Final Review

EC 201: Principles of Microeconomics

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Prologue

Today

Grades

- What do they mean?

- How does the curve work?

Final Exam Review

- Topics, structure, protocol, preparation, *etc.*

Q & A

- Ask me anything!

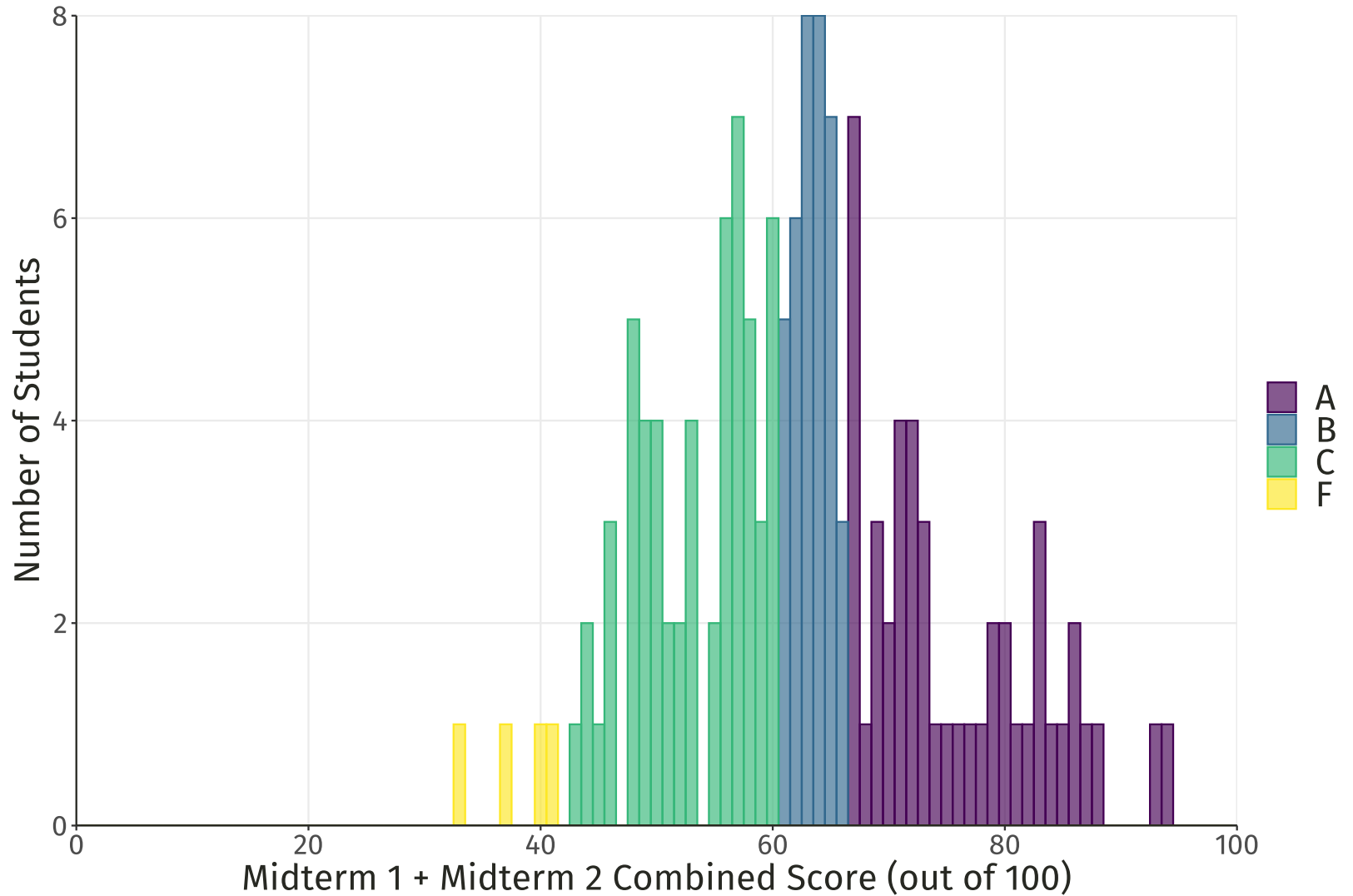# Finals Week

Office Hours

- Monday 10:00-12:00 in 412 PLC.

- Tuesday 14:00-16:00 in 412 PLC.

Final Exam

- Wednesday 10:15-12:15 in Pacific 123.

- If you show up after 10:30, I won't let you take the exam!

Grades

Grades

I will re-curve the class after the final.

Assignment Group	Weight
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	40%
Participation	10%
Optional Short Essays	up to 4% extra credit

Note$_1$: I have dropped your lowest three paricipation scores.

Note$_2$: The "Total" percentage you see in Canvas is misleading until everything is graded.

Final Exam

Exam Topics

Cumulative: Anything we've covered is fair game.

- Midterm 1 material: weeks 1-4

- Midterm 2 material: weeks 5-7.

- New material: weeks 8-10.

Exam Topics

1. What is Economics?

A: The study of how humans coordinate their wants.

- Why do we need to coordinate? Scarcity!

What role should economists play?

- Positive *vs.* normative statements.

People respond to incentives.

Exam Topics

2. Motivating the Economic Problem

Problem? Scarcity.

Organizing an economy

- **Our focus:** Capitalism.

- **Consequences:** Improved living standards + higher inequality.

What is a price?

- Know the punchline!

Opportunity cost

Exam Topics

3. Consumer Theory I

Total *vs.* marginal value

- *e.g.*, Diamond-Water Paradox.

Diminishing marginal value $\longrightarrow$ downward-sloping demand.

Optimal purchase rule

- Maximizes an individual consumer's surplus.

