

# Syllabus

## Labor Economics 339

### Spring 2024

Last updated: March 26, 2024

#### Instructor

Professor Sara Hernández-Saborit, *PhD*  
Northwestern University  
Department of Economics, KGH 3491  
Email: [sara.hernandez@northwestern.edu](mailto:sara.hernandez@northwestern.edu)



#### Teaching Assistant (TA)

In addition to Professor Hernández-Saborit's lectures, our course includes a weekly discussion section. In these sessions, you'll have the opportunity to meet with a teaching assistant (TA) in a smaller group setting. Together, you'll work on practice problems that directly align with the lecture material. These problems are typically drawn from previous exams, making them highly valuable for honing your skills and preparing for assessments.

Elizabeth Jaramillo Rojas  
Northwestern University  
Department of Economics  
[elizabethjaramillorjas2026@u.northwestern.edu](mailto:elizabethjaramillorjas2026@u.northwestern.edu)

All our OH will be posted on Canvas/Announcements. They start during Week 2. Many of the graduate students (the doctoral students who are pursuing their PhD) are also choosing classes and won't have their schedule finalized until the end of Week 1. We appreciate your patience!

# 1 Instructor Overview

I am firmly committed to diversity and equity whereby barriers are removed to create space for all individuals to fully engage in our community. Each student's voice has something of value to contribute and students are therefore encouraged to communicate and participate during class meetings. We must take care to respect the individual backgrounds, personal identities, intellectual approaches, and demographics expressed by everyone. Individual differences can deepen our understanding of one another and the world around us thus making us global citizens. I approach each class as if you have something to teach me – together we learn. I strongly adhere to the Northwestern University [non-discrimination policy](#): and reserve our classroom as a safe space for unique and meaningful dialogue.

## 2 Course description

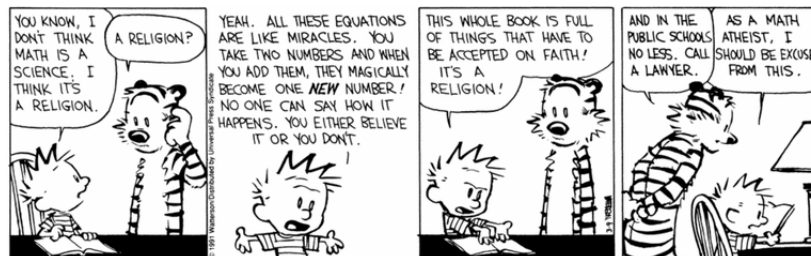
In this course, we will study the many different facets of labor economics. We will look into the economic decisions that individuals, households, firms, and governments face in relationship to the labor markets. The topics we will cover include, among others: the decision to participate in the labor market, the tradeoff between labor and leisure, the demand for labor by firms, the impact of minimum wages, labor mobility, human capital acquisition, discrimination, and the link between labor markets and crime.

The class will put an emphasis on applied microeconomic theory and empirical analysis. A combination of econometric techniques and theoretical models will feature prominently in the course. For each topic, we will study concrete examples emanating from all over the world, and make an intensive use of statistics and econometrics. We are also very much interested in understanding the relationship between research and public policy. By the end of the quarter you hopefully will have a solid microeconomic framework within which to analyze important issues in economics from a labor perspective.

## 3 Prerequisites

- Econ 281, 310-1, Econ 310-2

To do well in this class, you should be very well acquainted with statistics, regression analysis, and algebra: this class takes an approach to economics that is **mathematical**. You probably will not enjoy the class very much if you are not comfortable with technical material. You also need to master univariate and multivariate calculus. A key learning objective will be to improve your numeracy and problem-solving ability. As such, this class is a calculator-free environment.



You will also need a very good command of introductory and intermediate micro since we will use and incorporate a lot of models from consumer behavior. I recommend you brush up your notes from 310-1, Econ 310-2 and from 202, as needed. **To check if you are ready to succeed in this class, please attempt PSET #1 by yourself** (this is a self-directed problem set; if you struggle with it, please come talk to the professor).

