

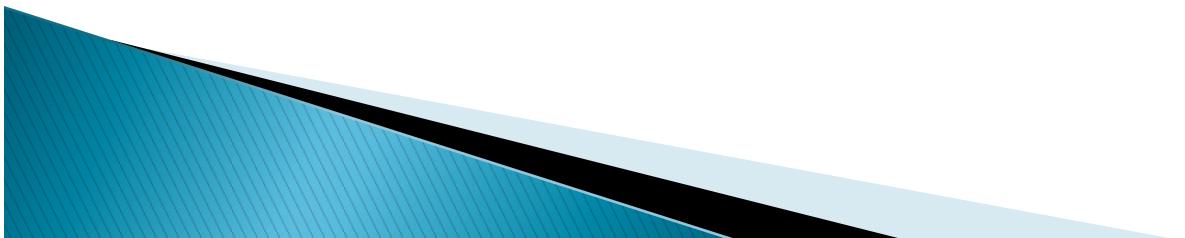
CSCI-UA.60-1
Fall 2019

**Database Design
and Implementation**

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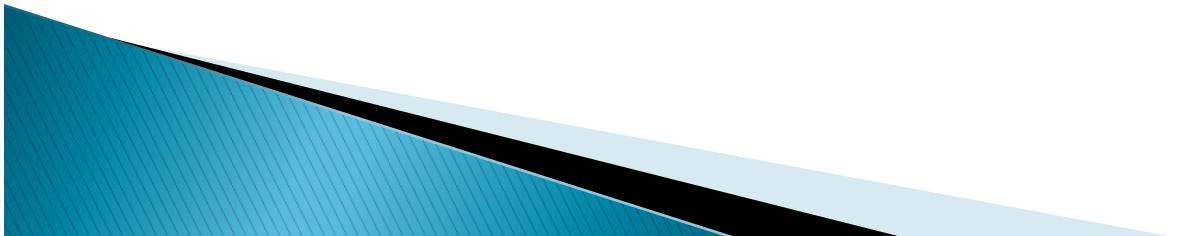
Road Map

- **Course Description**
 - What's this class all about (Goals)?
 - A preview of software applications used
 - Books and Resources
- **Administrative Issues:**
 - Important dates, Grading, Email and UNIX Accounts, Computer labs
 - Office Hours
 - Course Web site
 - NYU/Classes



Goals of the course:

- Principles in Database Design
 - Understanding the methodology and principles for designing and analyzing complex and effective datasets and databases
- Practice
 - Working with Data: Finding data; cleaning data; topics in data analysis; using Python to “scrub”data.
 - Topics in Database Design
 - SQL: SQLite and MySQL
 - NoSQL: MongoDB
 - SPARQL: RDF query language for linked open data
 - Using the Python’s PANDAS for data analysis
 - Introduction to data visualization using Python



Resources used in this course

1. There are a number of books which are available through the Bobst Library “Safari OnLine” in addition to the course textbooks.
2. [Special UNIX Account on the Computer Science department students' webserver \(*i6.cims.nyu.edu*\):](http://i6.cims.nyu.edu)
 - Used for server-side database access
 - You do not have to apply for this account, you will be assigned this account automatically based upon your enrollment in this course
 - ▶ Links to Internet resources will be posted to the course home site.
 - ▶ Software for your local computers will be free and open-source.
 - ▶ Any additional software needed (e.g. Photoshop) will be available in the ITS labs or running on the i6 server (e.g. Python, SQLite, MySQL and others).



Grading

- Grade Distribution:
 - Programming Assignments (40%)
 - Midterm Exam (25%)
 - Final Exam (35%)



Attendance

- ▶ Attendance is very important. If something comes up and you can't make it to class, please let me know so that I can help you to make up the materials!



A Word About Cheating

- For the purposes of this class, cheating is defined as:
 - Copying all or part of another author or student's homework or project.
 - Allowing another student to copy all or part of your homework, project, or exam.
 - Discussing homework concepts and getting feedback is fine, but ***you must submit your own work***
- However ... there will be one or two assignments in which you may work together with one other student in the class *if you wish*. I will clarify that at the time of the assignment!

When you have questions ...

Whenever you have a question about the course material, please feel free to drop by during my office hours, call me at x8-3131, or write me an email message. If at any time you feel that you are falling behind or are overwhelmed by the material, let me know as I will be very happy to help you.

Come to my Office Hours

- Dates and times – Tuesdays and Wednesdays
11:00 AM - noon
- And by appointment in my office ... or by phone ... or by Skype/Facetime/Hangout



I look forward to working with all of
you!

Please see me if you have questions
or comments!!

