

UCSC Math 100 Summer 2018

Course Information

Title: Introduction to Proof and Problem Solving

Location and Time: Social Sciences 2, Room 159; Monday, Tuesday, and Wednesday 9:30 am – 12:00 pm

Website: UCSC Canvas

Textbook: (required) Book of Proof, 2nd edition, Richard Hammack
(optional) Chapter Zero, 2nd edition, Carol Schumacher
(optional) Writing and Proof. 2nd edition, Ted Sundstrom

Prerequisites: satisfaction of the Entry Level Writing and Composition requirements; course 11A or 19A or 20A; and course 21 or Applied Mathematics and Statistics 10 or Applied Mathematics and Statistics 10A

Description: Students learn the basic concepts and ideas necessary for upper-division mathematics and techniques of mathematical proof. Introduction to sets, relations, elementary mathematical logic, proof by contradiction, mathematical induction, and counting arguments.

Instructor Information

Salvador Guerrero
saguerre@ucsc.edu

Tutor Information

Office Hours: Monday, Tuesday,
and Wednesday 12 – 1

Samuel Hirsch
szhirsch@ucsc.edu

Registration Dates

Enrollment Deadline: 6/28

Deadline to Change grading Option: 7/6

Drop Deadline (with refund): 7/2

Withdraw Deadline (no refund): 7/13

Assignments

Reading: It is imperative that you read the text before coming to class. The only way to really learn how prove mathematical statements and to reason well mathematically is exposure and practice.

HW (30%): There will be weekly homework assigned from the textbook and/or as handouts, due Tuesdays.
note: problem list on last page.

Quizzes (7.5% each): There will be four weekly quizzes, at the end of each week.

Final Exam (40%): Final Exam will be comprehensive and take place on 7/25 from 9:30 am – 12:00 pm.

Schedule

We will cover roughly one chapter per meeting.

UCSC Math 100 Summer 2018

Academic Honesty Policy Summary

The full text of the Academic Honesty Policy is in the Student Handbook & University Policies Section 100.

DRC Accommodations

If you qualify for classroom accommodations because of a disability, please get an Accommodation Authorization from the Disability Resource Center (DRC) and submit it to me in person outside of class (e.g., office hours) within the first two weeks of the quarter. Contact DRC at 459-2089 (voice), 459-4806 (TTY), or <http://drc.ucsc.edu> for more information on the requirements and/or process.

Homework List

1.1 - 14, 16, 22, 36, 50 1.2 - 2g, 8, 18 1.3 - 8, 10, 16 1.4 - compare 6 and 8, 18 1.5 - 2h, 4c, 10 1.6 - 2h, 4 1.7 - 6,12 1.8 - 10ab	2.1 - 4, 6, 12 2.2 - 2, 8, (14, fun don't need to turn in) 2.3 - 4, 8, (12, fun don't need to turn in) 2.4 - 2, 4 2.5 - 4, 6, 10 2.6 - 6, 14 2.7 - 4, 8 2.10 - 4, 6, 10	3.1 - 4, 10 3.2 - 6, 8 3.3 - 8, 12 3.4 - 6, 12 3.5 - 6, 10
Chapter 4 - 6, 8, 10, 14, 16, 20, 24, 26, 28	Chapter 5 - 4, 8, 12, 18, 24, 28	Chapter 6 - 6, 10, 18, 20, 22, 24
Chapter 7 - 4, 8, 10, 16, 22, 24, 26, 32, 34, 36	Chapter 8 - 2, 6, 12, 20, 22, 24,28	Chapter 9 - 12, 14, 18, 20, 24, 28, 34
Chapter 10 - 2, 4, 8, 18, 20, 30, 32	11.0 - 6, 12 11.1 - 14 11.2 - 10, 12, 14 11.3 - 2, 4 11.4 - 4, 6, 8	12.1 - 8, 10 12.2 - 14, 16 12.3 - 6 12.4 - 8 12.5 - 8 12.6 - 10, 12
13.1 - 10, 14, 16 13.2 - 4, 10, 14 13.3 - 4, 8 13.4 - 2, 4		

UCSC Math 100 Summer 2018