

## ECON 4010: Economics of organisations

Lectures:	Tuesdays and Thursdays, 10:10am to 11:25am, Hollister Hall 366
Instructor:	Takuma Habu (takumahabu@cornell.edu)
Instructor office hour:	Thursdays, 4:30–5:30pm, Uris Hall 446
TA:	Victor Wei (vzw2@cornell.edu)
TA office hour:	Mondays, 10–11am and Wednesdays, 1:30–2:30pm, Uris Hall 474B

### Overview

Why do most economic activities happen within managed organisations (i.e., firms) and not in markets (i.e., purchased from others)? More fundamentally, what is a firm? Why isn't there just a single firm in the economy producing everything?

This course provides an introduction to *organisational economics* that seeks to understand the nature and workings of organisations—a collection of different people with dispersed information, responsibilities and non-aligned interests. Viewing a firm as an organisation, we will spend the beginning of the class going through the issue of *provision of incentives* to understand how a worker—whose inherent interest is not to maximise firm's profit—can be incentivised to follow the firm's objective of profit maximisation using explicit and/or implicit contracts.

We will then turn our attention to the topic of the *boundaries of the firm* that help us unravel the neoclassical economics' "blackbox" view of the firm and provide potential answers to the question of why some transaction occur within firms while others occur outside. We will touch on ideas such as transaction costs, property rights and how they relate to inability to write contracts that anticipate every possible contingency. To unpack the blackbox further, we will study the internal organisation of a firm and answer questions such as: who should do what in a firm and what should/do managers do? Time permitting, we will discuss how workers can be incentivised through various types of communication as well as issues that arise when incentivising multiple workers.

Throughout, we will put emphasis on the "art" of economic modelling—figuring out what elements of reality should go in to describing a situation in order to, not only understand, but also come up with new insights. Moreover, reflecting the reality that theoretical and empirical research are always in conversation with one another, we will also have in-class presentations about relevant empirical studies that speak to the theoretical models that we cover in class. Students will gain the ability to use game theory as an applied theoretical toolkit to studying a wide range of issues, not just those related to organisations.

### Prerequisites

ECON 3030 (Intermediate Microeconomic Theory) and ECON 3110 (Probability Models and Inference for the Social Sciences) or equivalents. Familiarity with game theory and calculus is important. Knowledge of ECON 3801 (Introduction to Game Theory and Strategic Thinking), ECON 4020 (Game Theory I), and ECON 4907 (Economics of Asymmetric Information and Contracts) will be helpful. Feel free to reach out if you are unsure about whether this class is appropriate for you.

## Assessments<sup>1</sup>

You will be randomly assigned into groups and there will be both group and individual assessments.

**Problem Sets (20%)** There will be two or three problem sets that will help you deepen your understanding of the model we cover in class. The problem sets are mathematical in nature. You are encouraged to work with your assigned groups but you must submit answers individually.

**Exam (30%)** There will be one exam to be taken individually that tests your knowledge of the concepts and models we cover in class. The tentative date/time for the exam is during class time on Thursday, 7th November 2024.

**In-class presentation (10%)** The week prior to Fall Break, each group will give a presentation (around 20 minutes) that explains an empirical or experimental research paper related to the material we cover in class. Each group can choose a paper from a list (to be provided) or one of their own choosing with permission from the lecturer.

**A “model development” project (30%)** Each group will spend the first part of the semester finding a “case” to apply the knowledge you gain from this class to. You are encouraged to find inspiration in your own lives or the news, and discuss your ideas with the lecturer and the TA during office hours. The goal is for your group to eventually write a paper that describes the case, assesses the extent to which existing theory is (or is not) consistent with the case, and sketch out a model that would be consistent with the case. At the beginning of November (tentatively 5th November), each group will give a presentation on their analysis to date of the chosen case to gather feedback from the rest of the class. Each group will be required to submit a written paper by Thursday, 12th December 2024 at 10:10am.

**In-class participation and responses to required readings (10%)** Some classes may have required readings. You will be asked to submit responses to such required readings via Canvas in advance of the class to ensure that you’ve read the material. Active participation during class will also be rewarded.

Your final letter grade for the class will be determined by computing a weighted average of your scores. Your weighted score will be assigned a letter grade based on the following cut-offs.

Grade	A	A-	B+	B	B-	C+	C	C-	D	F
Range	94–100	90–93	87–89	83–86	77–82	71–76	65–70	50–64	40–49	0–39

I expect this breakdown to result in about 40–50% of the class getting A or A- grades and reserve the right to make the cutoffs more generous if problems and/or exams are unexpectedly difficult. Rest assured that the cutoffs will not be made less generous under any circumstances. I will give A+’s to students who earn A’s and show extraordinary mastery of the material by the end of the semester.

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<sup>1</sup>Late submissions are typically not accepted; however, please contact me if you are facing special circumstances.

## Materials

Materials will be self-contained and any required and optional readings will be posted on Canvas.

## Expectations, Course Policies and Resources

This course aims to collectively create a welcoming, supportive and tolerant environment for all students and respects the various forms of diversity that they bring, including differences related to race, gender, sexuality, class, nationality, geography, age, size, ability, etc. To this end, I ask that we be respectful of each other, actively listen, participate, ask relevant questions, and give balanced, specific, and constructive feedback to each other. Our focus is on achieving the student learning outcomes. In order to do this, it is important you be prepared and do your best.

## Academic Integrity

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work.

## Resources and Accommodations

Services and reasonable accommodations are available to persons with temporary and permanent disabilities, students with DACA or undocumented status, students facing mental health or other personal challenges, and students with other kinds of learning challenges. Please feel free to let me know if there are circumstances affecting your ability to participate in class. Some resources that might be of use include the following.

- ▷ Office of Student Disability Services: <https://sds.cornell.edu>.
- ▷ Cornell Health CAPS (Counselling & Psychological Services): <https://health.cornell.edu/services/counseling-psychiatry>.
- ▷ Undocumented/DACA Student support: See the list of campus resources at <https://dos.cornell.edu/undocumented-daca-support/undergraduate-admissions-financial-aid>.

## Course Outline

A tentative course outline is the following. We will keep the schedule flexible, so topics may be added and removed from this list. Each part is expected to be about three weeks worth of class time.

### (i) Incentive provision I

- ▷ Static single-agent, single-task: with and without limited liability.
- ▷ Static single-agent, multi-task.
- ▷ Dynamic single-agent, single-task: ratchet effect and career concerns, relational contracts.

### (ii) Theories on boundaries of the firm

- ▷ Transaction economics.
- ▷ Property rights.
- ▷ Adaptation.
- ▷ Class discussion: Fisher Body and GM.

### (iii) Internal organisation

- ▷ Job design and job assignment—who should do what?
- ▷ Allocation and delegation of authority.
- ▷ Hierarchies.

### (iv) What do managers do? (Tentatively 19th November)

- ▷ Guest lecture by Prof. Daniela Scur and discussions.

### (v) Incentive provision II

- ▷ Strategic communication: Cheap talk, signal-jamming, signalling, verifiable information, persuasion.
- ▷ Multiple agents: Relative performance measures; Subjective performance measures; Tournament theory.