

21-127 - CONCEPTS OF MATHEMATICS, SUMMER 1
2014
TENTATIVE SCHEDULE

Day	Topic
M, May 19	HW 1 out , Administrivia, what is a proof?
T, May 20	Numbers and inequalities
W, May 21	Numbers and inequalities
R, May 22	Basic logic: and, or, not, implies
F, May 23	HW 1 due, HW 2 out , basic logic: quantifiers
M, May 26	Memorial day: no class.
T, May 27	HW 3 out , basic logic: elementary proof techniques
W, May 28	HW 2 due , Sets: basic operations and notation
R, May 29	Induction
F, May 30	HW 3 due, HW 4 out , Induction
M, June 2	Strong induction and the well-ordering principle
T, June 3	HW 4 due, HW5 out , Relations and functions
W, June 4	Cardinalities of finite sets
R, June 5	Cardinalities of infinite sets
F, June 6	HW 5 due, HW 6 out , Review
M, June 9	Midterm.
T, June 10	Combinatorics: counting
W, June 11	Combinatorics: counting
R, June 12	Combinatorics: counting
F, June 13	HW 6 due, HW 7 out , Combinatorics: the pigeonhole principle
M, June 16	Number theory: the fundamental theorem of arithmetic
T, June 17	HW 7 due, HW 8 out , Number theory: modular arithmetic
W, June 18	Number theory: the Chinese remainder theorem
R, June 19	Number theory: Fermat's little theorem
F, June 20	HW 8 due, HW 9 out , Probability: definitions
M, June 23	Probability: conditional probability and Bayes' theorem
T, June 24	HW9 due, HW10 out , Probability: random variables and expectation
W, June 25	Selected topics (or most likely catching up)
R, June 26	HW 10 due , Review
F, June 27	Final

Date: June 9, 2014.