ECONOMICS 201B, WINTER 2020

OVERVIEW (TENTATIVE)

STRATEGIC ENVIRONMENTS
• Information and actions
• Perfect/imperfect information
• Complete/incomplete information
• Static/dynamic games

STATIC GAMES OF COMPLETE INFORMATION
• Dominance & iterated dominance
• Beliefs, rationalizability, Nash equilibrium (pure strategies)
• Mixed strategies
• Beliefs, rationalizability, Nash equilibrium (mixed strategies)
• Existence of Nash equilibrium
  o Mixed strategies
  o Pure strategies
• Correlated equilibrium
• Examples & applications

STATIC GAMES OF INCOMPLETE INFORMATION
• Bayesian Nash equilibrium
• Examples & applications

DYNAMIC GAMES OF COMPLETE AND PERFECT INFORMATION
• Commitment, subgame perfect equilibrium
• Bargaining
• Examples & applications

DYNAMIC GAMES OF INCOMPLETE AND IMPERFECT INFORMATION
• Inadequacy of subgame perfection
• Extending the spirit of subgame perfection
  o Perfect Bayesian equilibrium
  o Trembling Hand perfection
  o Sequential equilibrium
• Reputation
• Signaling
• Examples & applications

REPEATED GAMES OF COMPLETE INFORMATION
• Histories & strategies
• Discounting
• Subgame perfection & dynamic programming
• Folk Theorems
• Applications