

SS 201B SYLLABUS

- (1) Extensive form games with perfect information.
 - Equilibria.
 - Zermelo's Theorem.
 - The one deviation principle.
 - Backward induction.
 - Subgame perfect equilibria and Kuhn's Theorem.
- (2) Normal form games.
 - Pure and mixed equilibria.
 - Nash's Existence Theorem.
 - Dominated and dominant strategies.
 - Trembling hand equilibria.
 - Correlated equilibria.
 - Zero-sum games.
- (3) Beliefs and knowledge.
 - Belief spaces.
 - Knowledge operators, Kripke's S5 system.
 - Common knowledge.
 - Agreeing to disagree, no trade theorem.
 - Reaching common knowledge.
 - Bayesian games, Bayes-Nash equilibria.
- (4) Auctions.
 - Classical auctions: first price, second price, English.
 - Bayesian auctions: first price, second price.
 - The revelation principle.
- (5) Repeated games.
 - Finitely and infinitely repeated games.
 - Folk theorems for limit of means and discounting.
 - Perfect folk theorems.
- (6) Games of incomplete information.
 - Extensive form games with imperfect information.
 - Behavioral strategies.
 - Sequential equilibria.