# Syllabus Economics 410-1

- Professor: Eddie Dekel KGH 3329 Tel: 1-4414 e-mail: dekel@northwestern.edu PLEASE INCLUDE 410-1 IN SUBJECT LINE OF ALL E-EMAILS.
- Sections: There are **two** weekly sections where TAs will answer questions, solve problem sets, and cover material as time permits and according to your and their preferences.

Further course information (office hours, TAs, exam dates) will be posted separately on the web. **Reading the Course Info document is very important!** All schedule changes are tentative and subject to change.

- Web: Course material will be located on blackboard (canvas.northwestern.edu). Check the site regularly for announcements, which may include corrections to notes and problem sets. Make a note of when you download material as when changes are made I will (usually) indicate when the update was uploaded.
- Texts: The text for the course is *Microeconomic Theory*, by MasColell, Whinston and Green, OUP (henceforth MWG, or mistakenly, GMW). Useful additional texts include
  - A Course in Microeconomics Theory, by David M. Kreps, PUP
  - *Microeconomic Foundations I: Choice and Competitive Markets*, by David M. Kreps, PUP
  - Microeconomic Analysis, by Varian, Norton
  - *Advanced Microeconomic Theory*, by Philip R. Reny and Goeffery A. Jehle, Addison-Wesley (for some reason out of print in the Pearson US publishers site, but available from the UK <u>site</u>. This book is highly recommended).
  - Lecture Notes in Microeconomic Theory: The Economic Agent, by Ariel Rubinstein, PUP (online versions available at <u>PUP</u> http://www.pupress.princeton.edu/rubinstein/ and at Rubinstein's website).

Two books that go far beyond what we will cover are

- The Economics of Risk and Time, by Gollier, MIT Press
- *Notes on the Theory of Choice*, by Kreps, Westview Press The latter is a truly beautiful book in my opinion. We will not have time to delve into *Modeling Bounded Rationality*, by Rubinstein, MIT Press, available online at http://arielrubinstein.tau.ac.il/book-br.html, but it contains insightful perspectives related to some topics of this course.

# Material:

- MWG: Chapters 1-6, and in addition 20.B (with 3), 12.B (with 5), 21 and 17.C (with 4), 14 (pp. 485-6) and 8.B (with 6)
- Varian 8.5-8.8 (Chapters 1-11 often provide useful alternative perspectives on the material mentioned from MWG).
- Jehle-Reny 6.2. (Chapters 1-3 often provide useful alternative perspectives on the material mentioned from MWG).
- Class notes. (This is the main source (other than articles) for comparative statics and much of the material on uncertainty.)
- I also mention extra readings from time to time in the notes (or class).

A common concern is what material to study—the online notes, the texts or what I say in class. You may feel that you don't have time to read and study everything in all three. Obviously, what I cover in class is what I decided to emphasize and is the material you must understand. The material in the book and notes that is on exactly the same material as discussed in class complements the class and should help you understand it better (and correct any mistakes I make in class). Of course you should strive to go beyond what I cover in class, both because it will help you understand what I say and because it is useful—it is in the texts for a reason.

About notes: The uploaded notes have mistakes. If you find any (even minor typos), *please* notify me. Even if you are unsure whether you are confused or it is a mistake please ask.

The notes change during the course as the staff (and you) discover items to add and correct. We try to indicate dates of changes and what changes are made so you don't have to print out multiple copies of all pages, but such changes are unavoidable.

The notes include sections that may not be covered in class due to time constraints, a decision to emphasize different issues, or just how the class proceeds.

Objective: The course has several objectives. It will introduce concepts and tools of importance for almost all economists (pure and applied theorists and empirical economists alike): choice theory, demand/production analysis, comparative statics, and uncertainty. We will critically consider some underpinnings of welfare analysis, which itself underlies most of economics. We will see some very elementary and classic examples of the economic methodology: simple models used to highlight basic economic effects. The course covers a lot of material, and much of it is basic in the sense that it will help you study other models that are richer and closer to the current frontiers of research. It is nevertheless important to not only study the specifics and details we cover, but also begin your path as researchers: think critically about everything we do: are the assumptions reasonable, the models appropriate, the conclusions interesting, and the conceptual frameworks helpful or too restrictive?

The course is not a math course; I will try to give what I think are the basic economic intuitions behind results where such intuitions exist, but will not be spending much time going over proofs. You must learn how to read, understand and create proofs on your own.

- Grading: Midterm (35%), final (45%), and (almost) weekly problem sets (20%).
- Advice: Work together and learn from one another. Form discussion groups. But attempt all problems on your own, and make sure you understand the help that your colleagues give you.
- Problem sets: You may work on problem sets in groups. Each group only need submit one problem set, with the names of all group numbers listed alphabetically by last name. Grading is based primarily on effort (although also on success), so show your work.