This course has a website on Canvas. Everyone should automatically get access to the Canvas site upon official enrollment in the class (as per the Registrar instructions, I no longer have the ability to add you to Canvas if you are not formally enrolled). I will post my lecture notes, slides, articles, and handouts on our Canvas site. **Please, familiarize yourself with our Canvas site.** Every week:

- We will meet on Tuesday and Thursday for lecture (with the professor)
- You will meet on Friday your teaching assistant for discussion section
- On the days when you have an evening exam (exam 1, exam 2), we won't have lecture/meet during regular class time

In general, 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 or any other contagious illness do not attend class. Should public health recommendations prevent in-person class from being held on a given day, the instructor or the university will notify students.

## 4 Zoom Lectures

- Recording by the Instructor

If applicable, this class or portions of this class might be recorded by the instructor for educational purposes and available to the class during the quarter. These recordings will be shared only with students enrolled in the course and will be deleted at the end of 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.

- Recording 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 ANU. Unauthorized use of classroom recordings — including distributing or posting them — is also prohibited.

- Copyright of Class Materials and Recordings

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.

## 5 Textbook

There is no required textbook for this class. With the current price of academic textbooks, I'm concerned about issues of affordability and fairness in access to textbooks.

You will read a series of academic journal articles, policy reports, etc. Electronic copies of these readings are available through the course website or the library's electronic journals. Many of the readings are peer-reviewed articles and you will need your econometric toolkit to make sense of the published results. You have to be comfortable with the many readings that are assigned on a quarter basis. If not, kindly choose another class.

## 6 Grading and Evaluation

Grading for this class will be based on a series of assessments.

| Component                 | Percentage (%) |
|---------------------------|----------------|
| Problem Sets (4)          | 10             |
| Quizzes (4)               | 10             |
| Midterm 1                 | 30             |
| Midterm 2                 | 40             |
| Online, Short Essays Quiz | 10             |

The midterms are implicitly cumulative: you will still need to master past materials to do well subsequently. The two midterms play a crucial role. Because of the structure of the class, you must take them **both** for us to be able to evaluate you fairly. The exams may not be rescheduled under any circumstances. That means that you will not be able to take exams at any time other than the scheduled one. If you already know that can't take the exam on a given date, you should take this class on a different term.

Grades will either be based on the percentages described below (>95% is A, 90-94% is A-, etc) or a curve typical of economic courses that is determined and mandated by the Econ Department (the curve is not at the discretion of the individual instructor). If needed, the curve is computed once we have all grades for all the assessments. Class participation is expected, and will be taken into account in boundary cases (it could make a difference for turning a B+ into A-). The average grade in ECON 342 has been a B (or about a 3.1 GPA), which is consistent with departmental practice across all 300-level ECON electives (again, this is mandated by the Economics Department; the curve is not chosen at the discretion of individual instructors).

In the past, the grade cutoffs for ECON 300-level courses have been the following:

| Grade | Range (%) |
|-------|-----------|
| A     | 95+       |
| A-    | 90 - 94   |
| B+    | 87 - 89   |
| B     | 84 - 86   |
| B-    | 80 - 83   |
| C+    | 77 - 79   |
| C     | 74 - 76   |
| C-    | 65 - 73   |
| D     | Below 65  |
| F     | Below 60  |

If you do your due diligence, you should be confident in your ability to succeed in the class. If you opt for minimal effort, you will have a difficult time passing this class.

## 7 Final Grades

According to WCAS, final grade changes requested for the following reasons are not allowed:

- Redoing work or submitting extra work;
- Reexamination;
- A makeup examination administered without authorization by the Office of Undergraduate Studies and Advising;
- Reevaluation of work after the grades of others in the class have been submitted to the Registrar's Office

## 8 Exams

This class will have two evening, in-person midterms. The exams will test your understanding of the subject matter, including your ability to apply theory to economic problems. The exams will be timed and proctored. You should therefore focus on the systematic reasoning we are trying to develop, rather than on mere memorization. Economics does NOT lend itself to pulling all-nighters before exams. The exams will all be closed-book exams and you are not allowed to have any cheatsheet, nor use any calculator.

