

80-211/Spring 2004

Arguments & Mathematical Inquiry

Syllabus (Buldt)

Day	Date	Subject	Remarks
I. Introduction			
Mo	01/12	General Introduction	—
We	01/14	Types of argument	—
Fr	01/16	Mathematical arguments	—
II. Axioms & Proof			
Mo	01/19	Axioms & Proof I	—
We	01/21	Axioms & Proof II	—
Fr	01/23	Recitation	—
III. Propositional Logic			
Mo	01/26	Negation	1st hw
We	01/28	Conjunction & Disjunction	—
Fr	01/30	Subjunction & Bisubjunction	—
Mo	02/02	Propositional Schemes	—
We	02/04	Propositional Schemes	—
Fr	02/06	Recitation	—
IV. Quantificational Logic			
Mo	02/09	Existential & Universal Quantifier	2nd hw
We	02/11	Rules for \exists & \forall	—
Fr	02/13	Quantificational Schemes	—
Mo	02/16	<i>President's Day</i>	no class
We	02/18	Quantificational Schemes	—
Fr	02/20	Recitation	—
V. Constructing Proofs			
Mo	02/23	Propositional Rules	3rd hw
We	02/25	Quantificational Rules	—
Fr	02/27	Quantificational Rules	—

Mo	03/01	Review Session	—
We	03/03	In-class Examination	!
Fr	03/05	<i>Mid-Semester Break</i>	no class

Spring Break

Mo	03/08	<i>Spring Break</i> , Mid-Term Grades (9AM)	no class
We	03/10	<i>Spring Break</i>	no class
Fr	03/12	<i>Spring Break</i>	no class

VI. Axioms for Set Theory

Mo	03/15	Predicates & Sets	—
We	03/17	Relations & Sets	—
Fr	03/19	Functions & Sets	—
Mo	03/22	ZFC	—
We	03/24	ZFC	—
Fr	03/26	Recitation	—

VII. Axioms for Arithmetic

Mo	03/29	Successor	4th hw
We	03/31	Induction	—
Fr	04/02	Recursion	—
Mo	04/05	Robinson Arithmetic	—
We	04/07	Peano Arithmetic	—
Fr	04/09	Recitation	—

VIII. Models of Computation

Mo	04/12	Turing Machines	5th hw
We	04/14	Turing Machines	—
Fr	04/16	<i>Carnival</i>	no class
Mo	04/19	Turing Machines	—
We	04/21	Turing Machines	—
Fr	04/23	Recitation	—
Mo	04/26	Review Session: Axioms	—
We	04/28	Review Session: Computation	—
Fr	04/30	In-class Examination	!
Th	05/13	Final Grades (4PM)	