# Student comments for Arup Guha, dmarino@cs.ucf.edu

# Instructor Name: Arup Guha

Computer Science/College of Engr & Comp Sci	COP32230003	INTRO TO PROGRAMMING WITH C
Department/School	Course-Section Number	Course Name
236	148	62.71
Number of Students Enrolled	Number Responding	% of Response

The thing(s) I like the MOST about this course:

instruction blends math knowledge to write interesting programs

Although it's an introduction course it does stimulate some brain cells as you go along.

Teacher made Programming in C quite the fun subject and did a great job communicating most, not all, of the information required to succeed in the course

Professor Guha is a really great professor. I think he kept the course very interesting, handled students questions well, and was very well organized. I do wish however that some answers were provided to the sample questions, however I could understand his argument that it teaches the wrong type of learning or that it keeps students thinking on their own. However, I do feel that the book sections that test understanding of concepts should provide answers for its assessments.

the importance of the content and its usage

That we got to do some programs at the start and it felt good to know that i could write one.

good instructor, very realistic and understanding

That the notes are online, as well as past exams.

nothing

The homework assignments were interesting and the last few were even a bit of a challenge for someone, like me, who has had lots of experience with C programming. I also liked the methods of planning and tracing through programs that he presented (as I have had no formal instruction on the C language, learning this bit of information was quite helpful).

Arup knows what he's doing and explains most things very, very simply and clearly.

The professor kept the class engaged and tried to get participation form everyone.

Interesting, can work by yourself and on your own time

was the way the teacher answesr to my questions in a short period of time. Also, I like the way he simplifies the material to make it easy to understand.

I liked the grading scale. I think it is fair since this subject isn't necessarily the easiest. The pace of the material was also fair. I also greatly appreciated that fact that you actually use the computer in class. This was my second time taking this course and I have to say that programming in front of us made all the difference. My last professor used a VERY small white board and it was messy and impossible to see. The online lectures and programs were also very helpful.

Your desire to teach.

Learning a new programming language.

As a intro to computer programming course it was new to me how computer code even worked. The theory and structure behind computer programming was very interesting to learn.

The programming assignments were a blast! This was my very first programming class and I really enjoyed the challenge of writing the programs.

Interesting subject.

I like that he used a lot of examples in class.

The amount of knowledge I learned about basic programming. It sparked lots of interest.

He is good at reviewing for tests, and making it possible for students with unsatisfactory grades to bring them up.

# The challenge of the programming projects

It was excellent that he encouraged us to volunteer ourselves to help out non-profit organizations. This is something that I hope he continues, and really hope catches on with other professors and other classes. I think Mr. Guha has a good heart, and overall is a really great person and professor (when lecturing).

the availability of extra materials for use outside of class assignments.

The grading wasn't too harsh.

Mr. Arup Guha is everything I hoped a professor would be. He is reason alone for taking this course.

Mr. Guha's dedication to make all of his notes and lectures available to his students is superb.

Prof. Guha was available and always helpful. That seems to be a rare thing at UCF. Enjoyed going to class.

the concepts are interesting

It's easy. I basically took this class in 10th grade so it is mostly review.

The way in which the course is organized, and how the information is presented to the students. Numerous examples are done during class for the benefit of the students to understand the material and be able to do the homework. The professor is almost always available and when not in his office, he can be emailed and one can expect a response back rather quickly. There is no point in time in which the student might feel helpless because he cannot attain help.

Very good teacher. Facilitated and stimulated learning in an excellent fashion.

- The instructor is a very affable person. - The material is awesome.

#### MR GUHA IS AWESOME!

-Communication was good most of the time. -Your online resources are VERY good. -Overall pretty good teacher, and very knowledgeable.

the class overall is very interesting ..

His teaching style and the fact that he cares about his students alot.

Great analogies for difficult concepts to understand

Despite being later in the day, and me not needing programming directly for my major, I found the class to be interesting and Professor Guha to be rather capable of maintaining my attention.

It was interesting.

I love that the lectures are online.

The class in general was great.

The instructor made it fun and interesting.

Very fair grading poicies

The class material, programming, figuring out problems. I liked the new material we could add on to our programs each class. All points are understandable and easy to follow.

His explanations of the material were very clear and the it easy to learn the material.

How Arup would do his best every class to make it as easy as possible to learn C.

I liked doing the programs they were very challenging and I had a lot of fun doing them. I think trade off for program six was fair and I leared a lot. I really enjoyed this class.

Arup is excellent at explaining things, and very good at using class time to teach hard problems very clearly.

the order the information was presented and the availability of class lecture notes

I liked doing the programs and working with the TA's

The tests and the grading system

very good teacher

Arup! Arup! Arup is on fire!

Programming assignments were extremely helpful and informative. Always attached and assigned at the point after the instruction to reenforce.

Learning new things!

Instructor is organized, consistently and often in his office with the door open. Clearly available to answer questions if need be. Community service opportunity in place of a homework assignment is a creative, and sound idea. Class is heavily curved, but because of the below circumstances, it needs to be.

While I did not have time to access these resources, there seemed to be plenty resources available to assist the student that lived near UCF in learning Programming. Arup Guha. I am amazed at how patient and knowledgeable he is. He is down to earth and will try to walk people through stuff. While I definitely take issue with how the class ramped up, I certainly think that he should be a teacher for a long time to come.

Instructed very well.

The thing(s) I like the LEAST about this course:

too slow, instruction is dumbed-down, not very technical

Very abstract and hard to comprehend. Nothing like I ever did before.

