

APR 20 Quiz 1 - Replacing exam 2	APR 21 Lecture 17: Scheduling again (resources.html#lec17)	APR 22	APR 23	APR 24 Lecture 18: Knapsack problem (resources.html#lec18) Phase 2 of final paper (https://docs.google.com/document/d/10IOLc_KupPvjpusp=sharing)
APR 27	APR 28 Lecture 19: Shortest path again (resources.html#lec19)	APR 29 Ruhlman Conference	APR 30	MAY 1 Lecture 20: More practice (resources.html#lec20)
MAY 4 Quiz 2 - Replacing exam 2	MAY 5 Final Presentations start this week	MAY 6 Assignment 5 (ps/a05.pdf) is due	MAY 7 Reading Period	MAY 8 Reading Period
MAY 11 Final Exams	MAY 12 Final Exams	MAY 13 Final Exams	MAY 14 Final Exams	MAY 15 Final Exams Final paper due by 4pm

ADMINISTRATIVE DETAILS OF CS231

Course Overview

Course Requirements - Updated March 2020

Grading Policy and Support - Updated March 2020

Assignments in CS231

Special Accommodations

Course Overview

Prerequisites The prerequisite for CS231 is CS230 and Math 225. Students with significant mathematical experience (writing and understanding proofs), or those who have not taken Math 225 need the permission of the instructor.

Textbook - Very Important!! The readings will be assigned from the required text, Algorithm Design, by Jon Kleinberg and Eva Tardos

(https://www.amazon.com/gp/product/0321295358/ref=s9u_simh_gw_i1?ie=UTF8&fpl=fresh&pd_rd_i=0321295358&pd_rd_r=CW5YY2DY2WFG0TVYFN30&pd_rd_w=s7vZ8&pd_rd_wg=cByDK&pf_rd_m=ATVPDKIKX0DER&pf_rd_s=&pf_rd_r=PY6BX399c-49e1-901a-7b8786e59436&pf_rd_i=desktop), 1st edition. It is **required** that you read the relevant sections **before** every lecture.

Computers Some programming will be done as part of this course. You will also need your computers to type your assignments. You are expected to use Latex for typesetting all assignments in this course.

Assignment Submission This semester we will be using GradeScope for all CS231 assignments submissions. Assignments will be submitted weekly, in pdf format, to their corresponding directories. You will receive an email with more details after the first class.

Course Communication We will be using Piazza for all course communications, and student discussions. You will also receive an invitation to join the course Piazza page after the first class. We encourage you to post questions or comments that are of interest to students in the course. The instructors and TAs will read messages posted in the page on a regular basis and post answers to questions found there. If you know the answer to a classmate's question, feel free to post a reply yourself. The Pizza page is also a good place to find people to join a study group. You should plan on reading group meetings on a regular basis.

Course Requirements

Lectures All lectures will be recorded and posted on the course's Piazza page. Lectures will be in the form of short 20-ish minute videos, and all lectures for a week will be posted on Monday of that week.

[IMPORTANT] Lectures are private for CS231-Spring 2020 students only, so please don't share the video links with others.

The originally scheduled class time will be reduced to only 45 minutes for discussions and working on extra exercises. I will be available via Zoom (details sent in Piazza) every Tuesday and Friday from 10:00 AM to 10:30 AM to work with you on better understanding the material. I understand that the timing of the lecture might not work for everyone, so attendance is not mandatory.

Final Presentations and Paper: During the last few weeks of the semester, teams of 2 students work on a short survey paper. After choosing an interesting algorithmic problem, you will first read related literature on the topic, and summarize your findings into a scientific paper (min 6 pages, max 10 pages).

Each team will present their work in a final presentation during the last class, and will prepare a paper to be submitted by the last day of exams.

Exams: The second exam is canceled, and will be replaced with short quizzes, with dates indicated in the schedule above.

