CS 261
Mathematical Foundations of Computer Science

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Contact Info

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Lectures

- 11:00 am - 12:15 pm
- TR
- Dane Smith Hall 225
Office Hours

- Office Hours: MF 2:00pm - 4:00pm
- You may attend regular office hours without an advance appointment. If you want to meet at another time, make an appointment by email or in person.
- TA has office hours, too! (Check course website)
Textbook


- The bookstore has 7th edition available.
- Other editions of the book also work.
Grading

• 75% Exams (3 exams)
• 25% Homework, quizzes, etc.
  • Assignments must be in UNM Learn to receive credit.
  • It is your responsibility to make sure you submit the correct file.
  • Don’t wait until the last minute to submit.
  • Submit early, submit often!
Extension Days

• Ideally, you’ll never need to turn in an assignment late.
• However, life happens!
• You have 10 extension days to spend through the term.
• Max 3 days per assignment.
• Use them wisely.
• You don’t need to ask before using regular extension days.
• Contact me if these will not be enough, preferably *before* you are late.
ARC Accomodations

- The Accessibility Resource Center provides accommodations with students with disabilities.
- For example: Extra time and/or quiet location for exams
- http://arc.unm.edu
- Please take advantage of their services if applicable
UNM Learn

- http://learn.unm.edu
- Assignment submissions
- Discussion forum
- Surveys and quizzes
- Announcements
To do

- Visit course website
  - Slides will be posted after the lecture.
- Visit UNM Learn site
  - Visit discussion forum
What is CS 261?

- Discrete Math
- What is discrete?
  - Finite and countable
  - Sets of elements that can be listed.
- What is discrete math?
  - Also referred to as finite mathematics
  - The study of mathematical structures that are fundamentally discrete and do not support or require the notion of continuity.
What is included in Discrete Math?

- Set theory
- Sequence
- Number theory
- Mathematical Logic
- Combinatorial mathematics and Classic Probability
- Graph theory
- More! (Counting, Cryptography, State Machines, Proofs, etc.)
Why Discrete Math?

- Computers are fundamentally *finite* and *discrete*.
  - Finite number of bits
  - Represent discrete values (not continuous!)

- Improves your analytical thinking and the ability to grasp new concepts and technologies.

- Things are changing quickly. You never know what you will be doing 10 years down the road. It is important to be able to learn new things quickly.
How to do well in CS261?

- It is not really an advanced course and does not have a lot of prerequisites.
- In fact, it could be offered in middle schools and high schools.
- This is a brand new start!
- A lot of new definitions.
- Emphasis on logical thinking
  - Proof techniques.
  - Reasoning ability
- Don’t be lazy!
  - Attend the lectures
  - Read the book
  - Do the homework