The programming assignments, especially near the end of the class should be spaced farther out from one another. I only had a few days to work on Program 5 and I couldn't finish it until the night after it was due

the pace of the course, too fast sometimes

He went WAY to fast for a intro course. If you have had no prior experiance in programming at all you will fail. I understood the start and recieved 80's-90's and it just went down hill from there. I tried to get help to understand what he was going over and by the time I learned it he was 2 lessons ahead and he never slowed down.

n/a

Some of the programs were extremely difficult.

#### everything

The loop tracing questions on the tests were challenging, to say the least. I have learned to debug programs by running them through a debugger or by making changes to the code and running it through the compiler again, however, I do feel that Arup's method teaches you to be more careful about how your program is initially set up (to avoid the kinds of debugging issues that he presented in the tests).

Using scantrons on tracing questions really drives grades down. A small mistake makes for a big failure. Also, I know that they're human, but the TAs' lead times in grading are horrendous. I'm aware that it's tedious work.

For an "intro" course, and for a beginning programmer like myself, it was very hard to keep up. Althought i was true that many of the students were intermediate or experienced in the subject area, those who truly were beginners had a rought time. It wasn't impossible though. The professor just had to find a balance and a way to keep everyone on the same page.

Nothing

The TAs take too long to grade the assignments. Sometimes I need their feedback before the hext assignment but they wait until I summit 2 or 3 assignments before they grade one of them.

Exams

The fast pace.

It went slow for me.

As much as I liked learning about the theory and structure behind computer programming, C Programming isn't the most exciting topic out there. It's a difficult style of programming to master, and without prior programming knowledge it's a bit like jumping into the deep end of the pool to learn how to swim. Some of the programming assignments towards the later half of the semester became extremely difficult, and required too much time to complete. With only 9 or 10 days to complete the assignment that we are just learning the topic it could easily take 20 or 30 hours to write some of the more complex programs for beginners. 20 or 30 hours with a full class load and a full work load is not easy to find. The tests were a little on the difficult side and I'm not sure adequately measured one's ability to know programming theory and style.

To be honest, there wasn't much to dislike about this class.

#### Excessively hard.

The isolation I felt from help. I felt limited to resources like other students and even faculty.

How the course was described to beginning students. Being a person with no programmin background it made it quite difficult

to follow the book, terminology, and class discussions.

Tests being in different formats from each other

He was always late. He would blame the students for being in his office, and even in a demeaning manner tell us again and again not to come into his office right before class. He should be responsible enough to tell the individual students that come into his office that he needs to teach his class. Overall, it is his responsibility to make sure that he is not late to class. Even when he doesn't make up an excuse for why he is late (usually he'll have one when he is 10+ minutes late), he will still come 1-5 minutes late with no excuse for why he was late. This isn't even including the 1-2 minutes he needs to setup his lecture (loading the lecture document). I would really have liked to see him in class 5-10 minutes early, in order to setup his lecture and answer any general questions that the class might have, then we could start on time right at 6 pm. This never happened.

the tests of course (though that mostly falls on my fault), and the availability of TA's, there needs to be more TA's available in the lab, especially before assignments are due. as 2 minutes every hour is hard to really count as getting help, even though yes they were very helpful.

The material, itself

The size of the class really puts most of the instruction on the student. There is no "hands on learning" time with the instructor. In class at least.

The class size.

Two days a week. One day a week would have been easier.

material is very challenging and if you miss a class the lectures posted online dont make a whole lot of sense

It's easy. I basically took this class in 10th grade so it is mostly review.

Textbook could use some work.

I can't think of anything, really. I hated the multiple choice, but that's because i did terribly on it.

the tests are rather difficult

PROGRAMS ARE WAY TO HARD. IT'S ONLY INTRO.

-Programming assignment not always clear... On assignments 3,4,5,6 I had to re-read the assignment many times and it took me hours to understand where to get started. This is really bad and I have spoken to other students in the class that feel the same way, that the assignments expectations, a lot of times, are not clear enough. -Things that are obvious to you, are not always obvious to beginners that try to learn C programming when they have never seen it before, in fact, it is very tricky at times. However, I understand that once you understand a certain concept in programming WELL it is hard to explain it and pass on the knowledge in a clear way. -Exam one was overly-tricky. -Exam two-the last few problems were too hard (and above beginner level, in my opinion), too mind exhausting for such a short period of time. The final two questions on the test seemed like a program within itself that would probably take me at least an hour to figure out at home.

the class was taken to rapid, its not intended for somebody who has never programmed or atleast the way he taught it..

His tests are insanely hard, but i guess that the curve makes up for that

Difficulty jump from program 4 to 5

I realize programming is not for me

The small room we had. The lack of more assignments.

We should have more homework for more points.

We go through the material very quickly. The programs can be very tough to someone that's never been exposed to code before.

Sometimes the programs can take quite some time to do and figure out. Test questions can be tricky and require more time to look over than other course exams.

It seemed like there were a bunch of students who already had experience writing code and the instructor taught to their skill levels and not the begining student.

The only thing I disliked was when the class before the second test arup got rid of the multiple choice on the test. It just sucked personally for me because the free response was the area of the first test that I had tremendous difficulties with. But apparently everyone else was doing good on the free response so in that sense he was just trying to get as many people to pass.

Tests.... ugh I am a piss poor test taker.

Coming from a smaller college, I've grown more accustomed to smaller classes and more personable teachers. With so many students, I felt like more of a number than a student, so I felt very disconnected from my teacher (Arup). Also, being a commuting/non-local student, I was not closely connected with anyone in the class, so it was hard to work with fellow students (outside of the discussion board).

it was difficult to judge my progress in the course. There was no expectation on how long it should take to write some of the programs.

It seems like I did not learn anything new in the latter part. But I will take Arups CS1 class because intro was interesting.

The program assignments and the short amount of time to do them in.