Grading Policy

Final Grades For Spring 2020, grading will be mandatory credit/none. There is an option to receive a credit with distinction (MCRD), which represents higher merit. Consistent active participation in the course is a key factor to receiving an MCRD. Active participation can be in the form of:

- Asking questions on Piazza
- Answering questions on Piazza
- Joining an online meeting at least once a week (includes office hours)
- Answering polls

Support

All support in the course will be held virtually, through Zoom chats, Piazza posts and discussions, and emails.

Christine's Office Hours All office hours will be held via Zoom (details in Piazza). There will be two types of office hours, open join-in and one-on-one office hours.

* Open join-in office hours will be held on Tuesdays from 11AM to 12:30PM, and on Wednesdays from 10PM to Midnight.

* As for the one-on-one office hours, 15 minute slots will be available for you to sign up on the course's support calendar ([link here](#)). Once you sign up, a Zoom meeting will be automatically scheduled.

* Of course, if none of these times work for you, feel free to email me, and I will do my best to schedule another time with you.

Drop-in Hours All drop-in hours will be converted to one-on-one drop-ins. The slots will be available on the course's support calendar as well ([link here](#)), and you can request an appointment directly by choosing a time-slot.

Please note that the tutors will be not available on Zoom, unless an appointment is reserved. So, make sure to schedule an appointment at by 4PM of the same day at the latest.

Assignments in CS231

There will be bi-weekly assignments in which you will analyze algorithmic problems, using concepts and techniques discussed in class. Assignments are due as indicated on the class schedule. You are required to complete the assignments on your own. You can discuss the problems with the CS231 team members and classmates, but you must write your own solutions.

PROOF MODULES (PROBLEMS)

In some assignments, you will find a problem marked with [Proof-problem] For these problems, you need to carefully formulate and write your arguments for the correctness of your solutions. For these proof problems, you need to submit on the same day as the assignment, but in a separate sheet.

SUBMISSION

A softcopy of the assignments must be submitted to GradeScope in pdf format. It is **required** that you typeset the assignment using Latex. You can find some good tutorials here (<http://www.rpi.edu/dept/arc/training/latex/class-slides-pc.pdf>), and here (<https://faculty.math.illinois.edu/~hildebr/tex/latex-start.html>). And a complete book here (<https://en.wikibooks.org/wiki/LaTeX>).

WORKING WITH LATEX

You can work with Latex editors locally on your computers. There are many editors, and I personally use Atom since it works for both Windows and Latex. In any case, you must download the Tex libraries first. For Windows, you need the MikTeX library (<https://miktex.org/>), and for Mac OS, you need the MacTeX library (<http://www.tug.org/mactex/index.html>). If you don't want to go through all of that, you can always use Overleaf (www.overleaf.com), which is an online editor and compiler, with some nice tutorials as well.

LATE ASSIGNMENT POLICY.

You each have 4 late-passes to use through out the semester. Each late-pass gives you a 24-hour extension (DOES NOT apply to proof modules). No late work will be accepted unless it has been discussed with the instructor first, except for extenuating circumstances (e.g., sickness, personal crisis, family problems), which can be discussed after the fact.

Special Accommodations

If you have a disability or condition, either long-term or temporary, and need reasonable academic adjustments in this course, please contact Accessibility and Disability Resources (ADR) to get a letter outlining your accommodation needs, and submit that letter to me. You should request accommodations as early as possible in the semester, or before the semester begins, since some situations can require significant time for review and accommodation design. If you need immediate accommodations, please arrange to meet with me as soon as possible. If you are unsure but suspect you may have an undocumented need for accommodations, you are encouraged to contact (ADR). They can provide assistance including screening and referral for assessments.

Disability Services can be reached at accessibility@wellesley.edu, at 781-283-2434, by scheduling an appointment online at their website, <https://www.wellesley.edu/adr> or by visiting their offices on the 3rd floor of Clapp Library, rooms 316 and 315.