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In your opinion, what preparation or background is necessary to take this course?

Course

Evaluate the course overall.: **3 (good)**

Background in proofs is so, so helpful. I took Math 101 in the spring, and although I don't think taking Math 101 is necessary, having some background and intuition on how proofs are structured is essential. I was concurrently taking Stat 110, which was really helpful when we got to probabilistic computation, but I think it's doable to learn the necessary statistics on the fly.

Evaluate the course overall.: **3 (good)**

A lot of math######know proof-based math by heart before taking this

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Evaluate the course overall.: **1 (unsatisfactory)**

None

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **4 (very good)**

CS20 is helpful.

Evaluate the course overall.: **3 (good)**

None

Evaluate the course overall.: **4 (very good)**

A math background is more important than a CS background. The material is also very college-focused, i.e. high school students hoping to study ahead typically won't learn about this.

Evaluate the course overall.: **4 (very good)**

Good reading comprehension skills.

Evaluate the course overall.: **5 (excellent)**

CS50, 51

Evaluate the course overall.: **4 (very good)**

This class is very proof heavy, so you either need to be familiar with proofs or be prepared to catch up.

Evaluate the course overall.: **4 (very good)**

I took the course without official CS50 background (but with some coding experience from high school) and without Stat110. I have a pure math background, which was sufficient, but having taken 124 beforehand would have been immeasurably helpful.

Evaluate the course overall.: **3 (good)**

Knowledge of mathematical proofs and basic probability and set theory.

Evaluate the course overall.: **5 (excellent)**

A background in proof-writing, or natural aptitude for abstract mathematics, or both. Also, previous exposure to basic discrete mathematics, including modular arithmetic, elementary graph theory, etc. Although most of the problems on the exams and problem sets aren't actually that hard, they do require understanding of the often dense material.

Evaluate the course overall.: **2 (fair)**

How to write formal proofs

Evaluate the course overall.: **4 (very good)**

Ability to read math or have taken some sort of math class (CS20)

Evaluate the course overall.: **3 (good)**

take CS20 !!!

Evaluate the course overall.: **3 (good)**

I found Math 23a and c to be extremely helpful, mostly because a proof-based mathematical background can be very useful in much of the work.

Evaluate the course overall.: **3 (good)**

Nothing

Evaluate the course overall.: **2 (fair)**

CS20

Evaluate the course overall.: **5 (excellent)**

Some probability and combinatorics and some knowledge about functions (what it means to be injective, surjective, etc.)

Evaluate the course overall.: **5 (excellent)**

CS 20 for knowing how to write proofs and exposure to graphs. Probability background would be good because the probability review lecture was very rushed.

Evaluate the course overall.: **4 (very good)**

Proof-based mathematics or CS20

Evaluate the course overall.: **3 (good)**

CS 20 was marginally helpful (it was good to have written formal proofs before).

Evaluate the course overall.: **3 (good)**

The more CS background you have the better

Evaluate the course overall.: **2 (fair)**

Much more exposure to theoretical CS concepts than most students already have.

Evaluate the course overall.: **4 (very good)**

Proof based math is quite important.

Evaluate the course overall.: **3 (good)**

Some background in linear algebra, statistics, and writing proofs would all be helpful for this course.

Evaluate the course overall.: **4 (very good)**

Interest in CS. Basic proofs.

Evaluate the course overall.: **3 (good)**

Discrete math background helps, but self-studying is probably just as good as taking CS20

Evaluate the course overall.: **2 (fair)**

CS51. CS20 slightly helps (but not necessary)

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 58 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **4 (very good)**

Experience with discrete math, either by self studying or some previous class. OR proof-based math knowledge

Evaluate the course overall.: **3 (good)**

You should ideally take Math 23 or higher in order to develop rigorous proof-writing skills. Otherwise, be prepared to catch up.

Evaluate the course overall.: **1 (unsatisfactory)**

Proof-based math is nice, but as long as you do your psets with someone who is good at proofs, you will get the hang of it.

Evaluate the course overall.: **4 (very good)**

CS 124 was a help. Mathematical intuition and experience is important.

Evaluate the course overall.: **3 (good)**

mathematical proof background

Evaluate the course overall.: **1 (unsatisfactory)**

Intro CS, Probability (though not listed as prereq), Some proof based math

Evaluate the course overall.: **5 (excellent)**

mathematical maturity

Evaluate the course overall.: **1 (unsatisfactory)**

Proof math background absolutely! I think every student should have taken Math 23+ or 101 or have had proof experience in high school. You don't need to have taken CS classes though.

Evaluate the course overall.: **3 (good)**

Some theoretical math background

Evaluate the course overall.: **4 (very good)**

Knowledge of proofs -- induction, contradiction, etc, and familiarity with mathematical notation.

