ECON3810/CS5846/ECON6760: Decision Theory I

Welcome to the class! Please open your webbrowser now, and take the survey at https://lblume.economics.cornell.edu/survey/. (There are only 2 quesetions and it should take j 1 minute.)

Some Bureaucracy

All three versions of the course have the same lectures

- On the homework/prelim/exams there will be some different questions for undergrads (ECON 3810) and grads (CS 5846 + ECON 6760)
- CS 5846 and ECON 6760 are treated the same way
- You can find lots of course material on the course website: http://www.cs.cornell.edu/courses/cs5846/2021sp/
 - Homework, class notes, announcements, ...
 - Pay particular attention to course policies.

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We will also be using Ed Discussion for course announcements and discussion (instead of Piazza)

Ed Discussion can be accessed through Canvas

Note that anonymous posts are not anonymous to course staff
Recordings of classes will also be posted on Canvas

▶ The course is listed on Canvas as "ECON 6760/..."

Course Policies: Highlights

We would like this course to be as interactive as possible

- Prof. Blume and I will comment on what the other person is saying (politely, of course, even if we disagree :-))
- Please ask lots of questions!
 - Use the hand-raising feature on zoom (or just ask)
 - Posting questions on chat is OK; we'll monitor the chat window
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- Structure: You will have a certain amount of time to do them in a 24-hour window
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The text is Kreps' Notes on the Theory of Choice.

Prerequisites

The only required technical background is the basic elements of probability theory — random variables, expectations, and conditioning.

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Students who have not had experience with writing mathematical proofs have had difficulty with the course in the past.

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- Normative and descriptive decision theory
 - How people should make choices (according to various philosophical points of view and how people do make choices)
- Formal models of decision making under certainty (when all the information is known) and uncertainty (when it's not)
- Problems with standard approaches to decision making
- Applying decision theory to ethical issues