CLASS INFORMATION FOR *MATH 182: ALGORITHMS*
SUMMER SESSION A 2020
M,TU,W,TH 9:00AM–10:50PM

Disclaimer: This syllabus is a preliminary version. It is subject to revision, however no revisions will result in stricter policies.

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Course webpages (CCLE): `https://ccle.ucla.edu/course/view/201A-MATH182-1`
Piazza: `piazza.com/ucla/summer2020/math182/home`
Gradescope: `https://www.gradescope.com/courses/141867`

General information

Prerequisites: Math3C or Math32A; and Math61
Course text: The official textbook for the course is *Introduction to Algorithms* Third Edition, by Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein.

   I will primarily follow my own lecture notes, which will be available on CCLE. The lecture notes contain 6-weeks worth of material from the textbook, possibly reorganized, and possibly supplemented with other material.
Description: The goal of the course is to develop literacy with the mathematical analysis of various fundamental algorithms.

Activities schedule

Lectures: The lectures are on M,Tu,Th at 9:00am–10:50am on Zoom. Both hours of lecture will be recorded. There may be a short break around 10:00am between the first and second hour.

Discussion section: The discussion sections are on W at 9:00am–10:50am on Zoom. The current plan for discussion section is as follows: the first hour of discussion section will be structured more like a lecture: going over examples and other concepts from lecture. This first hour will be recorded to also benefit asynchronous students that cannot attend live. The second hour will be used more for discussion between students to work on problems (possibly using breakout rooms), and will not be recorded.

Office hours: There will be an assortment of office hours offered by the instructor and TA throughout the week. We will send out a poll on the first day to establish office hour times, and the office hours will be posted on the course calendar. Office hours will be held on Zoom and they may be recorded.

Grading policy

- The grade in the course will be computed by the following scheme (individual items will be discussed below):

Homework	30%
Quizzes	30%
Midterm	20%
Final	20%

- All scores and final grades will be available on the MyUCLA gradebook.
- We put a lot of effort into grading your assignments and exams, but grading errors do happen. If you feel that a mistake was made in grading, you may request a re-grade *within one week* after receiving your score. **Regrade requests not initiated within this period of time will not be considered.** Regrade requests are to be submitted via the regrade feature on Gradescope. You should also check that your homework and exam scores were input correctly on MyUCLA.

Letter grades: Letter grades will be computed in accordance with the following rules:
  (1) 90.00% and above guarantees at least an A-
  (2) 80.00% and above guarantees at least a B-
  (3) 70.00% and above guarantees at least a C-
  (4) 60.00% and above guarantees at least a D-
  (5) $+/-$ grades will be assigned roughly following the pattern: B-: 80%-83%, B: 83%-87%, B+:87%-90%, etc. The exception is the grade of A+ which is reserved for students with truly exceptional performance in the course.
  (6) Letter grade cutoffs (including $+/-$) may be lowered depending on the overall performance of the class at the end of the quarter after the Final Exam.
  (7) Your grade on the course is based entirely on your individual academic performance in the course and nothing else. In particular, your ranking in the course will not be a factor in deciding your letter grade. Final grades will only be changed in the event of a clerical error. If you have concerns about how your final grade in the course will affect your academic situation, you should meet with an Undergraduate Advisor.

Homework

- There will be 6 problem sets assigned over the course of the 6-week 2020 Summer Session A. The problems will range in difficulty from routine to more challenging. Problem sets will be "oversized" in the sense that there will be more problems assigned than you will be expected to complete, and you only need to do a certain number of them in order to receive full credit. Doing more problems than the minimum number will only help you obtain full credit on the assignment (and may play a factor in assigning the "A+" grade).
- Completed solutions are to be uploaded to Gradescope (accessible via ccle course webpage) by the announced deadline, beginning on June 28. Note that Gradescope gives you the ability to upload one page at a time, so you can upload your solutions early and not wait until the last minute - you can also re-upload as often as you want prior to the deadline. When uploading to Gradescope, it is preferred that you upload your homework as a pdf. There are multiple smartphone apps which can scan your paper and save as a pdf. Uploading as a pdf also is beneficial because you don't have to upload a separate document for each subpart of each problem (as you would have to do if you were to upload images).
- **No late homework will be accepted.** However, your lowest homework score will be dropped when computing your grade. Each homework assignment carries equal weight.