Evaluate the course overall.: **3 (good)**

CS50 and CS20. I know it says CS20 is optional but I found it difficult to catch up at the start.

Evaluate the course overall.: **3 (good)**

A lot of Math - A whole lot of Math and Proofs

Evaluate the course overall.: **1 (unsatisfactory)**

Stat 110, CS 124

Evaluate the course overall.: **3 (good)**

Some background in proofs.

Evaluate the course overall.: **3 (good)**

Taking concurrent with stat110 is helpful - otherwise CS20 definitely isn't a must if you are willing to work a little harder to catch up the first few weeks.

Evaluate the course overall.: **3 (good)**

Knowledge of probability (STAT110) and facility with mathematical reasoning and logic (CS20, MATH152, or a similar course).

Evaluate the course overall.: **3 (good)**

An understanding of how proofs work and how to write them.

Evaluate the course overall.: **3 (good)**

It can easily be done by someone who is at least at the level of multivariate calculus.

Evaluate the course overall.: **5 (excellent)**

Either some proofy background or going through the pre-course stuff at the end of the summer.

Evaluate the course overall.: **4 (very good)**

Know how to write proofs

Evaluate the course overall.: **2 (fair)**

Comfort with proofs and probability.

Evaluate the course overall.: **4 (very good)**

Proofs

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 60 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **4 (very good)**

None. In my opinion, this course should not be taken after CS124. It is too repetitive.

Evaluate the course overall.: **3 (good)**

Understanding more statistics would have been nice, also taking cs20 is basically necessary-it gives you good enough proof background to start off fine in the class.

Evaluate the course overall.: **4 (very good)**

Some CS and math experience.

Evaluate the course overall.: **1 (unsatisfactory)**

A lot of maturity with proofs and coming up with proofs. For reference, I got an A in Math25 and still found this class difficult just because of the way the class is taught and how the textbook is written.

Evaluate the course overall.: **2 (fair)**

Stat 110 and CS124 seriously helped

Evaluate the course overall.: **4 (very good)**

No coding necessary, nothing technically necessary but familiarity with proofs goes a long way.

Evaluate the course overall.: **3 (good)**

Having experience in discrete math, and perhaps even some in algorithms, is very helpful for having the intuition to solve some of the harder problems in this course

Evaluate the course overall.: **3 (good)**

Definitely knowledge of proofs is helpful. I took CS20 and felt underprepared. In CS20, you can get away with memorizing things, but in CS121 you need to focus on understanding all the material because it is impossible to apply things when you just memorize.

Evaluate the course overall.: **4 (very good)**

Experience with proof-based math (23+) is ideal because those classes tend to help people get used to common language and the types of thinking used in math courses.

Evaluate the course overall.: **5 (excellent)**

CS20 or proof knowledge

Evaluate the course overall.: **1 (unsatisfactory)**

nothing will really prepare you for this course besides maybe having taken it already, or just being a genius

Evaluate the course overall.: **4 (very good)**

Proofs based math class and some knowledge of python/another coding language

Evaluate the course overall.: **5 (excellent)**

CS20 or proof experience, programming experience is useful

Evaluate the course overall.: **1 (unsatisfactory)**

Comfort with mathematical proofs and notation.

Evaluate the course overall.: **5 (excellent)**

Some higher level math (mostly for understanding basic proof techniques).

Evaluate the course overall.: **5 (excellent)**

CS 20

Evaluate the course overall.: **5 (excellent)**

Strictly, almost nothing is required. I knew no computer science prior to this course, and the course text provides an introduction to the mathematics required for the class (which I already had). I recommend above all else an advanced beginner's mathematical maturity. Knowing prior to the course what an injective function is of great benefit to any potential CS121 student.

Evaluate the course overall.: **3 (good)**

A basic understanding of mathematical proofs, basic familiarity with graph theory.

Evaluate the course overall.: **3 (good)**

Proof-based math along the lines of CS 20.

Evaluate the course overall.: **4 (very good)**

math 1b

Evaluate the course overall.: **2 (fair)**

Students should really take CS20, and even that probably won't be enough. Be very comfortable with proofs and reading mathematical texts (because the textbook is mostly math notation and it is not really at all explained)

Evaluate the course overall.: **5 (excellent)**

Being comfortable with discrete math is necessary. I also think that having experience with formal proofs is helpful.

Evaluate the course overall.: **5 (excellent)**

proof-based math helps a lot

Evaluate the course overall.: **3 (good)**

Coding is not very necessary, and neither is proof writing. I'd never written a proof before, and I feel that I picked it up quickly; this wasn't what made the course difficult. Experience thinking about theory in math could be helpful, though I'm not sure that CS 20 is necessary (which I didn't take).

