Welcome to...

CSc 144: Discrete Mathematics for CS I
Fall 2023 — Section 002

Course Information Overview

Announcements
(Expect a slide or two of announcements at the start of each class.)

- Handouts:
  1. Syllabus Summary — a fraction of the full version!
  2. Background Survey — distributed/collected later

- There are two sections of CSc 144 this fall
  - This is Section 002
  - Sections 001 and 002 are NOT interchangeable!
    - Different pros, assignments, exams, TAs, . . .
    - Attend only the section for which you registered.
Catalog Info

Class: CSc 144–002, Discrete Mathematics for Computer Science I
Credits: 3
Meets: 3:00 – 3:50 p.m. Mondays, Wednesdays, and Fridays
Room: Koffler Building, Room 204
Prereqs: ‘C’ or better in 1st Semester Computer Programming, and
‘C’ or better in College Algebra or higher
Desc: The first of a two-course sequence introducing mathematical con-
ccepts for Computer Science. Topics include: sets, functions, and
relations; propositional and predicate logic; foundational combina-
torics; discrete probability; modular arithmetic; and proofs.
Final: Thursday, December 14th, 2023, 8:00 – 10:00 a.m.
(common final exam time with Section 001)

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Instructor and UGTAs

Instructor: Lester I. McCann, Ph.D., Professor of Practice

UGTAs: Kevin Li* (Class Coordinator)
Jake Bode* (Coordinator–in–Training)
Nimet Beyza Bozdag*
Claire Lodermeier*
Sartaj Rauf*
MohammadHossein Rezaei*
Kekhrie (KK) Tsurho*

* UGTA for CSc 144 w/ McCann last spring
* Took CSc 144 w/ McCann last spring
* Took CSc 245 (previous version of 144 and 244) w/ McCann

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Information Resources

Looking for class information and materials?

- **Class D2L Site** (textbook, links to web page content):
  - [d2l.arizona.edu/d2l/home/1322194](d2l.arizona.edu/d2l/home/1322194)

- **Class Web Page** (guided & completed slides, handouts):
  - [cs.arizona.edu/classes/cs144/fall23-002](cs.arizona.edu/classes/cs144/fall23-002)

- **Piazza** (Q&A):
  - [piazza.com/class/lkuca6fd8z7oe](piazza.com/class/lkuca6fd8z7oe)

We’ll have office hours (OHs) for in–person help, supplemental instruction (SI) sessions for additional practice, and tutoring in the CS Tutor Center (G–S 914). Times to be announced!

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Noteworthy Dates

**Exams:**

- Exam #1: Friday, September 22
- Exam #2: Friday, October 20
- Exam #3: Friday, November 17
- **Final Exam:** Thursday, December 14, 8–10 a.m.

**No Class Meetings On:**

- Monday, September 4th (Labor Day)
- Friday, September 29th (Honors Convocation, 3-5pm)
- Friday, November 10th (Veteran’s Day)
- Friday, November 24th (Thanksgiving)
Grades and Grading (1 / 5)

Grade Breakdown:

7 Homeworks = 28% (total; 4% each)

\( n \) Quizzes = 16% (total; best \( n = 8, 9 \) or 10)

3 Midterm Exams = 42% (total; 14% each)

Final Exam = 14% (comprehensive!)

TOTAL = 100%

We do not grade on attendance or class participation, but you’ll still want to attend regularly (e.g., for quizzes)

Grades and Grading (2 / 5)

Homeworks

- Typically 50 points each
- Due at the start of class one week after being assigned
  - You have three ‘late days,’ maximum one per homework
- Question types are mostly problem-solving
  - Though there will be some programming!
- You will submit answers as PDFs to Gradescope
  - We recommend that you word-process your answers
- Graded by the UGTAs within one week
- Regrade requests accepted for one week thereafter

See the full version of the syllabus for the details!
Grades and Grading (3 / 5)

**Quizzes**

- I plan to have 12 **unannounced** quizzes this semester
  - Usually given in the last 10 minutes of the period
- We’ll only count your best 10, or . . .
  - . . . best 9 if class evals are submitted by > 50% of students, or
  - . . . best 8 if class evals are submitted by > 66.7% of students

