LIST OF KEY TOPICS COVERED IN THE MID-TERM EXAM:

- **Coordination Problems**
  - Coordination Problems
  - The Classical Institutional Challenge
  - Externalities.

- **Basic Game Theory**
  - Strategic (or normal) form games with two agents and two actions: basic elements, payoff matrix.
  - Solutions concepts: dominant strategy equilibrium, Nash Equilibrium (being able to tell whether a player has a dominant strategy and whether there is a dominant-strategy equilibrium in the game; being able to identify the Nash equilibrium (or equilibria) of a game).
  - Pareto efficiency (concept and definition; being able to identify Pareto-efficient outcomes in a game).
  - Graphical representation of games.
  - Types of games (prisoners' dilemma, invisible hand games, coordination games, assurance games, disagreement games).
  - Role of institutions in addressing coordination problems.
  - Sequential games.

- **Preferences**
  - Rationality;
  - Social preferences;
  - Experiments and their role in investigating preferences empirically.
  - Types of preferences (Self-regarding, Altruistic, Reciprocal, Inequality-adverse, Spiteful)
  - Incentives and social preferences: the crowding-out problem.

- **Risk and uncertainty**
  - Expected payoffs.
  - Calculable risk vs. fundamental uncertainty.
  - Expected payoffs in games
  - breakeven probability & risk-dominance.

- **Utility, preferences and indifference curves**
- utility functions
- indifference curves
- Marginal utility
- Marginal rate of substitution
- Feasibility: feasible set, feasible frontier and marginal rate of transformation
- Utility maximization (equating trade-offs and opportunity costs)
- The Offer Curve and the Demand Function
- Social preferences & utility.

- **Property & Exchange**
- Definitions (mutual gains from trade; endowments; post-exchange allocations; economic surplus, distributional outcome, etc.)
- Edgeworth box and Pareto efficient-curve
- Exchange under a well-intentioned omniscient impartial spectator.
- Personal exchange when one participant has TIOLI power
- Personal exchange when one participant has price-setting power
- The effect of social preferences on voluntary exchange.