Evaluate the course overall.: **3 (good)**

Maybe CS20, but the online MIT course was sufficient background.

Evaluate the course overall.: **5 (excellent)**

Background in discrete mathematics or proofs is extremely helpful.

Evaluate the course overall.: **4 (very good)**

Some experience with proofs would definitely be helpful

Evaluate the course overall.: **4 (very good)**

Math 23A/B or similar level of proof-based math experience (maybe Math 101?). Anyone who has taken CS 124 should consider themself prepared also (though I would recommend the same preparation for that class). Math 21A/B + CS 20 is NOT enough preparation and the main reason why everyone complains about this class being too hard.

Evaluate the course overall.: **4 (very good)**

CS20, any background on proofs and logic is helpful, and discrete math.

Evaluate the course overall.: **1 (unsatisfactory)**

Very little background is required.

Evaluate the course overall.: **5 (excellent)**

124 or cs20

Evaluate the course overall.: **4 (very good)**

Some sort of higher level math class such as Math 101 or CS20.

Evaluate the course overall.: **4 (very good)**

comfort with algebra, some exposure to proofs helpful but not necessary

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Evaluate the course overall.: **4 (very good)**

Proof-based math would be helpful (I took CS20 and found it helpful.)

Evaluate the course overall.: **3 (good)**

Some background in proofs is quite helpful.

Evaluate the course overall.: **1 (unsatisfactory)**

If you've taken 124 or any proof-based math before this course will be a breeze.

Evaluate the course overall.: **4 (very good)**

Any sort of proof-based class (CS20, Math23/25) would have done wonders in preparing me for proofs. I had no proof background and felt grossly under prepared at the beginning.

Evaluate the course overall.: **3 (good)**

Definitely should take CS20 or have some formal training in proof based math. I think linear algebra also helps understanding the quantum stuff.

Evaluate the course overall.: **5 (excellent)**

Some familiarity with mathematical proof writing is helpful.

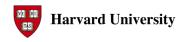Evaluate the course overall.: **4 (very good)**

Some amount of proof based math is necessary; I already had that going in, and that was a big leg up in this class, considering that this is really a math class disguised as a programming class.

Evaluate the course overall.: **5 (excellent)**

just a bit of math knowledge. know what a bit is too

Evaluate the course overall.: **4 (very good)**

None, just basic proof writing.

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 64 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **4 (very good)**

An understanding of mathematical proofs at least at the level of CS20.

Evaluate the course overall.: **3 (good)**

Math/proofs background.

Evaluate the course overall.: **4 (very good)**

Proof based math class. Some programming experience

Evaluate the course overall.: **3 (good)**

Strong mathematics background in proofs

Evaluate the course overall.: **4 (very good)**

Math 23 (a/b/c) and/or CS20. Taking CS 124 before this class REALLY helped

Evaluate the course overall.: **4 (very good)**

A lot easier if you have exposure to mathematical proofs. If you've already taken 124 it's also much, much easier as a lot of the content covered here is also covered in 124.

Evaluate the course overall.: **4 (very good)**

I decided to toughen up and take this class without CS20 and zero background with computational theory or any proof knowledge. It was difficult at first but I kept pace with the readings and worked hard on the psets with a good pset partner so everything worked out and was enjoyable.

Evaluate the course overall.: **5 (excellent)**

A whole lot. Not only should you have a strong math foundation in general, but a pretty broad one at that. There are long and complicated proofs and algorithms making all kinds of arguments so you are expected to know quite a bit. For example, very few people know much graph theory (in general?) at this point, but it comes up quite a bit. Things like this happen often, and its part of what makes the course so rich. But don't show up to CS121 as your first math class.

Evaluate the course overall.: **3 (good)**

I took CS20 but it wasn't nearly enough preparation; I wish I was better prepared but I'm not sure how - I think this course just needs to be taught with more structure and explanation

Evaluate the course overall.: **1 (unsatisfactory)**

Serre Duality, Math 55 with Yum-Tong Siu, Lubin-Tate Theory, and math 233a, preferably Arnav Tripathy's version.

Evaluate the course overall.: **4 (very good)**

Lots of proof-based math (23abc or above). You absolutely need this. Some knowledge of and experience with coding (CS50 or equivalent) is useful. Ideally even some discrete math. Taking Stat 110 concurrently is helpful later on. But generally just have to be extremely comfortable doing proof-based math.

Evaluate the course overall.: **5 (excellent)**

Familiarity with proofs and rigor, such as a proof-based math course or CS 20.

Evaluate the course overall.: **1 (unsatisfactory)**

One previous course in computer science

Evaluate the course overall.: **3 (good)**

CS20 was definitely helpful as well as programming knowledge especially in Python

Evaluate the course overall.: **4 (very good)**

Evaluate the course overall.: **4 (very good)**

You should have knowledge of proofs from CS20 or a similar course. Proofs and logic are essential to this course, so if you haven't taken discrete math you're gonna have a hard time working through the material.