The instructor is an egomaniac! He is very intellectual and sometimes loses track of the level of those who are attending his course. He is very totolitarian. His grading style is positive for the most part but is more intuitive that performance based' However, he allows flexibility within the scope of his internal beliefs systems with a perception of inequality. I debated even bothering to comment, as the instructor himslelf through his web course pretentiously lists students comments and then his commentary to explain his position. Regardless of what a student may say, he simply explains the concern away or adresses the inadequacy of consistancy through blame and unconstructive commentary ' nearly an excuse format to eleviate him from part of the possible improvement process. It seems its always the students fault, and there lack of comprehension as he could never improve or change the course. His final replay in any challenge of a grade detail is not a honest dialog or review, but rather that he is the instructor and sets the standards. Yet, he sets an ambiguous standard and expects all to fully comprehend his expectations. He is an excellent instructor and means well ' but is defensive and sometimes, loses track of the context of a student questioning the results of graded adssignemnts. Programming languages have a diverse array or reponses and solution sets ' without clear, hard guideline ' many solution may be correct, but be perceived incorrect because they may not meet his unclarrified requests.

#### Learning!

The textbook. It is awful. No index (although this was due to the publisher, not the instructor), no solutions to vague examples. The instructor. I don't even know where to start- he is very arrogant, and sometimes I feel like he talks down to students who aren't as proficient in programming as he would like them. It's almost as if he teaches assuming everyone in the class is a Computer Science major, making an already grueling class MUCH more difficult than it should be. He is teaching logic, not programming. His homework and exams are at best difficult to conceive.

The course was taught after the 1st chapter as if the class had already programmed before. The learning curve was extremely steep for an Introduction course.

Programs get difficult.

What is your reaction to the method of evaluating your mastery of the course (i.e., testing, grading, out of class assignments (term papers), instructor feedback, etc.):

# Accurate.

Fair load of assigment to keep you engage in the course, as well as exams.

The tests were a pretty fair way of making sure you knew what was going on - but the way the subject matter is, if you misunderstand one or two concepts, you're essentially screwed for test time. The programs however, were exceptionally difficult beginning at Program 4 - I spend well over 30 hours on that program and I still couldn't get it perfect.

ok

Like i said before the starting assignments were ok. For a intro course the following assignments and tests were beyond the ontro level or maybe he just didn't explain and stay on the lesson long enough.

solid, it was all appropriate to the material

Difficult, but fair..

I think the instructor used a good balance of testing and assignments and those tests and assignments accurately reflected the concepts needed to master the material.

impossible tests

Honestly, I feel that the grading curve on the tests was too lenient. I don't believe that earning a "50%" on a test should be worth a C. I understand that many of the people in there have never programmed before, though, so perhaps not. The homework assignments took a while to be graded once turned in, but the grading was absolutely fair. Would have liked more feedback, but it's understandable being that there were around 200 students in the class.

This was all good, other than the complaint about the scantrons.

Fair, some test questions were tricky

The test are too hard. The teacher gives some thing that we didn't cover in class. I don't mean we had to cover every single thing; but in a test of 10 questions, 5 new materials(questions we didn't cover in class) are too much.

I did not understand why the exams had to be hard, this is suppose to be an introductory c programming course for beginners.

Very sufficient.

I liked it. Perfect number of test, and I like the style of the test.

As somebody with no computer programming experience, and no real desire to learn computer programming (class required for my major), I struggled at times during this course. Programming in C is either something that comes extremely easy to some people (most likely computer science majors with previous programming experience), or is very difficult for many others.

The programming assignments were somewhat challenging, but I thought they were very fair. Arup's tests also seemed fair. A lot of students disliked his multiple choice questions, saying he tries to "trick his students," but as long as you are relatively careful on that portion of the test it shouldn't be too difficult. The writing portions of the test were very easy in my opinion. I liked the problem involving the gold miner on a 3x3 square, even though it took me a few minutes of reading it to understand what it was asking.

Some test questions relied heavily too much on one example. If I didn't grasp that 1 example, I'd miss multiple questions.

I felt his method is flawless. I learned everything at a comfortable but quick pace.

I believe that the professors methods of evaluating the students was quite good.

This was one of the most absurd classes I have taken concerning method of evaluation. He makes ridiculously hard tests (where the mean/median/mode are all around 55%). Then instead of realizing that he just makes hard tests, sets the grading curve lower. So passing the course is now ridiculously low (somewhere under 60%), but earning an A is relatively really high (around 84%) considering how hard the tests are. I don't think the A level should be set this way. Considering how hard the A level is set, the people getting an A seem to be the people that have a really good grasp over the subject because they are already computer science majors that have a background in programming, and have already had a good grasp over programming with C. It seems to me that getting an A in this class for anyone that has not had any background with C before is nearly impossible. In short, it seems he is teaching the materials for an introductory course, but he is testing on an advanced level.

the grading rubric for tests is excellent, and helps boost morale to learn more, since even if the score wasn't high, the grade was because the tests are hard. best rubric for grading I have ever seen.

Tests were difficult, and the later programs were far too complex

The tests are difficult, but very fair. The assignments given are challenging and really help you master the content of the course.

Tests and assignments are challenging, but very fair.

Well planned out. He has the system down.

Tests are good and test knowledge of what was covered in class. I would have all hundreds but I didn't get the book... Ah well. Still got an A (fingers crossed). We'll see how structs go anyway, I've never used them before.

Excellent. The grading is done based on the effort that you put in. If one doesn't practice the material, then the amount of work you have put into the material reflects on your grade.