Demand *vs.* quantity demanded

Exam Topics

4. Consumer Theory II

Individual responsiveness = price elasticity of demand.

- Relationship with revenue.

Determinants of demand = demand shifters.

- Prices of other goods (substitutes *vs.* complements).

- Income (normal *vs.* inferior goods).

- Changes in tastes, expectations, *etc.*

Relative prices $\longrightarrow$ relative demand.

- *e.g.,* shipping the good apples out.

Exam Topics

5. The Market Mechanism

Pit market activity!

- Number on card = marginal value.

- Basis of trade? Differences in marginal values.

Shortage and surplus *vs.* equilibrium

Q: Why do we like markets as a means to distribute goods?

- **A:** They can maximize mutual gains = efficiency!

Exam Topics

6. Demand and Supply

Determinants of (market) demand = demand shifters.

- Prices of other goods, income, tastes, expectations, number of buyers.

Determinants of supply = supply shifters.

- Input prices, production technology, expectations, number of sellers, supply disruptions.

Simultaneous shifts $\longrightarrow$ ambiguity.

- Know direction of change in price or quantity, but not both.

Market spillovers

Exam Topics

7. Policy Levers: Taxes & Subsidies

Tax/subsidy wedge between consumer price and producer price.

- Government gets/pays the difference.

Tax incidence $\neq$ statutory incidence.

- Inelastic side of the market bears more of the burden.

Elasticity $\longrightarrow$ tax revenue + deadweight loss

Per-unit *vs.* lump-sum

Equity-efficiency tradeoff

8. Policy Levers: Price Controls

Binding price floor $\longrightarrow$ surplus of goods $\longrightarrow$ deadweight loss.

- *e.g.*, agricultural price supports.

Binding price ceiling $\longrightarrow$ shortage of goods $\longrightarrow$ deadweight loss.

- *e.g.*, rent control.

What causes price controls to become binding?

- *e.g.*, how do price-gouging laws work?

Exam Topics

9. How Economists Learn from Data I

Q: Why correlation $\neq$ causation?

- **A:** Selection bias.

Structured thinking about causal *vs.* contaminated comparisons

- Ideal/hypothetical data on potential outcomes

How do randomized control trials help us make *internally valid* comparisons?

What does treatment – control tell us?

When is a study *externally valid*?

Exam Topics

10. How Economists Learn from Data II

Regressions!

- Interpret slope of regression line.

- Omitted variables bias.

Natural experiments

- Accidental randomized control trials (*e.g.*, Oregon Medicaid Experiment)

- Difference-in-differences (*e.g.*, Card and Krueger's minimum wage study)

Statistical significance

Exam Topics

11. Externalities

Market failure $\longrightarrow$ deadweight loss.

Negative externality $\longrightarrow$ overproduction.

Positive externality $\longrightarrow$ underproduction.

Solutions?

1. Pigouvian taxes/subsidies

2. Coase theorem

Exam Topics

12. Game Theory

Game = players + strategies + payoffs.

- *e.g.*, Prisoner's dilemma, chicken, matching pennies, *etc.*

Dominant strategy is always a best response, but a best response isn't always a dominant strategy.

Nash equilibrium = mutual best responses.

Make sure that you are comfortable solving a 2 × 2 game!

- Don't worry about the brinkmanship material.

Exam Topics

13. Public Goods

Types of goods

- Rival *vs.* non-rival, excludable *vs.* non-excludable.
- Private, public, club, and common-resource.

Markets fail with non-private goods. Why?

- Club goods $\longrightarrow$ market power.
- Public goods and common resources $\longrightarrow$ collective action problems.

Collective action problems

1. Free-rider problem
2. Tragedy of the commons

Exam Topics

14. Producer Theory I

Accounting *vs.* economic profit

Production technology

Profit-maximizing hiring decisions

Fixed *vs.* variable costs

- ATC = AVC + AFC

Short-run *vs.* long-run costs

Returns to scale

Exam Topics

15. Producer Theory II

Competitive markets

Profit maximization: pick Q where MR = MC.

- Short-run: make decision to shut down or keep producing.

- Long-run: make entry/exit decisions.

Firm-level response to a change in demand and short *vs.* long-run market adjustment.

- Horizontal long-run supply curve at minimum ATC.

- Upward-sloping short-run supply curve.

Exam Topics

16. Monopoly & Antitrust

Sources of monopoly power

Profit maximization: two steps!

Social consequences

Antitrust law + regulation

Exam Structure

Multiple Choice

- 80 questions

- 1 point per question

- Multiple groups of sequential questions (*e.g.*, about graphs or tables)

Exam Protocol

Materials

- Writing utensil

- 3-inch-by-5-inch note card

- Basic or scientific calculator (no graphing or programming capabilities)

- UO ID card

- **Nothing else**

Exam Protocol

Procedure

- **Randomized** seating chart

- 120 minutes from *"you may begin"* to *"pencils down"*

- First 30 minutes: **quiet period** (no questions, no getting up)

- Last 90 minutes: ask lots of questions

- Show your UO ID card as you turn-in your exam

Exam Preparation

Materials

1. Lecture slides

2. Discussion worksheets

3. Midterm exams

4. Practice questions for the midterms and the final

5. Practice problems from the book

Exam Preparation

Strategies

1. **Review** concepts ⟵ slides + book

2. **Dissect** midterm performance ⟵ keys + emails

3. **Practice** ⟵ worksheets + book problems

4. **Simulate** the final ⟵ 25 + 25 + 25 = 75 practice questions!

   - Set a timer!

5. **Visit** office hours

   - M 10:00-12:00 and T 14:00-16:00 in 412 PLC

6. **Prepare** your note card

Q & A