Sometimes problem sets may be hard to understand or have mistakes. Occasionally they are hard to understand because part of the work is in understanding how to make an incomplete idea into a complete one. But if you find it too confusing and certainly if you find any mistakes please contact the TAs or instructor so we can post corrections and/or clarifications online.

Sometimes problem sets may be too long; it is often hard for me to judge what may take a long time. If you think a problem set is unreasonably long please let me know right away, so I can decide whether to make some parts optional or to serve as review for later.

If you feel the need for more problems for study later then the books are a useful source for additional problems.

Request: I welcome feedback and constructive criticism. It is most valuable to you if you provide it during the course so I can make use of it. Please provide feedback about the pace—whether I am going too slow or fast. I will not necessarily be able to respond to your requests and suggestions, but it is helpful to be aware of your perspective.

#### Approximate schedule:

I list the number of weeks per topic, and order of topics below. The list is approximate and changes may occur both in time and order (e.g., I might move comparative statics to be after production and spend less time on it).

Choice theory: 1.5 week Consumer choice: 1 week Demand theory: 2 weeks (Aggregation: ~ 0 weeks) Production: 1 week Comparative statics: 2 weeks Uncertainty: 2.5 weeks

## Struggling?

Please feel free to reach out to me about any difficulty you may be having that could impact your learning experience in this course.

Students can also access confidential resources through the Counseling and Psychological Services

(CAPS), https://www.northwestern.edu/counseling, Religious and Spiritual Life (RSL), https://www.northwestern.edu/religious-life/, and the Center for Awareness, Response and Education (CARE), https://www.northwestern.edu/care/.

## Copyright and recording:

<u>Recording by the Instructor</u>: This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course in Canvas and will be deleted at the end of the quarter.

Note that this applies to recording of synchronous class components and not to pre-recorded lectures by the instructor and not featuring student contributions.

<u>Recording by Students</u>: Unauthorized student recording of classroom or other academic activities (including office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact <u>AccessibleNU</u>.

<u>Copyright of Class Materials and Recordings</u>: Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's <u>Copyright Policy</u>, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display,

or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

(https://www.northwestern.edu/provost/policies/recording-class.html)

## General information and campus resources:

<u>Accessibility (Evanston Campus)</u>: Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

<u>Sexual Misconduct and Reporting</u>: Northwestern University is committed to fostering an environment where students are safe and free from sexual misconduct. *Confidential resources* are available to those who have experienced sexual misconduct. Faculty, instructors, and TAs are not confidential resources and are required to report incidents of sexual misconduct, whether discussed in your assignments or in person, to the Office of Equity, which can provide information about resources and options. I encourage students who have experienced sexual misconduct to talk with someone to get support. For more information, including how to request interim protective measures and academic accommodations or file a complaint, see *the Get Help page*.

*Discrimination and Sexual Harassment*: Northwestern University's Policies on Discrimination, Harassment, and Sexual Misconduct apply to all members of the University community, including students, staff, faculty, and third parties. Any student, staff, or faculty member, or third party, who believes that they have been discriminated against or harassed on the basis of their race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, pregnancy, parental status, marital status, age, disability, citizenship, veteran status, genetic information or any other classification protected by law, should contact the Office of Equity at (847) 467-6571. Additional information about the University's discrimination and harassment policies, including the campus resources available to assist individuals with discrimination or harassment concerns, is available online on the *Office of Equity website*.

misconduct are also protected under the University's Policy on Non-Retaliation

The following are general University policies:

Academic Integrity: Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit:

https://www.northwestern.edu/provost/policies/academic-integrity/index.html

Accessibility: Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: accessiblenu@northwestern.edu; p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

**COVID-19 Classroom Expectations**: Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the COVID-19 Code of Conduct. With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADAccommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the COVID-19 Code of Conduct or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up. **COVID-19 Testing Compliance:** To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week.

Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

**Exceptions to Class Modality:** Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

Maintaining the health of the community remains our priority. If you are experiencing any symptoms of COVID do not attend class and update your Symptom Tracker application right away to connect with Northwestern's Case Management Team for guidance on next steps. Also contact the instructor as soon as possible to arrange to complete coursework.

Students who experience a personal emergency should contact the instructor as soon as possible to arrange to complete coursework.

Should public health recommendations prevent in person class from being held on a given day, the instructor or the university will notify students.

**Guidance on Class Recordings:** This class or portions of this class may be recorded by the instructor for educational purpose and available to the class during the quarter. Your instructor will communicate how you can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.

**Prohibition of Recording of Class Sessions by Students** Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact AccessibleNU. Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's Copyright Policy, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

**Support for Wellness and Mental Health:** Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE). Additional information on all of the resources mentioned above can be found here:

https://www.northwestern.edu/counseling/

https://www.northwestern.edu/religious-life/

https://www.northwestern.edu/care/