Each midterm will focus on all the material we cover and will be based on lecture notes, problem sets, assigned readings and articles, classroom discussions, and sections. Later analysis relies on principles covered earlier, so the exams are cumulative implicitly. In the spirit of transparency, I will post numerous old exams for you to review. This is a college-level class: we don't want you to simply regurgitate the material. We want to test whether you have a good understanding of the models and concepts. Are you able to apply the models and concepts we taught you to new settings and scenarios? If so, then you have a good mastery. Mastery is often seen as the ability to apply what you've learned to new situations or to solve new kinds of problems. You will note that while the set of material rarely changes, each exam looks a bit different as I cycle through a variety of ways of assessing your degree of mastery. In exams, we are not going to copy past questions and simply change the parameter values. In the past, the exams had a few, short, essay-type questions. The exams were online and the essays were typed; we will replicate the format for the essay-type questions. The TA will conduct a review session before each exam to help you prepare. We want to see you succeed!

You registered on CAESAR for 2 additional meeting patterns when you enrolled in this class. Those 2 additional meetings correspond to the evening exams. This is the only way to ensure that everyone can have additional time (we are generally constrained by the 80-minutes of a standard lecture and the need to vacate the room for the next professor). Students with accommodations will start at the same official time but their length will be adjusted to account for their extra time, 1.50x or 2.00x, as applicable.

- **Exam #1: Thursday, April 25th, 6.30 pm - SEE CAESAR for additional meeting pattern; room TBD**

This will be an in-person exam. Because of the evening exam, we won't meet for regular class time in the morning. The grades for Exam #1 will be available before the "drop" deadline.

- **Exam #2: Thursday, May 23rd, 6.30 pm - SEE CAESAR for additional meeting pattern; room TBD**

This will be an in-person exam. Because of the evening exam, we won't meet for regular class time in the morning. The grades for Exam #2 will not be available before the "withdrawal" deadline.

It's your responsibility to check the dates and make sure you do not have any conflicts. You should take this class on another term if you already foresee any conflicts. **No exceptions to this.**

## 9 Excused Absences and Emergencies

There are no make-ups for any of the exams or quizzes. If you have a health/family/personal emergency on the day of an exam: don't take it. Focus on your health first and foremost. Please make sure that you email me in advance, otherwise you will get a zero on the test. Once you reach out to me, I'll be in communication with your college advisor and the Office of Academic Standing to see what reasonable accommodation applies.

In the absence of documentation, your absence will be considered unexcused. If you miss an exam for an unexcused reason, you will receive a 0 on that assessment. Missing class for a job interview or a programmed family event would not constitute an excused absence.

If you take an exam, or start to take an exam, can you receive an excused absence for that exam? No. If you take an exam, or start to take an exam, you cannot receive an excused absence for that assessment. Your exam score will count and it will be used to determine your final grade in the class. If you feel that you are too unwell to take the exam, do not take the exam.

According to the Registrar's policy, Northwestern undergraduate students may request an incomplete grade of Y only in a course in which they have substantially completed the work, including any requirements of attendance or engagement. The university minimally requires that more than 50% of the course requirements must be complete in order for the course to be "substantially completed." Students must also be passing the course based on the materials submitted thus far to be eligible for an incomplete Y grade. For more information about incompletes and withdrawals, you can contact your Academic Advisor or the Office of the Registrar, [Requirement Policies](#).

The quizzes and problem sets in this course are designed with your flexibility in mind. You'll find that each of these assignments provides you with a generous window of time within which to complete them. This extended timeframe ensures that you have ample opportunity to carefully work through the questions, review your answers, and seek clarification if needed. It also accommodates various schedules. Unfortunately, we won't be able to extend the deadlines for submitting assignments. This is because we aim to release the solutions promptly, ensuring that your classmates have the opportunity to learn from them as part of the collaborative learning process. Adhering to the deadlines allows us to maintain a structured and fair course schedule.

## 10 Using Respondus + LockDown Browser for Online Exams

This course requires the use of Respondus & LockDown Browser for some assessments.

