

CSC 261/461 – Database Systems

Lecture 27

Fall 2017

Final

- On Dec 18
- 7:15 pm - 8:45 pm (90 minutes)
- Location: CSB 601

Announcements

- **Course Evaluation**

- The link is at **my.rochester.edu**.
- Click on the **Student Access** tab and select the **Course Evaluation Results** from Spring 2012 - Current.
- Once you complete all your course evaluations you will be permitted to view your grades as they become available.
- I will really appreciate your feedback.
- Let me know:
 - What you liked about the course
 - What you did not like much (I will work on that to improve)

I am offering the course again in Spring 2018.
So, your feedback is really important

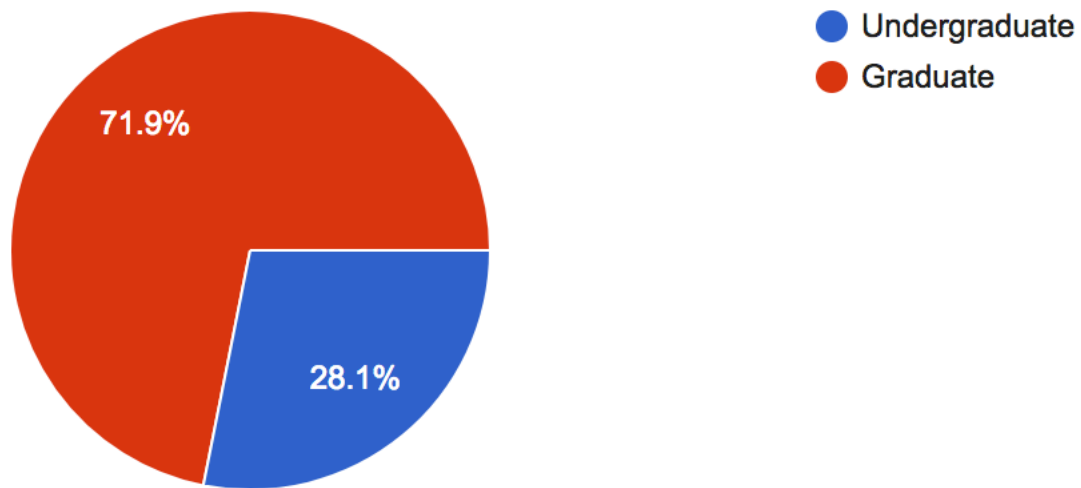
Fall vs. Spring Offering

- Less students
- More interactions
- More in-depth coverage
- More Graduate Students than Undergraduate
- More Data Science Students

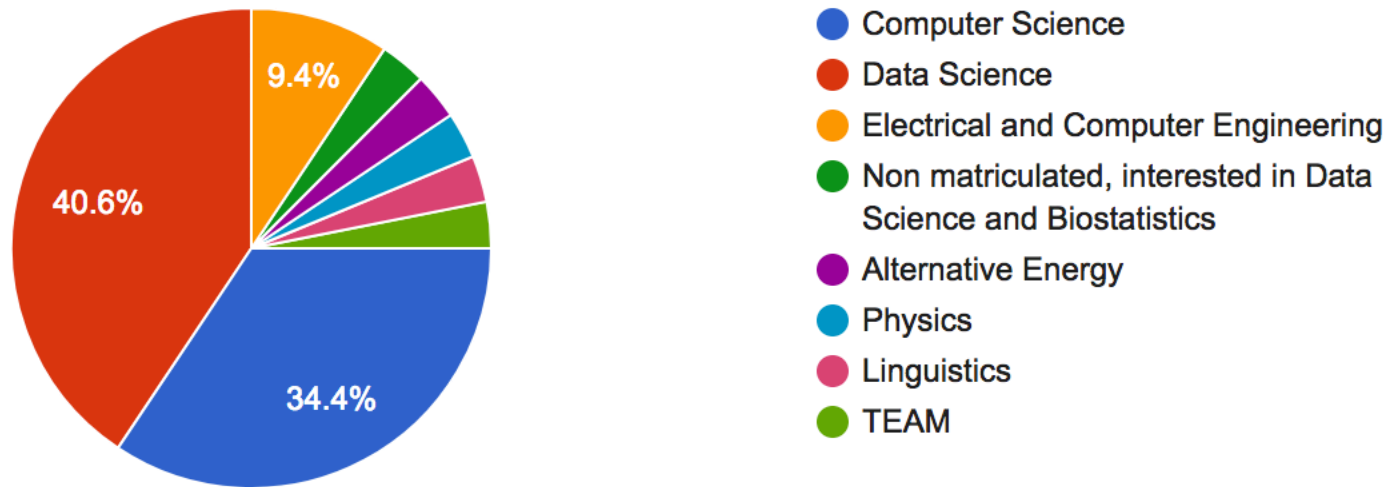
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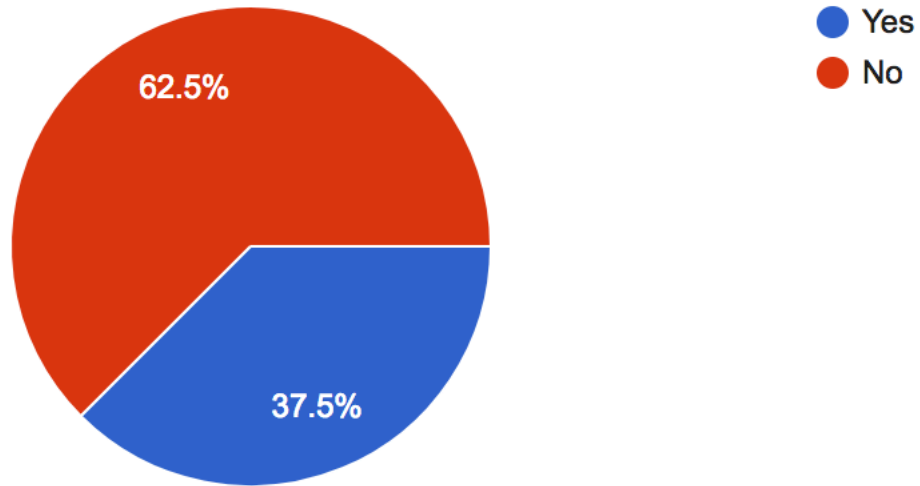
Grad vs UG