> *(This means you can miss some quizzes and still do OK.)*

- Electronic devices may **not** be used on quizzes!
- Regrade requests accepted for 1 week after grading is done

Grades and Grading (4 / 5)

**Midterm Exams**

- Will cover the material since the last midterm
- Question types are mostly short–answer, problem–solving
- Like quizzes, electronics may **not** be used on exams
- **I do not give make–up exams!**
  > *(Why not? Because I replace your lowest midterm’s score with a copy of your final exam’s score!)*
- Graded by the UGTAs and me within two class meetings
- Regrade requests accepted for a week by email to me

See the full version of the syllabus for the details!
Final Exam

- Is comprehensive (covers all topics, including math review)
- Is at a common time with the other CSc 144 section
  - Don’t blame me; not my idea!
- Consists of short-answer & problem-solving questions
- I review finals of students near the next-higher letter grade
  - Thus, regrade requests are not needed
- I replace your lowest midterm with your final exam score
  - Allows you to miss a midterm, or have an off-day

See the full version of the syllabus for the details!

“Why Should I Read the Full Version of the Syllabus?”

Because:

- There are many more details within it, such as:
  - A detailed topic outline, links to free online textbooks, when to expect replies to questions, applying for disability accommodations, etc.
- It has links to Department, University, and ABoR policies that you should know about, including:
  - Attendance, codes of conduct, FERPA, incompletes, etc.
- The Practice Quiz (Quiz #0) will ask you questions about the content of the syllabus.
- Ignorance of the syllabus will not excuse you from its content
- And, importantly, it covers . . .
Academic Dishonesty (a.k.a., Cheating)

Four words cover it: **Do Your Own Work!**

- The homeworks and quizzes in this class are **individual** assignments, meant to help prepare you for the exams (which are also individual activities!).
  - If you can’t do homeworks, how will you handle exams?

- If we catch you cheating, the *minimum* sanction is a zero on the assignment and completion of an expensive academic integrity workshop.

- Stuck? The TAs and I are here to help you get unstuck!
  - We have office hours, SIs, & Piazza (and CS tutors!)

- Not sure that an action is acceptable? **Ask us first!**

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Schedule for Weeks 1 and 2

- This week (Week 1):
  - Today: Basic Info, Math Review, **Background Survey**
  - Wednesday: Math Review continues
  - Friday: Finish Math Review, **Practice Quiz (Quiz #0)**

- Next week (Week 2):
  - Monday: Topic 2 (Logic)
  - Wednesday: Topic 2 continues
  - Friday: Topic 2 continues; **Quiz #1, Homework #1**

Curious about the items in red?
Administrative Drops (A Last Syllabus Detail)

Students who do not turn in AT LEAST ONE of:

- Background Survey,
- Practice Quiz (Quiz #0), and
- Quiz #1

will be administratively dropped from the class.

(Why? Such ‘ghosts’ almost always either withdraw later, or ‘disappear’ without withdrawing and thus get a failing grade.)

Plan to submit them all! Note that of those three items, only Quiz #1 counts toward your class grade.

The CS “Theory” Course Sequence

1. CSc 144 (Discrete Math for CS I)
   - Logic, basic proofs, sets, relations, functions, counting, probability, . . .

2. CSc 244 (Discrete Math for CS II)
   - Inductive proofs, recurrence relations, graph theory, finite state machines, regular languages, . . .

3. CSc 345 (Analysis of Discrete Structures)
   - Algorithm analysis, structural induction, trees and graphs, hashing, sorting, . . .

4. (B.S. Degree Theory & Writing Elective) Your Choice of:
   - CSc 437 (Geometric Algorithms),
   - CSc 445 (Algorithms), or
   - CSc 473 (Automata, Grammars, and Languages)
Let’s Do The Background Survey!

Instructions:

- The Background Survey is NOT graded! (No stress!)
- Take one copy, pass the rest down the row
- Read and follow the directions
- When you are done, hand your paper to me or to a TA; you’re free to go

Enjoy the rest of your day! We’ll see you Wednesday!