This course will cover selected topics in applied microeconomics, with particular focus on insurance and credit markets (aka “selection markets”), markets for innovation, and healthcare markets. The common theme (as the course name suggests) is that in all three contexts there are good a priori reasons to be concerned about potential market failures, suggesting that some type of government intervention or regulation may be critical for achieving efficient market outcomes. These three markets are also particularly useful in illustrating the connection and interplay between economic research and public policy.

The focus of the course will be on topics, not methods, and will therefore cater to a broad set of students – especially those with interests in applied microeconomics, broadly defined. While, formally, this class is not attached to any of the second-year sequences, it should be particularly complementary to the second-year sequences in IO and public economics.

In addition to discussing existing work and bringing students closer to the research frontier, the course will emphasize areas of inquiry where additional research is feasible and warranted, thus hopefully generating possible leads for second-year research papers.

**Course logistics and requirements**

The class meets regularly on Tuesdays and Thursdays, 9:30–11:20am in Room 218 (Landau Economics). A tentative list of lectures is below. We will be using Canvas to post material and send announcements.

Student requirements will include three components (weight in the final grade in parentheses):
1. Problem sets that will mostly include reviews of papers, concepts, and research ideas (30%)
2. Class attendance, preparation, participation, and occasional short class presentations (35%)
3. Research paper proposal (35%)
Class topics and schedule

A. Selection markets (Liran)
1. Tue, Jan 7: Intro to selection markets
2. Thu, Jan 9: Testing for asymmetric information
3. Tue, Jan 14: Empirical models of insurance demand
4. Thu, Jan 16: Empirical models of insurance demand
5. Tue, Jan 21: Estimating welfare in insurance markets
6. Thu, Jan 23: Credit markets
7. Tue, Jan 28: Credit markets
8. Thu, Jan 30: Reclassification risk vs. adverse selection

B. Markets for innovation (Heidi)
9. Tue, Feb 4: Introduction to markets for innovation
10. Thu, Feb 6: Market size and market design
11. Tue, Feb 11: Economics of science
12. Thu, Feb 13: Taxes and innovation
13. Tue, Feb 18: Public funding of research
14. Thu, Feb 20: Intellectual property rights
15. Tue, Feb 25: Immigration and innovation
16. Thu, Feb 27: Innovation and inequality

C. Healthcare markets (Liran and Heidi)
17. Tue, Mar 3: Entry regulation for medical technologies (Heidi)
18. Thu, Mar 5: Risk adjustments (Liran)
19. Tue, Mar 10: Unintended consequences (Liran)
20. Thu, Mar 12: Estimating the returns to medical spending (Heidi)
Reading List

(*) = paper discussed in class

A. Selection markets

1. Theoretical background

   o Arrow, Essays in the Theory of Risk Bearing (Chicago: Markham, 1971).

2. Testing for Asymmetric Information in Insurance Markets


3. Estimating Demand for Insurance

4. Welfare in Insurance Markets


5. Credit Markets


B. Markets for innovation

1. Introduction to markets for innovation

- Key references:

- **Market failures:**

2. **Market size and market design**

- **Market size and innovation**

- **Market design: Advanced Market Commitments**

- **Anti-trust and innovation:**
3. Economics of science

- Key references:

- Compensating differentials:

- Burden of knowledge hypothesis:

4. Taxes and Innovation

- Tax policy and R&D investments:
Tax policy and inventor mobility:

5. Public funding of research

Key references:

Impacts of publicly funded research investments:

Designing publicly funded research grants

Universities

**Public funding for private firms**


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### 6. Intellectual property rights

**Key references:**


**Optimal patent design**


**Empirics: Patents and innovation**


o Patent scope

o Sequential innovation

o Disclosure

o Prizes, patents, and patent buyouts

o Excludability


7. Immigration and innovation

   o H-1B visas and innovation

   o Historical evidence

8. Innovation and inequality

   o Who becomes a scientist/inventor?

Who benefits from product innovation?


Who benefits from patents?


C. Health care markets

1. Entry regulation for medical technologies


2. Risk adjustment

3. Unintended consequences

4. Estimating the returns to medical spending