- You are encouraged to work together on the exercises, but any graded assignment should represent your own work, that is, you cannot copy someone else's solution.
- In the event of technical difficulties with uploading to Gradescope you may send your solutions to the TA to upload, but **only as a last resort**.

Quizzes

- There will be 6 weekly quizzes on Monday-Tuesday (starting the first week) which are supposed to be taken online on Gradescope. You will have 48 hours to complete each quiz.
- The problems that appear on the quizzes (except the first week's quiz) would be based on the material of the previous week.
- **There will be no make-up quizzes**, but the lowest quiz score will be dropped when computing the final grade.

Exams

- There will be one take-home midterm and one take-home final exam. You are expected to be able to finish the midterm in 2 hours, and the final in 2 hours. However, to accommodate students from different time zones, you will have 24 hours to solve and submit your exam. There will be no lecture on the day of each exam.

  Midterm: Thursday, July 9, 8:00am – Friday, July 10, 8:00am (PDT time)
  Final: Thursday, July 29, 8:00am – Friday, July 30, 8:00am (PDT time)

- Completed solutions are to be uploaded to Gradescope (accessible via ccle course webpage) by the announced deadline.
- **There will be no make-ups for a missed midterm.**
- **You must take the final exam in order to pass the class.** Make-ups for the final exam are permitted only under exceptional circumstances, as outlined in the UCLA student handbook.
- You are allowed to use any resource you want for the exams **except** communication with another human being. In particular, you are not permitted to post exam questions on such online forums as `Chegg` or `stackexchange`. We will be monitoring the internet during the exams for such posts and you should be aware that many of these online forums cooperate with official university inquiries into academic dishonesty. Please, be reminded of the Student Conduct Code (it can be found at www.deanofstudents.ucla.edu; see, in particular, Section 102.01 on academic dishonesty). More detailed information about the exams would be communicated to you later.

Piazza

This course has a page on Piazza, where you can ask questions and receive help from other students in the course as well as the instructors. Use of Piazza is highly recommended. The piazza course page can be found at: `piazza.com/ucla/summer2020/math182/home`.

Zoom

Zoom Privacy Notice: This class is being conducted over Zoom. Please be aware that the following Zoom events may be recorded:
(1) Lectures on MTuTh.
(2) Instructor office hours.
(3) Structured portions of discussion section.

In general, the discussion sections and TA office hours will not be recorded, as to encourage more student participation. You will be notified if this changes at some point.

As the host, the instructor be recording this session. The recording feature for others is disabled so that no one else will be able to record this session through Zoom. No recording by other means is permitted. Any recorded sessions will be posted at the CCLE class website. **If you have privacy concerns and do not wish to appear in the recording, do not turn on your video and/or audio.** If you also prefer to use a pseudonym instead of your name, please let me know what name you will be using so that I know who you are during the session. If you use the chat feature to ask a question, all live participants will be able to read what you write, but the chat transcript will not be part of the recording. There is also the option of asking a "private" question in the chat feature, but this should be used only sparingly (email is a better for this). If you have questions or concerns about this, please contact me.

Pursuant to the terms of the agreement between the vendor and UCLA, the data is used solely for this purpose and the vendor is prohibited from redisclosing this information. UCLA also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a videoconference.

Notice about academic integrity: From the office of the Dean of Students:

With its status as a world-class research institution, it is critical that the University uphold the highest standards of integrity both inside and outside the classroom. As a student and member of the UCLA community, you are expected to demonstrate integrity in all of your academic endeavors. Accordingly, when accusations of academic dishonesty occur, The Office of the Dean of Students is charged with investigating and adjudicating suspected violations. Academic dishonesty includes, but is not limited to, cheating, fabrication, plagiarism, multiple submissions or facilitating academic misconduct.

Students are expected to be aware of the University policy on academic integrity in the UCLA Student Conduct Code:

`https://www.deanofstudents.ucla.edu/Portals/16/Documents/UCLACodeOfConduct_Rev030416.pdf`

Please note the sections on (1) cheating, (2) plagiarism, and (3) unauthorized study aids.