- Watch this short video to get a basic understanding of LockDown Browser and the optional webcam feature (which may be required for some exams):  
<https://web.respondus.com/lockdownbrowser-student-video/>
- Then download and install LockDown Browser from this link:  
<http://www.respondus.com/lockdown/download.php?id=171646780>
- To take an online test, start LockDown Browser and navigate to the exam. You won't be able to access the exam with a standard web browser. For additional details on using LockDown Browser, review this Student Quick Start Guide (PDF):  
<https://www.respondus.com/downloads/RLDB-QuickStartGuide-Instructure-Student.pdf>

## 11 Problem Sets

I will assign 4 graded problem sets and 1 self-assessment problem set (which is not graded). PSET 1 won't be graded and you don't have to submit it (it is for you to check how ready you are). The assignment due dates will be announced in class and on Canvas. Every problem set will be made of 2 parts:

- Part A: you work on it, but **you don't have to submit it**
- Part B: you will submit it electronically on CANVAS

These assignments will usually include a set of theory questions, another set of applications, and questions regarding the articles and readings assigned in class. Assignments may also include reading commentaries. Reading responses could refer to articles, news, and/or policy debates. **You are expected to use economic reasoning and the economic tools you have learned thus far at Northwestern when writing those. You will be evaluated accordingly.** Late problem sets will not be accepted. No exceptions to this rule.



## 11.1 Part A

- If you have a printer: download the problem set and print it. Work on the exercises.
- If you don't have a printer but you have a tablet: download the PSET and work directly on your tablet (use Notability and your stylus).
- If you don't have a printer, nor a tablet: that's OK! Just grab a blank sheet and get started.
- You may work in groups and collaborate for Part A.

## 11.2 Part B

You will be asked to write an essay and/or create a problem. This problem should be your own, original idea. **You may not collaborate with others for this part:** we are able to detect and keep track of problems that use the same equations, parameter values and solutions. Academic dishonesty is a very serious issue and you risk jeopardizing the value of your degree. **We will take into account the level of completeness, correctness, readability/logic, originality, and polished presentation. This applies to any graphical analysis as well.**

## 12 Short Quizzes

In the spirit of having more frequent, smaller, lower stakes assessments, you will take 4 quizzes. They are short quizzes. You will take them via Canvas + Respondus. The quiz will be in the form of a problem based on material from a past lecture and/or discussion section. There are no make-up options for the quizzes.

Please do not e-mail us if you forgot to take a quiz and the submission window is officially closed. You won't be given a make-up option.

## 13 Readings

Each lecture will have an associated set of required readings that I will list on the class schedule. These readings will feature in lectures, exams, and the problem sets. You should prepare the required readings prior to class: this will enhance your understanding of the lecture content and contribute towards creating a more engaging learning environment. The readings will focus on concrete examples from around the world and you will need to use statistics and econometrics to understand the published results.

## 14 Class Schedule

Please see the Long Schedule File on CANVAS. The list of topics and problem set dates is tentative.

## 15 Preparing for Lectures

All class materials (including lecture slides, lecture notes, and links to the referenced readings whenever applicable) will be available on the CANVAS site.

My lectures will often take the form of Beamer/LaTeX presentations and handouts. Posted PDF slides/handouts are intended to take the place of a packet of course notes, so you should expect the PDF files to be wordy and colorful. I have typed most of the equations and derivations so that you don't have to decipher my own handwriting.

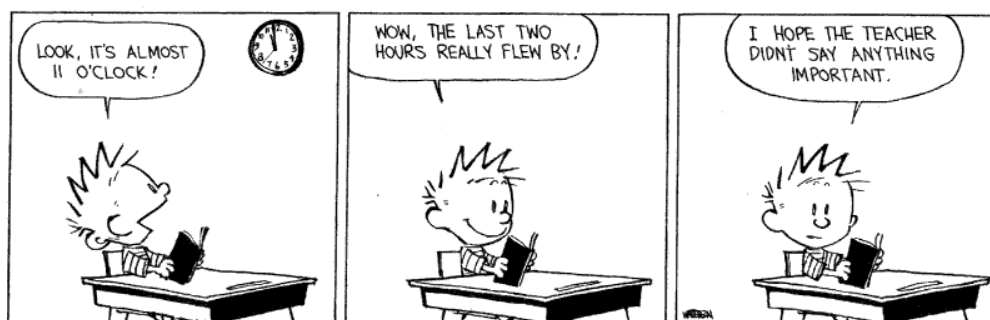
I communicate regularly via CANVAS/Announcements. Make sure you set your notifications to "immediate" so that you don't miss any announcement. Take the time to read the announcements.