Evaluate the course overall.: **1 (unsatisfactory)**

You need to have a strong background in proof-based math and it helps to have some understanding of linear algebra.

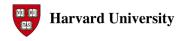Evaluate the course overall.: **4 (very good)**

Some background in proofs (summer self-study was fine for me)

Evaluate the course overall.: **1 (unsatisfactory)**

An understanding of CS notation, understanding things like sets, subsets, big oh, and finding algorithm run time are all strongly recommended.

Evaluate the course overall.: **4 (very good)**

discrete math

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 66 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **3 (good)**

TAKE CS20, take a theoretical math class before cs121. This is brutal without this background. I didn't take CS20, just took Math 21ab, DIED because I didn't have the math background. People told me I would be okay without CS20, but they were wrong.

Evaluate the course overall.: **3 (good)**

I think CS 20 helps, but a background in proof and logic is also helpful. Also general CS knowledge can be very useful for understanding material.

Evaluate the course overall.: **2 (fair)**

the required pre req cs courses and potentially cs20

Evaluate the course overall.: **2 (fair)**

Proof based math

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **3 (good)**

A solid background in proofs, ideally at a higher level than CS 20. You can certainly get by with CS 20 or even without it (grades-wise, that is), but I don't think you'll get as much out of it. The more comfortable you are with proofs/more math background you've had, the better you'll be able to fill in the gaps where the textbook/lecture are either hand-wavy or unclear.

Evaluate the course overall.: **2 (fair)**

None

Evaluate the course overall.: **4 (very good)**

If you are newish to CS and considering taking this class, read this review! I was in your situation. The tl;dr is as following: you do not need CS20 and if you do most of the background prep, you will be ok. The longer version is this. The stuff you do in CS121 is quite particular to 121, so having a super strong background in discrete math for example from CS20 actually will only translate to your work in the class to a small degree. What you do need to know, from the background prep page, is basic familiarity with graph theory (just like terms and basic theorems), set notation, logical expressions notation, proofs by induction, and probably a couple more things that I am forgetting now, but honestly, if you want to take this course without having any background in anything, I really believe that is doable (that was what I did). I would say you should allot about a week to doing the background prep if you can. If not, you will still probably be fine but there will be a more steep learning curve. And don't freak out about seeing crazy math notation from day 1 in the course! Everyone is in the same boat as you and will feel similarly overwhelmed, but it's not actually so bad when you get down to it. Enjoy it!

Evaluate the course overall.: **5 (excellent)**

Proof knowledge but accessible to people only moderately mathematically inclined.

Evaluate the course overall.: **4 (very good)**

Proof-based math

Evaluate the course overall.: **1 (unsatisfactory)**

Lots of programming experience. The math was not too bad, the big thing was having intuition about how programs work.

Evaluate the course overall.: **4 (very good)**

I believe this course does a great job of being accessible to those of any background. That said, a background in proof-based math or computer science will make the coursework substantially easier.

Evaluate the course overall.: **1 (unsatisfactory)**

CS20 kinds of helps with proofs.

Evaluate the course overall.: **1 (unsatisfactory)**

Optimally, some math/proof/tcs background so the course doesn't give you the wrong ideas.

Evaluate the course overall.: **1 (unsatisfactory)**

Definitely some proof experience. To be honest, you need all the preparation you can get.

Evaluate the course overall.: **3 (good)**

General exposure to CS ideas and a significant degree of mathematical maturity and experience with proofs.

Evaluate the course overall.: **5 (excellent)**

a 100 level math class or math > 21

Evaluate the course overall.: **4 (very good)**

CS20 is helpful, but didnt really help prepare much for CS121

Evaluate the course overall.: **2 (fair)**

You need a LOT of experience with proofs and probably CS 51 or higher

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Evaluate the course overall.: **4 (very good)**

math background, rather than cs.

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Which prior courses or self-study helped you the most in preparing for CS 121? Anything you didn't do but wish you have done to prepare?

Course

Evaluate the course overall.: **3 (good)**

Taking Math 101 was really helpful because I had 0 proof background in high school and Math 101 gave me a solid foundation for understanding the format of proofs. Taking Stat 110 concurrently also helped with the probabilistic computation sections.

Evaluate the course overall.: **1 (unsatisfactory)**

N/A

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **4 (very good)**

CS20 was helpful

Evaluate the course overall.: **3 (good)**

Math 101

Evaluate the course overall.: **4 (very good)**

Reading Sipser alongside would be a helpful complement for general knowledge purposes. I don't mean ahead of time though.

