

### Statistics

1. Bernoulli trials
2. standard deviation, expected value, variance
3. normal distributions
  - (a) 68-95-99.7 rule for standard deviation
  - (b) z-scores
4. mean and median
5. Simpson's Paradox
6. polling
  - (a) standard deviation
  - (b) polling accuracy
  - (c) confidence intervals/margin of error
  - (d) simple random surveys

### Game Theory

1. dominating strategies
2. Nash equilibria
3. mixed strategies
4. Nash's Theorem
5. evolutionarily stable strategies

### Auctions

1. first-price, sealed-bid auctions
2. second-price, sealed-bid auctions
3. English auctions
4. Dutch auctions
5. Vickrey's Revenue Equivalence Theorem

**Fair Division**

1. equal division
2. proportional division
3. equal division of contested sums
4. cake cutting algorithms
5. method of sealed bids

**Voting Theory**

1. plurality, runoffs, instant runoffs, Borda method, and method of pairwise comparisons
2. Condorcet criterion, majority criterion, public enemy criterion, monotonicity criterion, independence of irrelevant alternatives
3. Arrow's Impossibility Theorem