Tests were very difficult, but fairly graded. Same goes for the programming assignments

very thorough. the program keep you on your toes, and the tests required extensive knowledge of the language.

good, but I would have liked to see some more buffer grades, like mini-hello world assignments for each subject to test basic implementation of c-programming aspects (versus an assignment due every few weeks requiring mastery of the concept)

FAIR.

Grades were fair at all times. Tests were a little hard then beginner level tests. I really am generally happy with the grading for this course.

I found it to work well. I wouldn't change anything.

n/a

I wish there were more grades. I fell there were too few. Which could hamstring student's who may had a harder time learning the coursework.

I thought that the homework was very difficult and too harshly graded.

I think the tests are fair and the grading is very beneficial to the students. the programs are a little on the difficult side and you can be stuck very easily if you don't know how to work around a specific problem.

the homework was difficult but it helped learn the material. The tests were a little long but possible to do well.

Test questions were confusing and very tricky. It seemed that the instructor was more amused with us not getting those questions correct than actually evaluating us on the material we have learned.

I thought Professor Guha was really fair. If you had a question you could discuss it. He always made time for the students.

It's hard to determine my mastery of the course as I was absent for a lot of it due to hospitalization and sickness. However, the grading of projects shows a lot of how well I've done. I especially like that during the grading of the projects, when the feedback is given, an explanation of what I did wrong is shown.

difficult to understand grading

The multiple choice was tricky. It was a test of wit. And if you didn't show up to class to figure this out when the TA's were there, you'd probably be tricked. The tracing output grading could have been more efficient, not in time consumption but in a more accurate grade. I compiled the program and saw what I did wrong, a little logic error, If i could point that out to you and be marked off for that, instead of wrong numbers.

gave fair tests and i like the curve he put on the class grading scale

Great programming assignements! Did not care for the testing methods - excluded a major component of programming, the compiler!

pretty

See above feedback- instructor grades in a somewhat timely manner, but the assignments are geared toward experienced programmers.

I think this was the worst of all. The feedback was spotty, there were no clear-defined solutions to the problems, the grading was flexible and ever-changing so you never really knew how well or how poorly you were doing in the course till it was too late. In any task that you learn, you first have to have a tight framework from which to draw your hypothesis from. When you are left to your own devices, it is much, much harder to establish for yourself that you are doing things right (or proper). This is a 3-credit hour course, the amount of time that I saw many students (including me) say they were spending on their homework was absolutely well beyond that of a 3-credit hour course.

very well executed

Additional comments and suggestions for improvement:

I would suggest making the class a bit easier. You claim it is a beginner class, yet the material we must do is stuff some professional programmers have never seen. It is very hard to follow when you have no interest and/or experience in coding.

The instructor definately knows and is prepared thoroughly for the material. The course's pace and material however is extremely challenging for a introduction course.

I would have preferred more programming assignments with smaller increments of subject mastery. It would have made it easier to figure out what I didn't understand well. I found out quite late that I absolutely cannot apply functions well if my life depended on it - meaning I have been unable to truly understand later material.

thank professor, good job overall

Slow down and go over the lessons a lot slower and give more examples so students can understand different situations. Don't give assignments that confuse students in the lesson you just explained which doesn't make sense at all.

good guy, i liked having him

Great instructor, hope to be able to take Arup again for future CS classes.

MORE TIME FOR PROGRAMS!!! The difficulty is of a CS I class this is an intro course, the curve does sort of make up for it though

in general, the teacher has done a very good job.If I had to make a suggestion, I would suggest for the exams are not more difficult than what we learn in class.

Add an index in the book. More examples explaining concepts that would help with the homework as well.

Lower the pace.

Don't make the computer programming assignments as time consuming. Maybe have more smaller assignments rather than 6 large assignments. Tests could cover a little more theory and structure instead of trying to write a computer program in pencil during the time allowed and trying to figure out what the computer will print out based on the code on the paper. Arup Guha is a very good professor that cares about his students success though.

None.

None.

Try to use laymans terms more during class so people with no programming background can follow what you're trying to express.

It would be nicer if we wrote programs more often instead of in bursts to keep programming fresh in our minds

Show up on time, and test for what you teach.

keep on teaching Arup, you've given me a great star into programming that I know i won't forget anytime soon. Awesome class, and awesome teacher.

Easier Tests!!!!

Arup, you are a cool guy. Your name is cool.

Continue to improve textbook

MAKE THE EXAMS LESS DIFFICULT AND MORE PEOPLE WILL LEARN.

-It seems like lectures are for understanding the basics of different concepts in C programming and getting familiar with the

format of the code. I feel like most of the things I have learned in programming was due to hours and hours of frustration in front of the computer:) I recommend set up your lectures in a way where the students can go home after a lecture and apply what they have learned and really use it! -Overall, your a nice guy and easy to listen to and understand. Your overall rating I would say is 8.5/10. Take care:)

Great instructor. Hope to take again

I liked the HW 6 volunteer option.

n/a

Address difficult problems into a little more detail as they can be very confusing by the end of the term. Otherwise great class and would definitely pick Guha over another professor for the same course.

Really enjoyed the course thanks!

#### Mr. Guha is wonderful!

Perhaps a few times of having small group discussions at the end of a lecture to go over what was just taught could be helpful, so the material gets reviewed and planted more deeply in the students mind.

It would be nice for some direction on how to continue learning programming outside of the school when the class is done. I won't have room in my schedule for more than a class or two.

Don't like the community service opportunity.

Instructor should not be allowed to teach such a rudimentary (or what is supposed to be) course. Replace him, and take his textbook away as well.

Arup Guha is a knowledgeable and patient instructor. I think his advanced knowledge in programming puts him at a disadvantage for teaching an Intro class because I don't think he realizes that most people (with some exceptions) are starting from absolute 0 with programming when they are coming to this class. He should assume that his class knows nothing, and step them through the latter of programming 1 rung at a time. I am certainly not making excuses for my grades, but I think that future classes would benefit from Arup Guha being their teacher if he sees what I am saying.