Violation of course policy involving plagiarism, cheating, or possession of course materials during exams will be referred to the Dean of Students, who will be encouraged to take strong action. Do not cheat! The penalties can be very harsh. Do not believe it if you hear that "everyone does it." You generally do not hear about the punishments because they are kept confidential. If you are found responsible by the Dean of Students for violating course policy, cheating on any course materials, or giving or receiving unauthorized help, a zero will be assigned for the entire assignment. No exceptions will be made! Past examples of penalties also include loss of an entire term of credit and suspension for several terms. If you plan to apply to graduate or professional school, such a negative mark on your record may be a major obstacle to admission.

Disabilities: Students needing academic accommodations based on a disability should contact the *Center for Accessible Education* (CAE) at (310)825-1501 or in person at Murphy Hall A255. In order to ensure accommodations, students need to contact the CAE within the **first two weeks** of the term.

Title IX Resources: UCLA prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, there are a variety of resources to assist you.

Confidential Resources: You can receive confidential support and advocacy at the CARE Advocacy Office for Sexual and Gender-Based Violence, 1st Floor Wooden Center West, email address: `CAREadvocate@careprogram.ucla.edu`, (310) 206-2465. Counseling and Psychological Services (CAPS) also provides confidential counseling to all students and can be reached 24/7 at (310) 825-0768.

Non-Confidential Resources: You can also report sexual violence or sexual harassment directly to the University's Title IX Coordinator, 2241 Murphy Hall, email address: `titleix@conet.ucla.edu`, (310) 206-3417. Reports to law enforcement can be made to UCPD at (310) 825-1491. These offices may be required to pursue an official investigation.

Faculty and TAs are required under the UC Policy on Sexual Violence and Sexual Harassment to inform the Title IX Coordinator — *a non-confidential resource* — should they become aware that you or any other student has experienced sexual violence or sexual harassment.

Psychological Health, Well-Being and Resilience: UCLA is renowned for academic excellence, and yet we know that many students feel overwhelmed at times by demands to succeed academically, socially and personally. Our campus community is committed to helping all students thrive, learn to cope with stress, and build resilience. Remember, self-care is a skill that is critical to your long-term success. Here are some of the many resources available at UCLA to support you:

- *Counseling and Psychological Services (CAPS):* `https://www.counseling.ucla.edu/` Provides counseling and other psychological/mental health services to students. Walk-in hours are Monday-Thursday 8am-4:30pm and Friday 9am-4:30pm in John Wooden Center West. Crisis counseling is also available 24 hours/day at (310) 825-0768.
- *Ashe Student Health and Wellness Center:* `http://www.studenthealth.ucla.edu` Provides high quality and accessible ambulatory healthcare and education by caring professionals to support the academic success and personal development of all UCLA students.
- *Healthy Campus Initiative (HCI):* `https://healthy.ucla.edu` Provides links to a wide variety of resources for enhancing physical and psychological well-being, positive social interactions, healthy sleep, healthy eating, healthy physical activity and more.
- *Campus and Student Resilience:* `https://www.resilience.ucla.edu/` Provides programs to promote resilience and trains students to help support their peers.
- *UCLA Recreation:* `https://www.recreation.ucla.edu/` Offers a broad array of services and programs including fitness, yoga, dance, martial arts, meditation, sports, and much more.
- *Equity, Diversity and Inclusion:* `https://equity.ucla.edu/` Committed to providing an equal learning, working and living environment at UCLA and supports a range of programs to promote these goals campus-wide.
- *UCLA GRIT Coaching Program:* `https://www.grit.ucla.edu/` GRIT stands for Guidance, Resilience, Integrity and Transformation. In this program, UCLA students receive individualized support from trained peer coaches to manage stress, fostering positive social connections, set goals, and navigate campus resources.

Resources for Students Dealing with Financial Stress: The following resources are available for students dealing with financial stress:

- *Bruin Shelter:* `http://www.bruinshelter.org/` Provides a safe, supportive environment for fellow college students experiencing homelessness by fostering a collaborative effort between universities, community-based organizations, and service providers.
- *The CPO Food Shelter:* `http://www.cpo.ucla.edu/cpo/foodcloset/` Provides free food for any UCLA student who may be experiencing hunger and/or struggling to attain food due to financial hardships.