

Re: Georgia Tech CS

Gita Phelps <gita.phelps@gcsu.edu>

Wed 11/6/2019 5:36 AM

To: Gorham, Stephanie E <sgorham7@gatech.edu>

Thank you so much. I've just had a light bulb moment -- I now realize I stress opportunities for students to talk to others/ tutors for help instead of tools they can use on their own. If they already feel like an imposter they may not be comfortable seeking help from others. Thank you!!

I am also interested in the online software auto-grader used to check submission. Please let me know what you use.

Thank you so much!

Sent from my iPhone

On Nov 5, 2019, at 11:02 PM, Gorham, Stephanie E <sgorham7@gatech.edu> wrote:

Hi!

It's no problem. I love teaching CS, so I'm excited about any opportunity to share my experiences.

1. I remember the main problem I had with my lecture based class was that it was mainly structured around demos. I thought this was frustrating because it was so easy to miss something, and then be completely lost. I liked that my online class had videos that I could watch over and over again until I understood something. I also remember that the first two weeks of the class were really make-or-break. I wish my professor would have emphasized that if you are already lost, it's only going to build on itself. I think I would've sought out help sooner.
2. There are different TAs for the lecture and online sections. The roles are pretty similar, but the lecture TAs spend a lot of time grading tests because their tests are done on paper, and the online TAs don't. The online section has 14 TAs for ~300 students, and I think the lecture class probably has about that many too. Because there are 14 of us, I'm only required to hold 4 office hours on a normal week, and 8 on a test week. The online section also has an in-person recitation that I help run.
3. I see a lot of students that do not have the confidence to ask for help. I think the main cause of this is how toxic the tech community can be as a whole. All students experience Imposter's Syndrome in some way. I just try to balance my encouragement between "there's no shame in struggling because CS is hard" and "but it's not so hard that you can't do this"
4. I liked working at my own pace. I consider myself a slow learner, and the online class gave me the flexibility to absorb information in more bite-sized pieces. I have always found lectures hard to focus in, and I prefer activities to keep me engaged. Try making a Kahoot! for each chapter.
5. For the online section we have students schedule a "check-in" every chapter to explain a few coding problems to a TA. It's always very obvious in these meetings whether someone has cheated because they won't be able to explain what their code does. This also forces students to visit office hours at least once every chapter. Both sections also have an auto-grader for HWs, and the software is kind of like Turnitin, and will catch similar code. It's even smart enough to group students by coding methodology, so you can see if students have copied code, but changed spacing and variable names. To my knowledge, cheating usually isn't a big problem. If you want more information about the software we use, I'd be happy to get that for you.
6. Our lecture section currently has about 12% Ws and 6% Ds and Fs. The online section has about 4% Ws and 5% Ds and Fs. I think fewer people withdraw from the online section because the expectations are more clear, and it's easier to learn at your own pace. This isn't always true though, some students let themselves get very behind when given this freedom.

I've recently accepted a job at Microsoft, and during my interview I talked about how I failed the first CS class I took. I blame my failure on my own fixed-mindset and low self-esteem. It wasn't that I wasn't willing to go to class, or do the work; it's that I genuinely believed that no matter how hard I worked it wouldn't improve my performance. It took a long time for me to overcome these insecurities. Looking back, it all seems really silly, but I wish I would've had a mentor to help encourage me. With this experience I've tried to make it an important part of my job to listen to students' concerns, and try to reassure them of their abilities.

Sorry this is so much information, hopefully you can tell how much I love this! If you have any more questions, please let me know. I'll even be in Milledgeville for Christmas break if you would like to meet.

Best Regard,
Stephanie Gorham

From: Gita Phelps <gita.phelps@gcsu.edu>
Sent: Tuesday, November 5, 2019 8:46 PM
To: Gorham, Stephanie E <sgorham7@gatech.edu>
Subject: Re: Georgia Tech CS

Stephanie,

Thank you so much for responding. I am a professor at Georgia College and have been teaching here 25 years. I love teaching CS 1301 and am always trying to see how I can improve it. Your mom mentioned that you did not like CS 1301 when you first took the course. She said you preferred the online version over the lecture based course.

1. What do you wish your professor would have done to help you in the lecture-based course?
2. I assume there are TAs for both lecture-based and online courses. How are the roles different?
3. As a TA what are some problems that you see the students have when they take the course?
4. As a student, why did you prefer online courses? I would like to see how I can incorporate the best of both worlds.
5. We had a terrible problem of students cheating on homework assignments and then when it comes to exam time they perform poorly. What are ways Ga Tech address this problem? I have required more in class activities.

Our format: We program in Java. There are around 30 students in the class. Classes are held in the computer lab. We meet 3 days a week for 50 minutes. Lecture includes time for in class activities. We have 4 tutors that have office hours - each works 8 hours a week but the students choose not to visit the tutor. I also have an Supplemental Instructor (a student that recently took the course sits in with the class. She holds office hours for group study 3 hours a week.) . Homework usually incorporates Turingscraft/Codelab - interactive coding activities.

Ga Tech's 1301 covers more than our course -- We cover up to arrays. Our 1301/1302 combination is the same as your 1301. 1/3 of the students usually drop by midterm and of those that remain 1/3 will not pass -- they don't come to class or do the work.

I am glad to hear you now enjoy programming. Was there an interesting assignment/activity that sparked your interest in programming?

I really appreciate your help.

Dr. Gita Phelps

From: Gorham, Stephanie E <sgorham7@gatech.edu>

Sent: Tuesday, November 5, 2019 5:39 PM

To: Gita Phelps <gita.phelps@gcsu.edu>

Subject: Georgia Tech CS

Hi!

My name is Stephanie Gorham, and I am a Teaching Assistant for CS 1301 (Intro to Programming in Python) at Georgia Tech. My mom, Roberta Gorham, told me that you might have some questions about how our online class works. I would be happy to answer these for you! Let me know!

Best Regards,
Stephanie Gorham