

Georgia Tech CS 4001 - Section A - Spring 2014

General

Instructor

- Professor Alberto Apostolico (Email is the BEST (and ONLY) option: axa at cc dot gatech dot edu, please use CS4001: as the first words in the subject line)
- Office Hours: After class OR schedule via email appointment

Co-Instructor / Teaching Assistant

- TBA (TBA AT gatech DOT edu)

Class Time/Location:

- Tuesday – Thursday 9:35p – 10:55p.
- Location: CoC102.

Class Description

Although Computing, Society and Professionalism is a required course for CS majors, it is not a typical computer science course. Rather than dealing with the technical content of computing, it addresses the effects of computing on individuals, organizations, and society, and on what your responsibilities are as a computing professional in light of those impacts. The topic is a very broad one and one that you will have to deal with almost every day of your professional life. The issues are sometimes as intellectually deep as some of the greatest philosophical writings in history – and sometimes as shallow as a report on the evening TV news. This course can do little more than introduce you to the topics, but, if successful, will change the way you view the technology with which you work. You will do a lot of reading, analyzing, and communicating (verbally and in writing) in this course. It will require your active participation throughout the semester and should be fun and enlightening.

Learning Objectives

In this class, you will learn about:

- **Ethics:** What do “right” and “wrong” mean anyway? How is “ethical” different from “legal”? We’ll learn about several philosophical approaches to ethics including utilitarianism, Kantianism, stakeholder analysis, and virtue ethics. The goal is for students to be able to address ethical dilemmas with reasoned arguments, grounded in a combination of these ethical theories.
- **Professional Ethics:** What special responsibilities do we have as computing professionals? What do the Software Engineering Code of Ethics and ACM Code of Ethics say, and how can we use these in our daily practice?
- **Computing and Society:** In what ways does computer technology impact society? We’ll talk about a host of issues including privacy, intellectual property, and freedom of speech.

- **Argumentation:** How do you construct a well-reasoned argument? Whatever you go on to do in your professional career, your success will arguably depend more on your oral and written communication skills than on your technical skills. This class is one of your few and precious opportunities to work to improve those skills.

Core issues about computing and society and about computing professionalism.

Following issues will be touched on during the course of the term

- Impact of Computing on Society, Individuals and Organizations
- Governance and Regulation
- Free Speech
- Intellectual Property
- Privacy
- Security and law enforcement
- Dependability other than security.
- Professional Responsibility
- Media and its impact on computing and society

Text & Reading Material.

- Ethics for the Information Age, [Quinn] by Michael J. Quinn, M., 5th Edition, Addison Wesley, 2012 (ISBN: 978-0132855532) (Website)
- Writing Arguments: A Rhetoric with Readings, [WA] (Concise Edition), by John D. Ramage, John C. Bean, and June Johnson, 6th Edition, 2012. ISBN: 0-205-17149-4 ([Website](#))
- Other material available online or on electronic reserve.

Assignments and Grading

- Class Attendance & Participation (20 %)
- Homeworks (40%) [There will be 8 Assignments denoted as Homework]
- Midterm (10%) (Here is a [sample midterm exam](#).)
- Term Paper (20%)
- In Class Presentation (10%).
- All of the above subject to slight modifications, which will be announced in class.

Policies

- **Class attendance is required.** Late by 15 minutes, counts as an absence. Legitimate reasons for being excused from class include, personal issues, health (keep those germs away from class), interview, conference travel, etc. Travelling and exploring, assignments due in other classes, out to pick up friends, and other such excuses not accepted. Please inform Instructor of a planned absence via email before class.
- **Homeworks Assignments** will be graded on a list of criteria (specified on the assignment) such as quality of writing, completeness, insight into technical issues, insight into social issues, etc. Assignments are due at the *start* of class on the day they are due.
- **Late Assignments:** Each student is allowed 2 days of late submission, to be

USED **only for assignments (and not for anything related to the final term paper!)**. You can use these 2 days for any assignment. After your “grace” days are expended, grading will be deducted as described above.

- **Laptops use in class:** Use of laptops in class room for purposes of note-taking is allowed, but ONLY and ONLY for that purpose. If a student is seen surfing the web during class, or chatting with someone, or emailing, then points will be deducted from the class attendance and participation portions of the grade (3% for each infraction, with a total of 3 max after which the whole class participation grade will be lost).
- **Cellphones in class:** Please turn your cellphone and other mobile devices to “silent” mode during class. Thanks.
- This class abides by the [Georgia Tech Honor Code](#). All assigned work is expected to be individual, except where explicitly written otherwise. You are encouraged to discuss the assignments with your classmates; however, what you hand in should be your own work. If any work product was produced based on discussions with someone else (in the class OR outside), please specify clearly in the final turn-in.

Acknowledgments

Assignments and ideas on this syllabus build on those from everyone who has taught it before, especially Colin Potts, Amy Bruckman, Jim Foley, Irfan Essa, Mary Jean Harrold, Jay Summet, and Spencer Rugaber.