#### Instructor Name: Arup Guha

Computer Science/College of Engr & Comp Sci	COT39600001	CS FOUNDATION EXAM
Department/School	Course-Section Number	Course Name
65	41	63.08
Number of Students Enrolled	Number Responding	% of Response

# The thing(s) I like the MOST about this course:

I was glad that the passing with condition option was added this year. I was not quite in the passing range, but with the additional homework assignment, I felt that I was really forced to learn the summations.

NO meeting dates.

It was a test

The thing(s) I like the LEAST about this course:

Nothing

What is your reaction to the method of evaluating your mastery of the course (i.e., testing, grading, out of class assignments (term papers), instructor feedback, etc.):

A good test

#### Additional comments and suggestions for improvement:

This is not a real class, so don't require an evaluation.

# Instructor Name: Arup Guha

Computer Science/College of Engr & Comp Sci	COP3502H0201	HONORS COMPUTER SCIENCE I
Department/School	Course-Section Number	Course Name
22	14	63.64
Number of Students Enrolled	Number Responding	% of Response

# The thing(s) I like the MOST about this course:

Content.

He actually wanted us to learn, and he challenged us. Completely worth going to every class, doing all the work, and reading the optional textbook, for the learning value alone.

Mr. Guha is the first computer teacher I have had that can actually 'teach'

My favorite teacher. Arup really cares about his students, and you can learn so much from him.

fun materials, teacher was incredibly enthusiastic and really inspired learning

He was really able to express what he was trying to explain, using analogies and examples that really made it easy to understand.

The course was engaging and made rather abstract concepts more concrete. Having not seen any of the material before, the professor was easily able to break things down into parts that made sense. The assignments were also creative and challenging.

The material covered. At times boring, but still beneficial.

The teacher knows far more than the scope of the course, and foreshadowed what we'd learn in Comp Sci. II

Solving interesting logic problems and being able to experiment with the ideas I learned to develop solutions.

# The thing(s) I like the LEAST about this course:

# Nothing.

Quite time-consuming. I can't really complain about that, but it is what I liked least!

Arup expects a lot out of his students, which is a good thing, it just made for some difficult tests.

The homework was extremely hard and brain-wrecking for those who little experience. I learned al ot from the homework but there must be easier ways that are less costly on your grade.

Honestly, this course was rather fair. Although it was challenging, the rewards were great once you overcome those challenges. I probably had more heartache from this course than any of my other courses this term, but looking back it has made me a much better student. So as for what was the "worst" part of the course, I would have to say the fact that there are only two tests for Honors instead of three which can make a big difference if you're having a bad day during one of them - but this is something that could possibly have been unavoidable.

Pace of the course. Material was covered quickly. Not enough examples for at home learning.

We were not given test cases to test our programs out, and it really is quite difficult to come up with comprehensive ones on our own. In the real world, won't we have an idea of what we're working with to get test cases, and we could use past experiences, no?

The pace I felt was far too fast. Sometimes I felt I just could not keep up. It may be because the honors section of this course does not require a lab with it, and it would have probably been helpful to get in that extra practice and examples.

# What is your reaction to the method of evaluating your mastery of the course (i.e., testing, grading, out of class assignments (term papers), instructor feedback, etc.):

Fair.

Quite effective. Midway through the semester I wished the programs got graded faster, but the grading is very fair and usually quite timely.

Tests are brief and to the point

Testing and grading was all fair. Programming projects outside of class were great practice, and the group project at the end was a good way to get to know some people in the class and get experience collaborating with others in a programming setting.

the tests were a bit too hard and the grading scale was skewed due to the difficulty of the assessments

The tests were challenging but not overwhelmingly difficult or about things new. The assignments are themed after particular focus points in the course but it feels like it tests a LOT more than just the data structures, which sometimes makes it frustrating.

Testing and grading was fair: practice tests gave a student the sense of what to expect to see and following that, one can do well on the test. Grading, although slow sometimes, was above fair and even the speed is also unavoidable with so many other students to grade.

My performance in the course was shown well through assignments and tests. I saw where I needed to improve after each test and assignment. Feedback was given every time, as well.

He used tests and programming assignments. no problems.

Stern, but fair. Encourages improvement.

The evaluation was done promptly and fairly.

# Additional comments and suggestions for improvement:

N/A

Make clones and have him teach every computer class at UCF?

If I could take every class with Arup I would!

Although part of the philosophy of this class is to make students go the extra mile to understand concepts, having perhaps some more practice problems online with answers can help. Often times, I found myself thinking I knew the process only to find out later on the exam that I was wrong. Not that it should be a "graded homework assignment", but just a resource available online - such as what is posted for the regular recitations but for honors concepts and on more topics than what's covered in recitations.

# Good job Arup!

The best way to improve this course in my opinion would be to slow down the pace and take more time to show examples. Often we'd go over a subject, get one example, and then move on. I didn't feel like it was very thorough. I remember in Intro to C I was getting tired of being told what was the wrong way to do things, but now I can see the value of it. There are many common pitfalls when trying to implement certain ideas in your code, and I think these could have been covered better. I also feel doing more examples would be better to show the ideas can be used in different ways with very small modifications.

# Instructor Name: Arup Guha

Computer Science/College of Engr & Comp Sci	COP3502C0001	COMPUTER SCIENCE I
Department/School	Course-Section Number	r Course Name
231	123	53.25
Number of Students Enrolled	Number Responding	% of Response

The thing(s) I like the MOST about this course:

The homework assignments effectively utilizes the information presented from the lectures. Also, I like how lecture notes and sample programs are posted so that we can gain a better understanding of how code is developed in programs.

