GUIDE TO IN-CLASS MIDTERM EXAM

The in-class midterm will be held on Monday, March 29. It will cover Part I of the course, minus Topics #8 and #9 which are cancelled due to lack time, and it will cover Bargaining Games and Bargaining Tactics (Topics #10 and #11) only in so far as this material has been covered in class through March 24. You should have studied Parts I and II of Dixit and Nalebuff, plus Case Studies #2, #3, #5, and #12 in Chapter 13. (Chapter #10 is recommended but no longer required.)

The in-class midterm will consist of a number of short-answer (5-10 minute) questions — not longer essay questions. Many of these questions will ask you, in a brief but precise paragraph for each item, to identify and indicate the significance of a selection of items (with some choice) drawn off the list that appears below. (Note that these items are not of equal generality or importance. The more general or important ones are more likely to appear on the test, but many items below that do not appear as questions may be used to good effect in answers.) Some questions will be in a different format. In particular, you will be presented with some simple payoff matrices and asked question about them (in the same manner as in the Problem Sets).

parlor game
game of strategy
Social Coordination Game
tacit coordination (Schelling)
Game of Fair Division
Ultimatum Game
Social Dilemma Game
Centipede Game
Dollar Auction Game
game against nature (one-player game)
risk vs. uncertainty
payoff matrix
Maximax Principle
Maximin Principle
Principle of Insufficient Reason (Maximize Average Payoff)
ordinal vs. cardinal (or interval) payoffs
Principle of Maximizing Expected Utility (or Payoffs)
D-Day Game Against Nature
Dominance Principle
dominated strategy
undominated strategy
dominant strategy
best reply strategy
[Nash] equilibrium
simultaneous choice two-player games
Matching Pennies: Zero-Conflict Version
Battle of the Sexes Game
Matching Pennies: Total Conflict Version
variable-sum game

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Prisoner’s Dilemma Game
Chicken Game
zero-sum (total conflict) game
maximin (for Row) vs. minimax (for Column) payoffs
strictly determined zero-sum game (e.g., Battle of Bismark Sea Game)
saddlepoint
non-strictly determined zero-sum game (e.g., D-Day Invasion Game)
pure vs. mixed strategy
Minimax (or Min-Max) Theorem of von Neumann (D&N, p. 178)
practical uses of mixed strategies
sequential choice (with perfect information)
pre-play communication (unrestricted vs. restricted)
strategic intelligence and deception
credible commitment
unconditional commitment
conditional commitment
threat (vs. warning)
promise (vs. assurance)
cooperative games
binding agreements
sidepayments
iterated/repeated games
D&N Rule 1: Look ahead and reason back
first-mover vs. second mover advantage
games in extensive form
games in normal (or strategic) form
definition of a strategy in an extensive form game
information set
backwards induction
President vs. Congress Game
Powell Amendment Game
sincere vs. strategic voting
Generalized Chicken Game
bargaining tactics: “give in” vs. “stand firm”
Hostage Holding Game
“the rationality of irrationality”
strategic moves (as defined by Schelling and Dixit & Nalebuff)
reputation effects
“last clear chance”
“doomsday machine”
“trip wire”
decomposing a threat
threat that leaves something to chance