

# Math 347: Lesson Plan

Fall 2018

Class	Date	Topic	Assignment Due
Lecture 1	Aug. 27	Sets (pg. 6-10)	-
Lecture 2	Aug. 29	Functions (pg. 10-14)	Read topic before class
Lecture 3	Aug. 31	Real Number System (pg. 15-18)	-
Lecture 4	Sep. 5	Quantifiers and Logical Statements (pg. 27-31)	Read topic before class
Lecture 5	Sep. 7	Compound Statements (pg. 31-35)	<b>Homework 1</b>
Lecture 6	Sep. 10	Elementary Proof techniques (pg. 35-39)	Read topic before class
Lecture 7	Sep. 12	Principle of Induction (pg. 51-57)	Read topic before class
Lecture 8	Sep. 14	Applications (pg. 58-62)	<b>Homework 2</b>
Participation 1	Sep. 17	Chapters 1-2	<b>Groups 1,3,6</b>
Lecture 9	Sep. 19	Strong induction (pg. 63-66)	Questions from previous Worksheet
Lecture 10	Sep. 21	Injections and surjections (pg. 83-85)	Read topic before class
Lecture 11	Sep. 24	Bijections (pg. 80-83)	-
Lecture 12	Sep. 26	Comp. of Fucts. (pg. 83-87)	<b>Homework 3</b>
Lecture 13	Sep. 28	Cardinality (pg. 87-92)	-
Lecture 14	Oct. 1	How to approach problems (pg. 92-94)	Read topic before class
Participation 2	Oct. 3	Chapters 3-4	<b>Groups 2,4,5</b>
<b>Exam 1</b>	Oct. 5	Chapters 1-4	-
Lecture 15	Oct. 8	Completeness of the real numbers (pg. 256-258)	<b>Homework 4</b>
Lecture 16	Oct. 10	Limits (pg. 258-259)	Read topic before class
Lecture 17	Oct. 12	Limits (pg. 260-261)	-
Lecture 18	Oct. 15	Monotone Convergence (pg. 261-263)	Read topic
Lecture 19	Oct. 17	Cauchy sequences (pg. 276-279)	<b>Homework 5</b>
Lecture 20	Oct. 19	Exercises on sequences	-
Lecture 21	Oct. 22	Chapters 13-14: Worksheets	-
Lecture 22	Oct. 24	Discussion Practice Exam	-
Lecture 23	Oct. 26	Review for Exam	-
<b>Exam 2</b>	Oct. 29	Chapters 13-14	except for section on Series
Lecture 24	Oct. 31	Binomial Theorem (pg. 101-104)	<b>Homework 6</b>
Lecture 25	Nov. 2	Binomial Coefficients (pg. 104-109)	<i>Worksheet 10</i>
Lecture 26	Nov. 5	Further topics (pg. 109-111)	-
Lecture 27	Nov. 7	Discussion of Worksheet	<i>Worksheet 11</i>
Lecture 28	Nov. 9	Prime Factorization (pg. 124-126)	<b>Homework 7</b>
Lecture 29	Nov. 12	Euclidean Algorithm (pg. 126-129)	<i>Worksheet 12</i>
Lecture 30	Nov. 14	Uniqueness of Division (pg. 126)	-
Lecture 31	Nov. 16	Discussion of Worksheet	<b>HW 8 / Worksheet 13</b>
	Nov. 19/21/23	<b>FALL BREAK</b>	-
Lecture 32	Nov. 26	Equivalence relations (pg. 140-141)	-
Lecture 33	Nov. 28	Congruence classes (pg. 142-145)	-
Lecture 34	Nov. 30	Congruence classes (pg. 142-145)	<b>Homework 9</b>
Participation 3	Dec. 3	Chapter 5 topic	<b>Groups 1 and 2</b>
Participation 4	Dec. 5	Chapter 6 topic	<b>Groups 3 and 4</b>
Participation 5	Dec. 7	Chapter 7 topic	<b>Groups 5 and 6</b>
<b>Exam 3</b>	Dec. 10	Chapter 5-7	-
Lecture 35	Dec. 12	Review for Final exam	-