## 16 Attendance

### 16.1 Lecture

Attendance for this course is not mandatory, but if you attend regularly you will benefit greatly. If you miss class, it is your responsibility to track down notes, handouts, and any other information (such as due dates for problem sets) that you missed. You can find most of the material on CANVAS. Lectures will not be repeated in the instructor's or the TA's office hours. The slides/lecture notes will be uploaded to CANVAS after lecture. Before lecture, a handout will usually be available for you to print and bring to class.

No food is allowed inside our classroom. Drinks are permitted.



### 16.2 Discussion section

Attending section is not mandatory, but the sections will be very useful. Your TA can help you understand and apply the material. There will be practice exercises each week, and the problems and discussions you have in section will certainly reflect what we cover in the problem sets and during lecture. You will get a lot more from the course if you attend sections. I strongly encourage you to attend the weekly sections too in order to meet your TA and other students, and to gain exposure to additional problems.

## 17 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". You are expected to know and abide by the rules. 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 the website: [Academic Integrity](#). Whether intentional or not, improper use of materials can be considered a violation of academic honesty. For example, you should not refer to prohibited materials (e.g., notes, another student's exam) during an exam, alter an exam for re-grading, or submit someone else's work as your own. Please know that any form of cheating, including improper use of content generated by artificial intelligence, constitutes a violation of Northwestern's academic integrity policy.

If you are unsure what is acceptable, please consult the instructor or the TA: ignorance is not a valid excuse.

## 18 Student Health & Wellbeing

Northwestern University is committed to supporting the wellness of all 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).

## 19 Academic and/or athletic accommodation

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 ([accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); 847-467-5530). If you already have established accommodations with AccessibleNU, please activate them as soon as possible, preferably within the first week 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.

I'm equally committed to providing an accessible learning environment for students on Northwestern varsity athletic teams. If you are an athlete and you anticipate an exam conflict due to an NCAA event and/or competition, please have your Athletic Academic Services contact me on your behalf. The exams for students with academic or athletic accommodations will have the **same official starting time** as the rest of the class.

## 20 Getting help outside of class

If you have questions about class concepts, class materials or problem sets, there are many ways to get help! It is never too late to reach out, but the sooner you do so, the higher the chances we can help you succeed.

- Ask question during class and in section as appropriate.
- Drop in during any of our office hours

If you have administrative questions or questions about class logistics (example: do we have class on February 1st?), please use our threaded **CANVAS/Discussion** (monitored by the TA and professor as needed). You can subscribe to it. If you don't quite know how to use/post on the discussion section, please have a look at this set of instructions: [What Are Discussions?](#)

- The forum will be actively monitored from Monday to Friday
- Questions that are posted on weekends will have to wait (that's a nudge for you to get your work done ahead of the weekend!).

### E-mail

Please do not send us your class-related questions by email. We will politely ask you stop by during any of our OH.