The availability of nearly everything in the course, and the lecture notes, example programs and a plethora of other information that really helped.

Difficulty is good

That this course was comprehensive in Computer Science objectives and ideas. The knowledge that was taught is valuable and good for general thoughts. I think that Arup is a energetic speaker and believes in the correct values for teaching.

Lectures were always worth attending. Very informative and at times entertaining. Exams are fair and I like how everything is curved based on difficulty and class performance. Programs had entertaining back story were fun to do. I really appreciated how the professor was available for office hours and via e-mail. The lab sections were a great help. I liked how we got to do practice problems and have that ability to do more individual help.

Everything. The assignments were fun and challenging, the mateiral was presented clearly, Arup is an awesome teacher. I feel I have progressed significantly as a programmer thanks to this class.

I loved the programming assignments. I also loved how he adjusted his grading lines according to how difficult his tests were. I loved his class demonstrations. I loved the community service option for Program 6. I loved how he allowed us to use cheat sheets on his tests. His lecture notes are easy to understand.

Guha was very enthusiastic and explained concepts very well.

- programming
- Creative way of teaching ideas

Challenging yet I also learned a great amount of information.

The clarity the professor supplied. Everything asked for in this course was very straight-forward.

Great teacher, learn a lot.

You learn a lot.

Lectures, they were well put together and engaging.

His use of visual examples

I liked this course because as the tests are so hard, the overall grade is based on how the class does in general. I also liked the notes and the programs there were available for us to study.

The instructor speaks perfect English and is very easy to understand. Grading scale is fair, if a little weird, and generally favorable to the students.

style of teaching and website are good

Opportunities for extra credit; detailed explanations of topics covered in class; helpful course website that includes sample programs and lecture notes

Arup is a fantastic teacher. He works hard to explain concepts as simply and logically as possible.

N/A

The class is very interesting. The professor.

he really explained the concepts and algorithms thoroughly

The course was interesting and very well taught.

He actually knows everything is he talking about and can explain it perfectly. The programs make you learn how to program. Great teacher.

Professor Guha's proficient ability to teach such difficult material in a way most capable students can understand.

#### Awesome.

I like that there's no attendance policy. Arup is a good teacher who knows what he's doing, I just took the class for elective credit after having prior cs experience.

Professor Guha made the lectures simple and easy to follow. Overall the class was very organized and well thought out.

The content was effectively explained, taught, and tested while providing incentives to pursue additional knowledge outside of class

So much information learned is an extremely efficient way.

I thought the lectures were great

I liked the new things I learned.

I liked the new stuff I learned.

The professor. He taught everything very well. Also he encouraged community service which NO PROFESSOR cares about. GREAT teacher!

distribution of grades and adequate curve

Learning new concepts in computer programming to further my knowledge in the field. Also, the instruction style was fairly relaxed but very well done. This style helped make the learning environment fun but also very insightful.

Difficult and challenging programs for someone relatively new to programming and the C language in general (only prior experience being Intro to C). I learned the most in this course while working on these programs specifically.

Dr. Guha is an excellent lecturer. The TA's, namely Jonathan, were extremely helpful.

The challenge. It was not another pushover CS course, was challenging but only in the best of ways, and Arup's methods of teaching and grading are most appreciated, I wouldn't change his style in the least.

I love computer science so the course to me was interesting and easy to understand

The online notes helped quite a bit.

The way that we were taught was great. Learning how sorting works was very simple when we were given a physical demonstration of what the code essentially does makes learning it a whole lot simpler. Also the way we learn about data structures and having them drawn out for us makes it easier to wrap your head around what the code actually does visually instead of just knowing what happens. I actually enjoyed how difficult the first assignment and test were because the first assignment was so difficult (if you hadn't dealt with C in a while) that you were literally thrown into the deep end and told to sink or swim. If you were able to swim then the rest of the semester wasn't nearly as bad and you ended up taking away a whole toolkit of data structures, algorithms, and sorts that you didn't come in with.

The interactive learning and challenged.

The homework (programs) always corresponded with the work we were doing in class, allowing me to learn the material very well.

What I liked most about this course was the amount of material that Mr. Guha provides and how he organizes that information. His personal website is one of the best teaching tools I have ever seen any teacher/professor use. I also am appreciative for his leniency when grading. He understands that there are challenging concepts and he compensates for these.

The professor's dedication to the subject, willing to go step-by-step with struggling students, the challenging examinations that made sure students learned, and the organization and consistency of lesson plans

Nothing specific

Very smart guy; also extremely understanding and always willing to help.

learning a lot

Assignments were challenging but helpful.

The instructor was the best thing about this course.

Program assignments were interesting and stimulating. They ensured I learned what I needed to. The adjustment of grading scale in accordance with the difficulty of the exams. Also, the volunteer alternative for the last assignment was good.

# The thing(s) I like the LEAST about this course:

The pace of the class was too fast and tests were pretty hard as well.

Difficulty results in lower grades

The course was purposefully difficult as the instructor said and that is fine however some of the assignments given were exceptionally difficult and the time needed to spent per class was a bit on the ridiculous side. Arup does have the believe that not every one deserves an A however this class was almost to the point of too difficult. I think that more time should of been spent on recursion when it was taught and that would of been highly beneficial.

Sometimes there's just so much material to cover I felt as though the class were a little rushed.

I have to put in hard effort just to get B's. (Im actually glad the class is this way)

I feel that the amount of time that was given to us for each test was not enough. Even though the class is 50 minutes long, we would actually only get 40 minutes to complete the test because of the way he hands out tests. He won't give you a test until the row you're sitting in is completely full.

