

COMBINATORICS MAT145

SYLLABUS WINTER 2019

Professor: Roger Casals - casals@ucdavis.edu.

Teaching Assistant: Ander Aguirre - aaguirre@ucdavis.edu.

Class schedule: Lectures MWF 9-9:50am at Hoagland Hall 168 by Roger Casals.

Email. My email address is casals@ucdavis.edu. This is the fastest way to contact me. I strongly encourage you to come to Office Hours, and it also tends to be helpful to set up appointments to meet in person, you are welcome to do either.

Office Hours. My office is MSB 3214, in the Mathematical Sciences Building, ten minutes away from the lectures. I will have regular office hours twice a week, on **Mondays 4:30-5:30pm** and **Wednesdays 3-4pm**. Feel free to come and discuss the material on the Lectures and the Problem Sets. If you are planning to come with a large group (more than six), I can book a seminar room if you let me know in advance.

TA's Office Hours. The Teaching Assistant's Office Hours will take place in MSB 3202, on **Tuesdays 2-3pm** and **Thursdays 3-4pm**.

Course. This course is an introduction to Combinatorics, one of the fundamental branches within discrete mathematics, with an emphasis on Enumerative Combinatorics (Part I) and Graph Theory (Part II). Learning how to solve problems in combinatorics and writing them up in a clear and rigorous manner will be one of our main goals. It is primarily for students with no prior experience with this.

Textbook. We will use “Discrete Mathematics: Elementary and Beyond” by L. Lovász, J. Pelikán and K. Vesztergombi.

Course Website. I will be maintaining the course website at the following URL

”[https : //www.math.ucdavis.edu/ ~ casals/Winter19MAT145.html](https://www.math.ucdavis.edu/~casals/Winter19MAT145.html)”,

whose content includes this syllabus, the weekly assigned Problem Sets, Math Diary on the material covered in each lecture, and additional materials. The grades for the assignments and the exams will be administered through the UC Davis Canvas.

Grade. Final Class Grade = $0.4 \cdot \text{PSets} + 0.4 \cdot \text{Final Exam} + 0.2 \cdot \text{Midterm}$.

Assignments. The weekly assignments are due on **Friday** and should be handed directly to me at the beginning of class. The assignments will be posted in the course website as the course progresses. The lowest grade from the Problem Sets will be dropped.

You are allowed to ask for one *unexcused* extension for a Problem Set directly to me (R. Casals), prior to the due date for that Problem Set. Late homework will not be accepted under any other circumstances. Use the extension wisely and I encourage you to directly talk to me about the benefits and drawbacks of using an extension.

Exams. There will be an in-class one-hour Midterm on **Friday Feb 8** and a Final Exam on **Friday Mar 22**, at 6:00pm on the Last Day of the Finals Week.

The Midterm Test and the Final Exam will strictly follow the given date and time. There will be no make-up exams. So, please plan your schedule accordingly. Electronic devices, notes and books are not permitted during the exams. Please bring your UC Davis Student ID to the Exam Hall.

Academic Conduct. You must read, understand and act in accordance with the Code of Academic Conduct, available at <http://sja.ucdavis.edu/files/cac.pdf>. Inappropriate conduct will be reported to the Office of Student Support and Judicial Affairs.

Disabilities If you need special accommodation, please let me know, ideally in advance. The Student Disability Center (SDC) is here to help, and they can do so if you contact them.

Please be aware of the following message by the SDC:

"Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Student Disability Center (SDC). Faculty are authorized to provide only the accommodations requested by the SDC. If you have any questions, please contact the SDC at 530-752-3184 or sdcc@ucdavis.edu."

In addition, the SDC also shares:

"The Student Disability Center (SDC) asks that students interested in serving as paid note takers for this course please contact the Student Disability Center at sdcc@ucdavis.edu."

Note takers are paid a stipend of \$25 per unit, but must have a social security number or have visa status to qualify for an SSN, have a GPA of 2.5 or better, and be in good Academic standing with UC Davis. Students should attach a sample of their notes to the email and put the following information in the subject line: 'note taker', the course code, CRN number, and instructor's name. If selected, the SDC will offer the position to the Note Taker.*

Notes provided to SDC students needing note takers are not to be posted, sold, or otherwise distributed, either by the note taker or the SDC Student receiving the notes. Note takers and SDC students receiving notes are expected to comply with the UC Davis academic honor code. Thank you in advance for your time and consideration.

** You can volunteer in lieu of payment"*