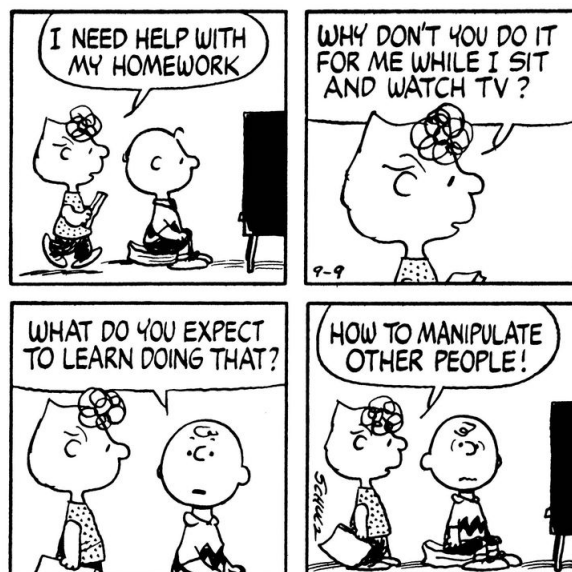
If your question is about class logistics ("I can't find the Panopto video for L5"), we may ask you to post it on the CANVAS/Discussion before we address it. We want the help we give to be public in nature so everyone benefits from the discussion (and help given). It is also way more efficient (and economists are all about efficiency).

I am happy to meet individually during my OH if you have general concerns or want to talk about economics, all things considered. However, out of a concern for fairness, if you want extra help with the course material please use the scheduled office hours, which are drop-in and public in nature. We want to be available to help everybody, while we ensure that we are equally accessible for all students.

Do not expect email responses after hours, nor during the weekends. You do not have to email us twice if you don't hear back from us; you can interpret it as a signal for you to stop by during OH.

## 20.1 Professionalism during OH<sup>1</sup>

1. Be prepared. Don't forget to bring all relevant course materials: notes, textbook, problem sets, practice exams, pencil & paper, calculator, laptop, charger, etc.
2. Think about what you'd like to focus on. Take a little time beforehand to think about what type of problem, or what idea or concept, is most challenging for you. That way, you can spend your time to the heart of the matter.
3. Try the work first. Take a stab at doing the problems or understanding the material ahead of time. This will help you accomplish #2.
4. Let the professor guide you. I'll use a guiding method, which means that I'm not telling you how to arrive at the solution, but rather helping you find your way there. This can take longer, but in the end you'll learn more!
5. Refrain from asking for confirmation about the particular answer to a problem. Example: "I got 20 hours as the solution, is this the correct answer?" Telling you whether that solution is correct will give you an unfair advantage (and many economists care about fairness too, not just efficiency).
6. Take advantage of being with classmates who are also at the session. Working collaboratively gives you the chance to learn from others and check your understanding of course material. I'll often ask a student that comes to my OH explain something to another student.
7. Be kind. Help your fellow students, and be supportive if somebody seems to be struggling, even with material you find easy. Everybody comes at the material in their own way.
8. Be creative in the way you work. Draw diagrams and pictures, use props – whatever helps you make sense of the ideas.
9. Know that there are no bad questions. Don't be afraid to ask when you don't understand something. If you don't ask, you won't learn. And chances are that others have the same question you do (but are afraid to ask!).
10. Congratulate yourself. By attending OH, you are actively managing your learning and making great use of the resources available to you. Keep doing that.