Evaluate the course overall.: **4 (very good)**

I don't think anything I learned in prior classes was particularly useful.

Evaluate the course overall.: **5 (excellent)**

CS124 was extremely helpful, although I think CS121 would have been more useful had I taken it before 124.

Evaluate the course overall.: **4 (very good)**

It probably would have been good to have taken a CS class prior to this class (other than having taken APCS a long time ago), but I made it through with my math background and a lot of work. I don't think Stat110 is necessary though, as many people wrote in response to this question last year.

Evaluate the course overall.: **3 (good)**

CS20 and Stat 110 (taken concurrently) were helpful. I wish I read more mathematical proofs.

Evaluate the course overall.: **2 (fair)**

CS20

Evaluate the course overall.: **4 (very good)**

Homework 0 and the mathematical background chapter of the textbook

Evaluate the course overall.: **4 (very good)**

I'm a Math major so I've taken 12 math classes by this point, as well as CS124 and CS181. Prior exposure to mathematical notation and struggling with difficult concepts is definitely most important. I'm also a senior which helps. The people I saw struggling the most were those who hadn't seen mathematical notation before and hadn't taken CS20. Would highly recommend people without mathematical background to take it (and encourage this in advising to freshmen to take in addition to CS51) because many don't realize it until sophomore year, when it's too late.

Evaluate the course overall.: **3 (good)**

Math 23a and 23c were extremely helpful, if for no other reason than their proof-based nature.

Evaluate the course overall.: **5 (excellent)**

Cs124

Evaluate the course overall.: **3 (good)**

I don't really think I needed any prerequisite for this course, maybe CS50's genera; CS knowledge was helpful.

Evaluate the course overall.: **2 (fair)**

CS124, CS20. CS20 was helpful for writing proofs but that's about it.

Evaluate the course overall.: **5 (excellent)**

CS20 was definitely useful for preparation. I think also PHIL140 and CS141 as these classes helped me develop good knowledge of logic (especially useful in the first part of the course).

Evaluate the course overall.: **5 (excellent)**

CS 20 helped a lot, but I still struggled a lot even though I took it. While I learned how to write proofs in that class, and learned about graphs, that really only prepares you for pset 0. I wish I had a strong math/proof-writing background as the course seems easiest to those with that background.

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **4 (very good)**

I self-studied by watching the videos from cs20. Was helpful, but I don't think it was crucial, and other factors such as general math competence are much more important for doing well in the class.

Evaluate the course overall.: **3 (good)**

CS 20

Evaluate the course overall.: **2 (fair)**

CS20 seems like good but not essential preparation for CS121 - otherwise, programming experience for the occasional programming problem

Evaluate the course overall.: **3 (good)**

CS20 helped me learn how to write proofs, but it definitely wasn't necessary to understanding the material.

Evaluate the course overall.: **4 (very good)**

Math for CS resources on Boaz's website are good. Am really glad I didn't take CS20.

Evaluate the course overall.: **3 (good)**

Self-studying using the MIT course and the review guide Prof. Barak provides is definitely useful. I don't think students who took CS 20 were significantly more prepared than those of us who self-studied.

Evaluate the course overall.: **4 (very good)**

Wish I had more proof-based math experience (like Math 23 instead of Math 21) or even just experience taking harder computer science classes (like CS 124 instead of coming straight from CS 51). I self-studied most of the MIT 6.044 discrete math class over the summer and that was pretty helpful, but only for the first pset. I actually think having a strong math/proof background is the most important thing for this class, since discrete math is easier to pick up.

Evaluate the course overall.: **3 (good)**

Math 23

Evaluate the course overall.: **1 (unsatisfactory)**

I did nothing to prepare. Never took proof-based math. I picked it up and it worked out fine.

Evaluate the course overall.: **4 (very good)**

CS 124 was helpful but not necessary. Math experience helped too.

Evaluate the course overall.: **3 (good)**

CS124, Math25

Evaluate the course overall.: **1 (unsatisfactory)**

CS124

Evaluate the course overall.: **5 (excellent)**

Math 25

Evaluate the course overall.: **1 (unsatisfactory)**

Math 23 and Yale's CS 365b

Evaluate the course overall.: **3 (good)**

I took CS20 but it didn't help very much. Some experience with reduction proofs would have been helpful.

Evaluate the course overall.: **4 (very good)**

Math 25 helped so, so much -- made me really proud and glad to have taken that class. Definitely should have treated this class more seriously.

Evaluate the course overall.: **4 (very good)**

CS124

Evaluate the course overall.: **3 (good)**

Helpful preparation: Maths 112 Real analysis gave me some proofs background and that helped in the problem sets. Wish I had done: CS20. I don't actually know whether I would have been better off. However, I think I enjoyed the course much more as time went on and I believe this was because I was slightly out of my depth at the start. However I also probably wouldn't have taken the course if CS20 was required because I'm not a concentrator and couldn't fit both in to my plan.

