Course Missive

Introduction

Welcome to CS22, Introduction to Discrete Structures and Probability. This course seeks to place on solid foundations the most common structures of computer science, to illustrate proof techniques, to provide the background for an introductory course in computational theory, and to introduce basic concepts of probability theory, Boolean algebras, logic, set theory, elements of algebraic structures, graph theory, combinatorics, and probability.

Lectures

Lectures will be given by Professor Klivans on Mondays, Wednesdays, and Fridays from 1:00pm to 1:50pm in Macmillan Room 117. Course-related announcements may be made in class and, while you are not required to attend, you are responsible for anything covered in lecture. Professor Klivans will not strictly follow the text, and may skip topics in the book or lecture on subjects not in the text. We will release very brief class notes, but they are meant to reinforce the lectures, not replace them.

Recitations

Each week, there will be two identical recitations (See calendar for times and locations). At recitation, students will review important materials from lecture and collaborate on problems chosen to reinforce core concepts. Recitations are *fully collaborative*, and so you are encouraged and expected to talk through solutions with your colleagues. You are strongly encouraged to attend these for more practice and understanding, but they are not required.

Assignments

Homework

Homework will be released every Thursday, and are due the following Wednesday at 12:55pm in the CS22 bin on the 2nd floor of the CIT.

You get *one* late homework pass to be used at a time of your choosing throughout the semester: the late homework deadline is Thursday at 2:30pm.

Any subsequent late homeworks will receive no credit. Note that only the professor can grant extensions. Written solutions to the homeworks will be posted on the course website after all student handins have been graded.

Clarity

CS22 introduces many students to formal proofs. As such, your proofs will be graded not only on correctness, but on the clarity of your argument. For suggestions on how to write robust proofs, please refer to the style guide.

Regrade Policy

If you believe a mistake was made in grading some of your work, you may request a regrade. To request a problem be regraded, please contact the TA *who graded that problem* at his or her office hours or via email. You must contact your grader with a grade complaint within one week after homeworks are returned to the handback bins. Otherwise, your complaint will not be accommodated, though you should still reach out to your grader if you have any questions about how your assignment was scored. If you still have a dispute after speaking with the TA who graded the problem, please see an HTA or the professor during their hours. TAs are very explicitly not allowed to regrade a problem if they were not the original grader.

LaTeX

All homeworks must be typed up and printed using a typesetting language made for math called LaTeX. In order to give you some time to learn it if you have never used it before, we will allow non-LaTeX submissions for the first two homeworks. Starting on Homework 3, any handwritten or non-LaTeXed submission will get no credit. Don't worry – LaTeX is simple to learn, and you can find many resources for learning it (including a template) on the CS22 website. We will additionally release the LaTeX source of our homeworks and solutions so that you can see how we write our own LaTeX!

Note that you may hand-draw diagrams on your submission if applicable.

Cover Sheet and Anonymous Grading

There is a cover sheet template included on the CS22 website. All homeworks are required to have that cover sheet as their first page, which includes your Banner ID on the front and a grading sheet on the back. Please staple

the cover sheet to the front of your homework with your Banner ID as the first page. Additionally, to allow us to anonymize grading, you may not use your name, login, or any other identifying feature anywhere on your homework (including the cover sheet), except for your Banner ID.

Exams

There will be two midterms and a final. The midterms will be held on the evenings of Monday, March 5th and Wednesday, April 18th, locations to be announced. The time and location for the final may be found on Banner. If you have any conflicts with the exams, please email `cs0220headtas@lists.brown.edu` as soon as possible and at least one week before the scheduled exam time.

Grading

You can view your grades by logging in to `http://canvas.brown.edu`. The following is an *approximate* guide to the grading breakdown:

Type	Percentage
Homeworks (10)	45 %
Midterm Exams (2)	30 %
Final Exam	25 %

Clinic

Clinic hours will be held throughout the week (See calendar for times and locations). If any changes are made to the hours schedule, these changes will be reflected in the calendar. TAs will gladly help clarify homework questions, explain concepts covered in homeworks, and help with general questions about course material. Students are encouraged to work collaboratively with other students, with TAs available to offer assistance as needed.

The TAs all love this course and the material, and would be happy to help you through any of the course concepts. The TAs want to help you gain a great understanding of the material and problem-solving strategies–they are not just intended as a last resort. Bottom line: utilize this resource!

TAs are here to help you, but remember, TAs are students too and have their own classwork. Please don't ask a TA questions outside of official hours – technically, they are not even allowed to answer them. If you need to talk

to a particular TA, feel free to email them and set up a time to meet. If you feel that you can't possibly make any scheduled TA hours, please get in touch with the Head TAs.

Communication

The **course web page** is an indispensable resource. You can find online postings of assignments, solutions, course notes, announcements, TA hours, and other miscellanea. The course web page can be found at:

`http://www.cs.brown.edu/courses/cs022/`

CS22 also uses Piazza, an online academic forum where students can convene to explore the course materials and ask questions to the TAs and other students. A link to the Piazza page is provided on the course website.

If you have administrative questions, comments about the course, or have a problem with a TA, you should email Prof. Klivans and the Head TAs at `cs0220headtas@lists.brown.edu` or show up for their hours.

Comments or Suggestions

If you notice a mistake in the homeworks or in the solutions, please email the TA list at `cs0220tas@lists.brown.edu` or post to Piazza. We would rather receive multiple emails than let the mistake go unfixed, so please do not hesitate to point out even the smallest error!

If you have a comment about how the class is going, or want to offer an idea of how the class could be even better, email the HTAs about it! We are all passionate about the course's improvement, so your suggestions are more than welcome.