CAS CS 132
Object-Oriented Programming
Spring 2015

Meeting Place: CAS 313

Meeting Time: TR 3:30 – 5:00 pm

Instructor: Professor Mark Crovella

- **Office:** MCS-140E
- **Office Hours:** TBD
- **Email:** crovella@bu.edu

Teaching Fellow: QInxun Bai

- **Office:** TBD
- **Office Hours:** TBD
- **Email:** qinxun@bu.edu

Overview of the Course

This course will ...

Readings

The textbook for the course is David C. Lay, *Linear Algebra and Its Applications* (LAA), 4th edition. Assignments will be taken from the book.

Web Resources

The slides I use are actually executable python scripts, using the `ipython notebook`. If you have ipython notebook, you can download and execute the examples on your own computer, and you can modify them any way you'd like, play around with them, experiment, etc.

The slides I use in lecture are published on `github`. The repository is `https://github.com/mcrovella/CS13` The TF will describe how to access the repository using `git`, but you can simply download directly from the web site if you prefer.

We will be using Piazza for class discussion. The system is highly tuned to getting you help fast and efficiently from classmates, the TF, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. Our class Piazza page is at: `https://piazza.com/bu/....`

Reading and Homeworks

1. You have about 10-12 pages of reading for each class. Class will be more understandable if you do the reading first.
2. Homeworks will be assigned on Thursdays.
3. Homeworks are due at 3:30 pm on Tuesdays. This means they are due before the start of Tuesday's class.
4. You can discuss homeworks in section meeting on Mondays. But don't expect that Mr. Bai will be going into detail – instead, he will answer specific questions!
5. Homeworks will be submitted via *websubmit* (instructions in class).

Grades

Programming Environment

We will use `python` as the language for teaching and for submitting assignments that require coding.

Course and Grading Administration

Assignments will be submitted using `websubmit`. Assignments will generally be due *WHEN?*

LATE POLICY: You have a total of three late days that you can use without penalty. After you have used your three late days, each day reduces the assignment grade by one step (eg, from check-plus to check, etc).

Lecture slides, homework assignments, and this syllabus will be available online on the website. Incompletes will not be given.

Assignments

There will be weekly assignments.

Academic Honesty

One of the goals of this course is to provide you with an intensive programming experience that will raise your level of programming skills. You will come out of this course with the ability to take on larger programming projects than you could before.

Hence this is a programming-intensive course; almost all of your grade will be based on code that you submit.

Some of the homework assignments given in this course were originally developed at other institutions. Undoubtedly, you will be able to find examples of assignment solutions online. Likewise, your classmates will be solving the same assignments as you.

I have two messages with respect to academic honesty in this course: (1) submitting someone else's code means you lose about 90% of the value of being in the course at all; and (2) you will probably get caught, which will have very serious consequences.

This doesn't mean you shouldn't ask for help; what it means is that *you must indicate on your submission any help you received.* That includes discussions with the TF, grader, or other students. Do this in the comments at the beginning of the code.

This discussion should make clear that *you must not share code with other students.* Don't ask for someone's code, and don't provide it. Discuss ideas and strategies freely, but write your own code.

Also, *you must not look a solutions from other courses or other years.* The assignments in this course will be different in some ways from other courses and years, so using "found" code in this way is dangerous as well as being dishonest.

To back this up, keep in mind two things: first, you must be prepared to explain any program code you submit. The TF, the grader, and I may ask any of you to explain your code at any time. And finally, I use automated plagiarism detection tools. These tools compare code between students, as well as code that is available online. I have used these tools for some time and (unfortunately) they regularly turn up cases of academic dishonesty.

Syllabus

Note: the best strategy is to do the reading *before* the class on which it is based.

Date	Topics	Reading	Assigned	Due
1/20	NO CLASS			
1/22	1: Linear Equations	LAA 1.1	H1	
1/27	2: Row Reduction	LAA 1.2		H1
1/29	3: Vector Equations	LAA 1.3	H2	
2/3	4: $Ax = b$	LAA 1.4		H2
2/5				
2/10				
2/12				
2/17	Substitute Monday - No Classes			
2/19				
2/24				
2/26				
3/3				
3/5				
3/10	Spring Break			
3/12	Spring Break			
3/17	Midterm			
3/19				
3/24				
3/26				
3/31				
4/2				
4/7				
4/9				
4/14				
4/16				
4/21	(Guest lecture)			
4/23				
4/28				
4/30				