Evaluate the course overall.: **3 (good)**

Background material on website

Evaluate the course overall.: **3 (good)**

Stat110 concurrent (because the CS121 material on statistics overcomplicated everything with unnecessary over-notation)

Evaluate the course overall.: **3 (good)**

CS124

Evaluate the course overall.: **3 (good)**

STAT110 and CS20. This course will demand a facility with rigorous mathematical definitions and proofs, as well as facility with probabilistic reasoning in order to do well.

Evaluate the course overall.: **3 (good)**

I should have written more proofs. I was not comfortable with them and it hurt me quite a bit in this course. Especially since they didn't do a great job of preparing you to write them. A more relevant proof-writing section would have been great. The one we had was very "CS20" like and too general/basic to be very helpful. The homework postmortems were helpful though.

Evaluate the course overall.: **1 (unsatisfactory)**

CS 121 would have been unbearable if I had not taken CS 20 beforehand.

Evaluate the course overall.: **3 (good)**

I took CS124 last spring and I think that gave me a massive advantage over people who had not.

Evaluate the course overall.: **5 (excellent)**

Self-studying the materials on Boaz's website.

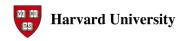Evaluate the course overall.: **4 (very good)**

I did algorithms at UChicago and learned some stats stuff. There's nothing I wish I had done to prepare.

Evaluate the course overall.: **2 (fair)**

CS20 helped instill some comfort working with proofs, which helped but was not necessary. I think taking CS124 prior to CS121 tremendously helped in being able to adapt to the heavy workload of the course.

Evaluate the course overall.: **4 (very good)**

CS20. I wish I had taken AM106 before CS121

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 125 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **4 (very good)**

CS 124 definitely helped a lot.

Evaluate the course overall.: **4 (very good)**

CS124 was so good for preparing CS121 felt repetitive, which wasn't great.

Evaluate the course overall.: **3 (good)**

cs20!!! wish i had taken a stat course as well, but not nearly as necessary as cs20

Evaluate the course overall.: **4 (very good)**

I didn't do CS 20 but the summer plan you outlined on the website was very helpful!

Evaluate the course overall.: **4 (very good)**

CS-124, but I think the most important thing that's necessary for preparation is just a good amount of experience reading mathematical texts.

Evaluate the course overall.: **4 (very good)**

math, stats. some cs

Evaluate the course overall.: **2 (fair)**

CS124, Stat 110 Really don't understand how CS20 is supposed to help people with this course.

Evaluate the course overall.: **4 (very good)**

Proof-based math knowledge helped a lot, as well as a very base knowledge of coding. Nothing else would really have helped prepare.

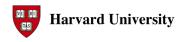Evaluate the course overall.: **3 (good)**

Having experience in discrete math and having taken CS 124 were quite helpful, as 124 helped build a lot of intuition about algorithm complexity and design that was used in the latter half of the course.

Evaluate the course overall.: **3 (good)**

CS20

Evaluate the course overall.: **4 (very good)**

Math 23 was helpful, and being interested in math in general was also helpful.

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 126 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **5 (excellent)**

Self-studying CS20 and taking CS124 was very helpful

Evaluate the course overall.: **1 (unsatisfactory)**

this class was the worst

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **5 (excellent)**

CS20

Evaluate the course overall.: **1 (unsatisfactory)**

I had taken CS 124 last semester, and have had experience with proofs and notation from a Graph Theory course in high school. With these, I felt adequately prepared for the course.

Evaluate the course overall.: **5 (excellent)**

Math 23 (for proofs)

Evaluate the course overall.: **3 (good)**

Without having taken 124 last spring, I feel like it would be much harder for me to grasp certain concepts about complexity and reductions.

Evaluate the course overall.: **5 (excellent)**

CS 20 was really helpful. Early in the probability unit, I wished I had taken STAT 110, but after grasping the material I don't think it would have been too helpful beyond the initial problem set problems on basic concepts. The concept of amplification really felt like the core of our use of probability, and you don't really need STAT 110 to learn that.

Evaluate the course overall.: **5 (excellent)**

Knowing elementary set theory and having moderate mathematical maturity; I'm a joint physics and math major with no prior CS experience.

Evaluate the course overall.: **3 (good)**

Any heavily proof-based math course will suffice (Math 25, 55, maybe 23).

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 127 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **3 (good)**

CS 20.

Evaluate the course overall.: **4 (very good)**

I did the self-study course boaz recommended, it was helpful

Evaluate the course overall.: **2 (fair)**

I probably would have failed without having taken CS20. I wish I had been born more mathematically inclined, but sadly this wasn't the case. I'm not sure what else would have helped me.