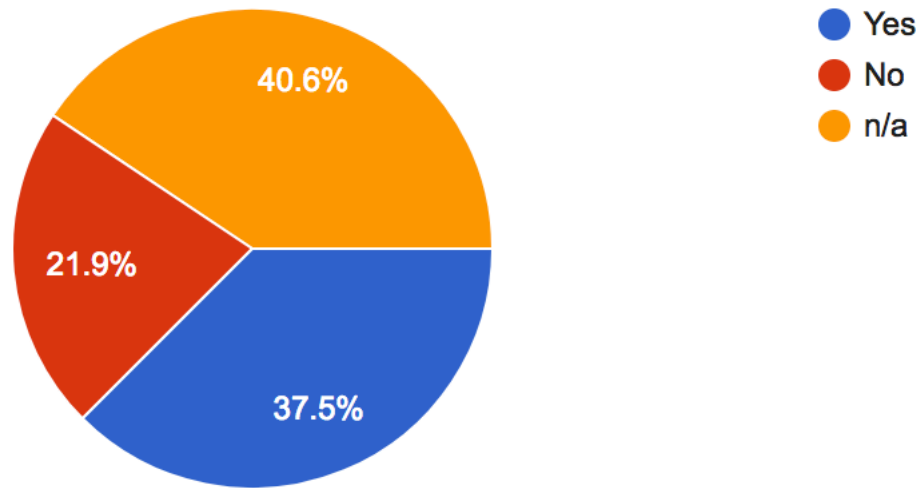
Major



Did you take CSC 172?



If 'no', have you ever taken a course similar to CSC 172



If any of you need to brush up data structures knowledge:

1. You can review slides from my current offering:

<http://www.cs.rochester.edu/courses/172/fall2017/>

2. http://lti.cs.vt.edu/LTI_ruby/Books/CS172/html/

COURSE COVERAGE

What did we learn in this course (Before MT)

User Perspective

Why Database Systems (vs. List or Microsoft Excel)

How to design a database system?
(Requirement Analysis; Queries Supported, Forms (for input), Reports (for output))

ER Diagram

Relational Schema and SQL Queries



What did we learn in this course (After MidTerm)

Database
Administrator/
Designer
Perspective

How and Where to Store the data?

Do I need indexing?

How to make the queries
optimized?

How to make sure all the
transactions maintain ACID
property

Chapters to Study for Final

- SQL
- Whatever we covered after midterm:
 - File Structures, Indexing, and Hashing
 - Chapter 16 (Disk Storage, File Structure and Hashing)
 - Chapter 17 (Indexing)
 - Query Optimization
 - Chapter 18
 - Chapter 19
 - Transactions
 - Chapter 20
 - Chapter 21
 - Chapter 22

For most of these topics, going through the slides and working on the problem sets are good enough.

Final

- 60 pts
 - 20 pts short questions
 - 40 pts longer-questions
 - Mostly focuses on topics covered after Mid-Term
 - SQL is included
 - There will be extra credit problems!

Topics to Study

- Main Modules:
 - File Structures, Hashing, Indexing
 - Query Processing and Optimization
 - Transactions
 - Projects
 - Project 2: SQL + Triggers

Each of these 4 sections is worth between 10 and 20 pts.

No question on Functional Dependencies

No question on Normalization

No question on ER diagrams

No question on MongoDB

That's all



"That's all Folks!"

Acknowledgement

- CS 145 offered by Stanford University
- Textbook authors
- Numerous websites
- Last but not the least

All of you



It's Exam Time!
Here's a BIG

GOOD
LUCK!

wish to you