#### debuging

The amount of time it took to receive grades for assignments

Well, the material is hard, but that's computer science for you.

Hard test and hard assignments

Guha expects too much out of his students.

Exams!!!

It always seemed a bit rushed.

There was a lot of material to cover in a short period of time. Sometimes it got too crazy with all the things to study.

Question 8: The book was a bit too high a level to be comfortable. Since Arup does not really teach out of the book, I seldom used it. The 45-minute class schedule is too short for testing; I found myself rushed and breathless. Tests are always difficult for me, and the rushed pace only made it worse, and hard for me to do well.

#### assignments

Sometimes I feel the professor explains things so detailed that it's harder to understand topics. Tests are extremely hard. There are NOT enough people at this university that are fully competent in C programming. TA's are NOT helpful, Tutoring Center in the Engineering Building is NOT helpful. Because there are limited resources for aid in this class, students often find themselves struggling with assignments and test preparation.

#### N/A

Some of the projects were very time consuming at least for me.

#### the programming part

The labs are not very good and they are manditiory. The lab is not long enough for the ta to teach us and for us to do a worksheet. I would rather see worksheets and solutions be posted online so we can work through them at our own pace and not have to rush, and a lab that just has an additional lecture.

Nothing to dislike about this class.

Simply that the material is too difficult for me to grasp.

Some of the programming assignments were pretty difficult for people without much experience.

The programming assignments were pretty difficult, though not impossible.

The book was absolutely no help. Also, the math for this course was way to advanced for me. I struggled with everything that had to do with an equation. It was just assumed everyone was following the math and I was not. I also had never seen anything we had done before, but the teacher assumed we were familiar with some of the things I never mastered.

tests.

Tests.

9:30 in the morning

homework assignment are too difficult to test completely for people that have no previews programing experience besides intro to c. (5 hours to make the program and another 5 to test for all possible cases) students have more that one class to be able to dedicate this much time for a homework assignment.

The tests. Some of the questions were hard to answer in the correct format. A student could have knowledge of the question being asked, yet not know how to specifically put it down (on the written portions) that it would not be marked wrong.

9:30AM!

the tests were hard

Sometimes when our lectures were about heavy math related topics they were dead boring to listen to. I understand it's difficult to make math and summations interesting but it's the kind of thing that if you don't pay attention you won't grasp the concept and paying attention is almost impossible for the most part. Aside from that the only other thing I didn't really enjoy was the little feedback we got on our assignments, you spend 5~10 hours on it and the TAs spend 5 minutes on it. I know in a class like this it's unrealistic to get it but sometimes I wish we would go over in class the "right" way of solving a problem because sometimes you can brute force or backdoor an assignment and completely miss a few key concepts and you really DON'T know if you did it wrong unless the program just plain doesn't work.

Lack of book assignments.

The tests were always fair, but extremely hard.

The only thing I can think of that I didn't like about this course was how challenging it was, yet that isn't entirely Mr. Guha's fault. Computer Science 1 is a challenging course in general and especially a challenging course for me. This being said there are a very few things that I disliked about Mr. Guha and this class.

Nothing specific

A bit challenging.

I felt like there was a big step up in difficulty from Intro to C. Obviously that's not a problem in itself, but I could have used a heads-up early on.

Test were extremely hard but curve helped. Also, did not like how long the programs took to grade.

The course itself is worthless towards the real world, in my opinion. It's only usefulness is helping facilitate similar programming methods that span all languages. Although this could much better be conveyed in worthwhile languages that are in use; not one that is outdated.

First exam was too long/didn't have enough time.

What is your reaction to the method of evaluating your mastery of the course (i.e., testing, grading, out of class assignments (term papers), instructor feedback, etc.):

Considering the difficulty of the course, I would say that I am satisfied with the method of evaluating my mastery of the course.

The first test given was all free response write code on the fly which was entirely ridiculous for a 50 minute class period. I think that the class feedback system was fine.

I like how there are a lot of grades that weigh in to your final average, instead of it being solely exams. The programs were always great practice and really made the concepts sink in. I also like having an attendance grade for lab. Overall it's a good balance and with the curve, my average is definitely a fair evaluation of my performance.

It is a fair means of evaluation.

He is the fairest teacher I've ever had. He understands that his tests are difficult, and so he adjusts his grade lines according to the difficulty of his tests. The programming assignments were great because it helped me understand the concepts that I learned in class.

Tests were fair. The class seemed to suffer the most on the first exam, but that happens in every CS class, and Guha weighted the scores appropriately.

Teacher adjusts grade scale to difficulty of class, which was sufficient.

Very straightforward. Homework and tests were based on specifically what he taught.

Grading was extremely harsh.

Having a different format for each test was stress inducing since i never knew what to expect!

I believe he has a good balance between everything. Maybe have a standardized test format to use for all his tests instead of doing all free response or all multiple choice.

Assignments were fine, and well-matched to our lessons. Arup does a good job of making them as interesting as possible. That said, the assignments all had operated on a file, processed it, spat out the results, then ended. Would have liked to see one assignment operate differently, where input is entered by the user and continues to run until ended. A suggestion would be to create a game based on a data structure.

testing fair, assignments complicated

I appreciate the grading based on averages and standard deviations because it is more challening, but also more rewarding when your grade is good.

N/A

The grading scale is great but kind of scary.

test were freaking hard! but he curves so its ok

This course had very good evaluation methods. Assignments were graded in a timely manner unlike my other programming class last semester.

His grading lets you know how well you know the material.

Considering this type of material, I find the method of evaluation very suitable and complementary to how it is taught.

Hard to gauge how you're doing the the course since assignments take a while to grade and the grading scale is constantly changing.

Excellent, tests were fair.