Evaluate the course overall.: **5 (excellent)**

I took several proof-based math classes at the University of Chicago, and I think having had those experiences helped me greatly because I had experience with writing formal proofs, a large component of this course, and also because I was used to thinking deeply about the material and figuring out how to apply it creatively to different types of problems, which was also extremely important on the problem sets in this course.

Evaluate the course overall.: **5 (excellent)**

MATH 25A, MATH 25B. I wish I took CS 124 first. For the reductions to prove NP-Completeness, always tried to use 3SAT because that was the one we spent a lot of time on in class but those who took CS 124 were more comfortable using others (MAXCUT, ISET, etc.).

Evaluate the course overall.: **3 (good)**

I didn't take CS 20, and I don't regret this. I was very worried at the beginning of the course about lacking the mathematical background (I'd never written proofs before), but I don't think this is what made the course difficult. I picked up the math concepts/ proofs as I went along, and I wouldn't say that this held me back, especially since the course isn't very strict about proofs.

Evaluate the course overall.: **3 (good)**

I watched all of the lectures from the online MIT course recommended in lieu of CS20 on the CS121 website and did problem sets from that course.

Evaluate the course overall.: **5 (excellent)**

I took CS20, which was moderately helpful in giving a first exposure to some topics like proofs, state machines, etc. However, I think I would have done similarly without taking it.

Evaluate the course overall.: **4 (very good)**

CS 50

Evaluate the course overall.: **4 (very good)**

I've taken a lot of math classes, which I think helped.

Evaluate the course overall.: **4 (very good)**

Math 25A/B, CS 124. After taking these courses, CS 121 was not very hard at all. In my opinion, the CS department should make people take proof-based math or make CS 20 more legit; this is the main reason people suffer in this course. You should also bring back CS 125!

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **5 (excellent)**

CS 124, Stat 110. In my opinion the required math is easy to pick up on the fly

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Evaluate the course overall.: **1 (unsatisfactory)**

Math

Evaluate the course overall.: **5 (excellent)**

CS124

Evaluate the course overall.: **3 (good)**

CS20 was extremely helpful

Evaluate the course overall.: **4 (very good)**

Math 101 and Stat 110 were both very useful for me.

Evaluate the course overall.: **4 (very good)**

Having some experience reading mathematical texts was pretty helpful.

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **3 (good)**

CS124

Evaluate the course overall.: **1 (unsatisfactory)**

124

Evaluate the course overall.: **4 (very good)**

Wish I had taken a proof based class before this one - thankfully my friend helped a ton at the beginning but I couldn't imagine trying to do it without her.

Evaluate the course overall.: **4 (very good)**

CS 124 helped a lot.

Evaluate the course overall.: **4 (very good)**

Math 25 helped a lot in being rigorous and thinking mathematically. I would have liked to have taken a graph theory class to understand topics related to the graph problems better, but the background material on graphs was definitely enough for what was needed in this course.

Evaluate the course overall.: **3 (good)**

CS20 really helped a lot with understanding how to write proofs and what the basic types of proofs were. I wish I had taken linear algebra, just so I could understand the quantum stuff more.

Evaluate the course overall.: **5 (excellent)**

CS124

Evaluate the course overall.: **5 (excellent)**

Having a strong mathematical background was very helpful.

Evaluate the course overall.: **4 (very good)**

I have taken Math 55, which helped tremendously when it comes to proof based mathematics (as in, most of the course), but of course that is likely overkill.

Evaluate the course overall.: **5 (excellent)**

CS 124, CS 141

Evaluate the course overall.: **5 (excellent)**

textbook all the way. CS124 was very helpful too

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 130 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **4 (very good)**

CS20, CS124

Evaluate the course overall.: **3 (good)**

CS 124 helped a lot. Being familiar with some proof techniques was also super helpful.

Evaluate the course overall.: **4 (very good)**

Math 25 was most helpful. CS124 also helped a bit.

Evaluate the course overall.: **3 (good)**

Math 23c helped prepare me for the proof part of the class.

Evaluate the course overall.: **2 (fair)**

CS20 definitely helps but probably not absolutely necessary.

Evaluate the course overall.: **4 (very good)**

In order of relevance: 1. CS 124 2. Math 23a 3. Math 23c

Evaluate the course overall.: **4 (very good)**

CS 124 made my experience drastically easier, as almost all of the material was already covered in CS124. Aside from that I am grateful I was also enrolled in STAT 110 and feel like the M23 series also helped with mathematical formality / maturity.

Evaluate the course overall.: **4 (very good)**

Go to section more because I barely went and stay on top of the psets and the solutions to them after because that is the material you truly need to know for the course. I didn't take CS20 or know computational theory but this class still worked out fine.

