

ALGEBRAIC TOPOLOGY II MAT215B

SYLLABUS WINTER 2020

Professor: Roger Casals - casals@ucdavis.edu.

Class schedule: Lectures MWF at 3:10-4:00pm at MSB 3106 by Roger Casals.

Email. My email address is casals@ucdavis.edu. This is the fastest way to contact me. You are more than welcome to come to my Office Hours.

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

“<https://www.math.ucdavis.edu/~casals/Teaching/Winter20/Winter20MAT215B.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 = $0.4 \cdot \text{PSETS} + 0.4 \cdot \text{Final Exam} + 0.2 \cdot \text{Midterm}$.

This is subject to change if the evaluation of the course as it moves forward requires.

Professor Office Hours. My office is MSB 3214, in the Mathematical Sciences Building. I will have regular office hours once a week, on **Monday 11:30-12:30pm**. 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 ten), let me know in advance and I can book a seminar room. You are also welcome to ask me questions before or after class, and I am open to scheduling a meeting to talk anytime which suits both our schedules.

Textbook. We will use the textbook “Algebraic Topology” by A. Hatcher, with ISBN-13: 978-0521795401.

Assignments. The weekly assignments are due on **Friday at 3:00pm** and must be submitted online at that time. 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 7** and a Final Exam on **Friday Dec 13** at 3pm.

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, the use of Internet, notes and books are *not* permitted during the exams.

Course. This course is a continuation to Algebraic Topology I (MAT215A). It will study homology theories associated to topological spaces, one of the fundamental applications of homological algebra to topology. Learning how to solve problems, both algebraically and geometrically, and writing the solutions in a clear and rigorous manner is one of our main goals. It is assumed that the students have mastered Topology (MAT147) and acquired the basic notions from Algebraic Topology I (MAT215A).

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 sdc@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 sdc@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"*