The assessments were comprehensive of the entirety of the course, nothing more, nothing less

I was surprised about the extremely difficult tests but very happy he adjusts his grading scale.

This class needs a text. Depending soley on lectures and instructor notes is not sufficient.

Homework was fair, tests are ok.

Homework was good exercises. Tests are ok.

The only thing that was kind of tricky was the formatting of the tests. The first one was really tough but they got exponentially better with the next two.

test are fair in my opinion but the course notes posted online do not include all the workout problems, there will be blank spaces where there is supposed to be a figure. notes exactly as they appeared in class and any alterations done in class should be posted online.

The system by which test and assignment were graded from the instructor's point of view were always available to the students. This insight allowed each individual to understand how or why each question was graded in a particular way. Thus, the grading system was fair and fully open to discussion because these views were made public to the entire class.

Grades generally took a long time to get back between turning programs in, though the test grades were received in a much more timely fashion.

Feedback was spot on, testing was challenging, but his grading policy was highly forgiving, assignments were challenging but on point with the topic.

#### same as above

Tests felt fair, they were difficult but they didn't test us on anything that we hadn't learned. I think the first test and first assignment were basically designed to make people who weren't dedicated to the class to drop out but past that the class got progressively easier.

#### Very good

Everything was fair and everything tended to be on the subject of what we were learning.

I believe the tests were a little too challenging and at some times slightly ridiculous but overall I believe Mr. Guha tested the material he taught correctly.

The challenging exams are a great way to gauge how well the class is learning.

#### It works

It was strange how the grading scale worked. Instead of having to curve a class 20 points, make it easier. The same amount of learning takes place either way (you get a 70 on an easy exam or a 50 on a hard one, you still did average so what's the point).

At times I thought I was putting inordinate amounts of effort into the programs, which are weighted much less than exams, and often do not help a whole lot as preparation for the exams. I'm not sure if differently weighted grades would help at all, though. Overall the grading system seem totally fair to me.

The only way to truly test programming skill is to make us write programs. I find Arup's decision to do just that very effective.

Grading was fair for the most part.

#### Additional comments and suggestions for improvement:

Fortunately he is based on a curve.

This class should have a disclaimer that the time requirement for general students is high versus a standard class. Arup being a great lecturer and theoretical-type teacher I believe that some assignments need modification or more idea sharing for some of the assignments.

Best teacher I've had at UCF thus far! Please teach CS2 in the spring :)

Perhaps offer an extra credit programming assignment?

# Great professor!

This class would be better served by moving to an hour and 15 minute schedule, two days per week instead of three. If a 45-minute class schedule is unavoidable, use WebCourses for testing. Future classes should have a lecture or two (and maybe a small program) providing at least an introduction to programming for a Windows environment. Even if all the program did was allow the user to move a simple shape around the screen.

When selecting students to be TA's please select students that not only understand C FULLY but also that can teach these topics, essentially being able to successfully convey these topics to students who often times are first year CS students and who have no idea of what they are doing.

Best teacher I have had so far.

Could use some smaller programming assignments here and there that focus more of the coding of the data structures without figuring out the logic of how to solve the issue. That way, when we're actually solving complex coding problems, we're more familiar with the data types we need to use.

Keep up the great work professor Guha, enjoyed the class!

What is the point of giving a test that you as a teach pretty much know no one is going to pass? Also, many cheaters in this class, but I felt it was unfair since the class is curved. No matter the teacher says the class is not curved, I dont know how you call getting a 53 in the class a C, not a curve.

I think the the class was slow paced, I think if you should use powerpoint or graphics off the internet concerning trees/linked lists, it gets to the point faster, and it allows more time for other things.

I think you should use powerpoint, so you have more time to go over other things. I felt a semester was a bit much for basic data structures. Other than that, I think you're the best CS teacher I had!

grading criteria is to harsh for homework assignment specially for inexperience programmers.

Perhaps take a bit out of the length of the primary programs, and add in smaller homework assignments to help enforce the ideas taught in class. This could also act as a buffer for the students who are struggling to maintain a grade in the class.

Only suggestion I could make would be to utilize a tablet/tablet PC when switching from lecture notes to written notes, or scan in written notes after class, sometimes the pace of written notes were too much to keep track of writing myself, while trying to pay attention (especially with traced out code). Either that, or I'm lazy.

I think you need to stress from the beginning of the semester that assignment 6 is going to be a lot of tedius (yet not entirely difficult) logical work because if I knew how much work it was going to be (in relation to the past assignments) I might have put in more effort towards getting community service done. With that said assignment 6 wasn't even that bad, I think it was just understanding a lot of logic so on the flip side I feel like a better programmer now after having done it so I guess it's a double edged sword really. Designing a bubble sort that works on strings may be simple but understanding the logic for it and actually writing it up is important. Same with the order you handle events that occur. I've actually taken Arup before (in '04) for intro to C and back then I didn't enjoy the class but coming back and taking him with a few more years of experience I can easily say I think I've learned the most in his class than any other class so far. When you are forced to struggle and put in effort to get things done you really end up learning a lot better than just breezing through the material.

Mr. Arup Guha has been by far my favorite teacher here at the University of Central Florida (UCF). I have had him as my instructor for two classes and am planning on taking him for several more. His teaching style is excellent and his organizational skills are by far the best I have ever seen for any teacher/professor. The only downside is that he is a very challenging professor and when I say challenging I mean that Mr. Guha will challenge your knowledge on the topics he teaches very throughly. As I stated before Mr. Guha is a wonderful and even though I struggled through this class (Computer Science 1) I still enjoyed it. Thank you Mr. Guha.

I wish more professors taught like this.

n/a

Thanks for teaching, Arup!