Evaluate the course overall.: **5 (excellent)**

CS50/51. Sure, I wish I started coding at 12 as well so this all felt more accessible.

Evaluate the course overall.: **3 (good)**

CS20, reading Ch.0-2 over the summer I wish I had been more prepared, but not sure how I could've done that other than by reading the whole textbook over the summer / taking the course twice or something

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 131 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **1 (unsatisfactory)**

Expository Writing 20. Also I wish I took Cumrun Vafa's seminar "Physics, Math, and Puzzles." I think it would be excellent preparation.

Evaluate the course overall.: **4 (very good)**

Math 23abc, taking Math 152 and Stat 110 concurrently

Evaluate the course overall.: **2 (fair)**

learn reductions.

Evaluate the course overall.: **1 (unsatisfactory)**

CS 124

Evaluate the course overall.: **3 (good)**

CS20

Evaluate the course overall.: **4 (very good)**

Math 55

Evaluate the course overall.: **4 (very good)**

CS20, CS152

Evaluate the course overall.: **1 (unsatisfactory)**

CS20, proof-based math

Evaluate the course overall.: **4 (very good)**

I did the self-study over the summer and felt comfortable with everything we did! I think besides proof by induction and learning about functions/relations and set, you don't really need much else! Just getting used to reading/writing proofs was important I think.

Evaluate the course overall.: **1 (unsatisfactory)**

CS20 helped a bit, but you need some other theory intro in my opinion.

Evaluate the course overall.: **4 (very good)**

CS20, CS124

Harvard University

COMPSCI 121

FAS Course Evaluations, Comments
Fall 2018

Page 132 of 134
[2019-01-25T13:31:31.088-05:00]

Evaluate the course overall.: **3 (good)**

CS20

Evaluate the course overall.: **3 (good)**

TAKE CS20, TAKE A THEORETICAL MATH COURSE, PROOF BASED. DO IT OR SUFFER.

Evaluate the course overall.: **3 (good)**

I would definitely recommend taking CS 20 before this course. CS 50 and 51 are also very good prep.

Evaluate the course overall.: **2 (fair)**

cs20

Evaluate the course overall.: **2 (fair)**

I wish i had taken CS20

Evaluate the course overall.: **4 (very good)**

CS20

Evaluate the course overall.: **3 (good)**

I can't point to one specific course, but I'd taken several proofs based courses prior to this (combinatorics and graph theory, rings, intro set theory), and felt significantly more equipped than most of the students, particularly those who had only taken CS 20 or who hadn't taken it at all. A lot of kids just didn't seem to know how to write proofs. (My partner for most of the psets struggled with this throughout. In my opinion, he finished the course still not really knowing how to right a proper reduction proof)

Evaluate the course overall.: **2 (fair)**

CS20

Evaluate the course overall.: **4 (very good)**

I did not take CS 20 and did not feel like I needed to take it - the material in this course is very specific to this course, so taking general discrete math or whatever I don't think would be that applicable What I did do is spend about a week going through the preparatory material on the course website, and that was very helpful. In particular, you should know what graphs are and some very basic graph theory, set notation, logical expressions, proof by induction (well, sort of - not sure if we used this much), and a few more basic things on the prep part of the website. But preparing for this class without CS20 or other background is SO doable if you give yourself a solid week or so before the course begins.

Evaluate the course overall.: **5 (excellent)**

STAT 110 for the one probability problem set. Felt intimidated by lack of proof background initially but the subset of possible CS proof techniques we learned were pretty accessible.

Evaluate the course overall.: **4 (very good)**

Math 25a/b

Evaluate the course overall.: **1 (unsatisfactory)**

CS-124 was helpful. Just having a lot of programming and math prior experience was also helpful. What happened to CS 125? I would have loved to take that.

Evaluate the course overall.: **4 (very good)**

Math 25a/25b

Evaluate the course overall.: **1 (unsatisfactory)**

I'm a math major, so I already had experience in the kind of problem solving we did in the class.

Evaluate the course overall.: **1 (unsatisfactory)**

I wish I had taken CS20, but a lot of people said it didn't really help them a whole lot. I wish I had taken more theoretical math courses.

Evaluate the course overall.: **3 (good)**

All of the math I've ever done helped above all else. I wish I had more time in the semester to devote to this class.
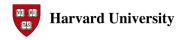
Evaluate the course overall.: **5 (excellent)**

Math 152, was super helpful

Evaluate the course overall.: **2 (fair)**

CS124

Evaluate the course overall.: **2 (fair)**

CS 20, CS 51 , Stat 110 I wish I had more proof experience than what CS 20 offered. I think CS 20's material needs to change in accordance with the new material in this course.

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Evaluate the course overall.: **4 (very good)**

Study in proof structure and math.