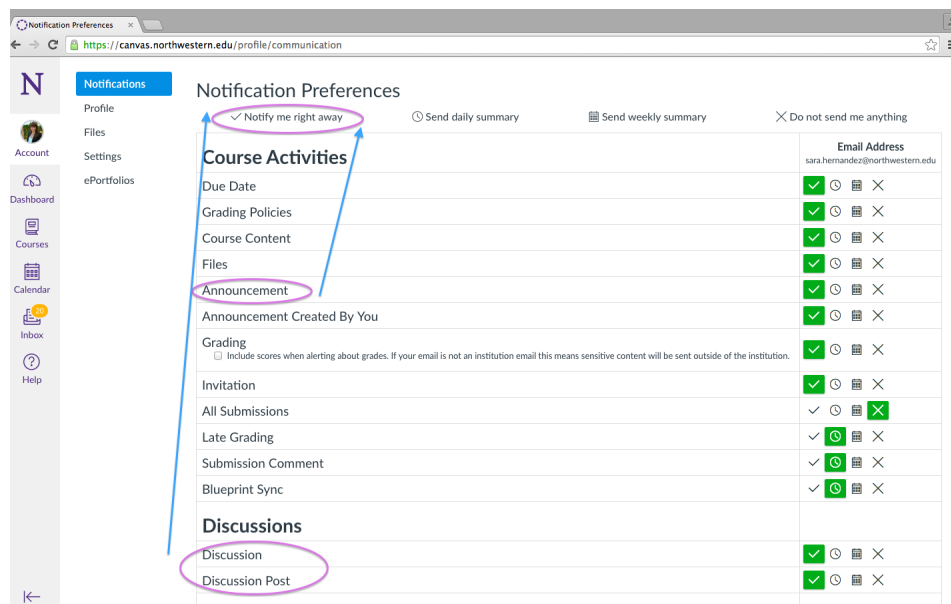
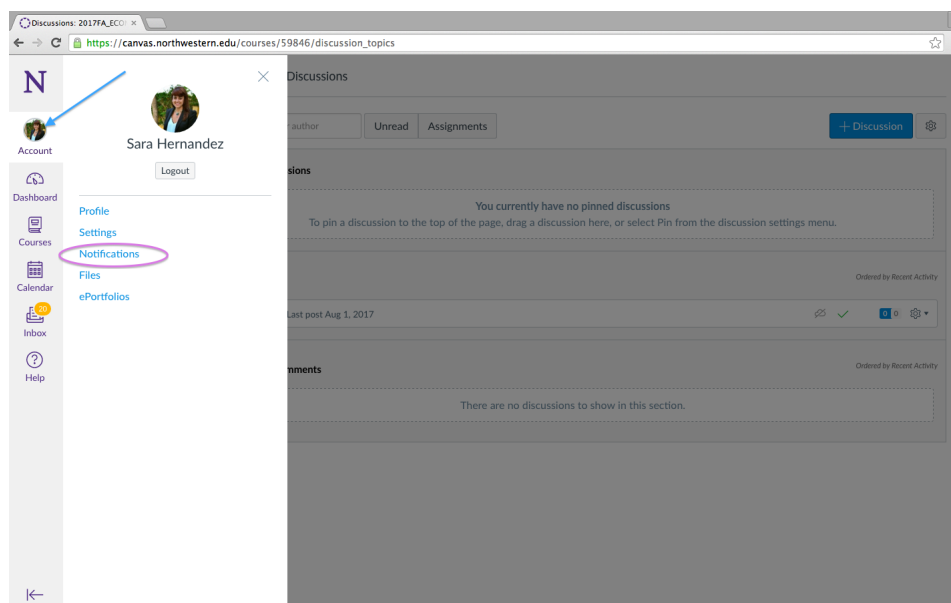


<sup>1</sup>Inspired by the Academic Support and Learning Advancement Center at NU

## 21 Notifications

We use CANVAS a lot: to upload the class files, the lecture handouts, the assignments. It is important that you stay on top of what happens in class! Make sure you keep up with the **announcements** and the **posts on the discussion forums**.

- Go to your CANVAS/Account/Notifications
- Once there, I recommend you set the “Announcements” and the “Discussion” and “Discussion Post” notifications to “Notify Me Right Away”.



## 22 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](#). Students, staff, and faculty who report harassment, discrimination, or sexual misconduct are also protected under the [University's Policy on Non-Retaliation](#).

## 23 Emergencies

In the event of a campus emergency (during class time, or while you take any assessment/exam/quiz), please follow NU's guidelines: <https://www.northwestern.edu/emergency-management/how-you-can-prepare/index.html>

## 24 COVID-19 Testing Compliance Statement

To protect the health of our community, Northwestern University may require students who are in on-campus programs to be tested for COVID-19. 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.

## 25 Exceptions to Class Modality

Class sessions for this course will generally 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.

## 26 Unforeseen Circumstances

In the event that new guidelines issued by the Provost are released once the quarter has started and supersede the class policy, or in the case of unforeseen circumstances, please note that the specifics of this course syllabus are subject to change (including, among others, the modality/format of exams, the corresponding weights of each assessment, and the assessments themselves). Instructors will notify students of any changes as soon as possible. Students will be responsible for abiding by the changes.

## 27 Miscellany

If you need some motivation, or if you are passionate about the topics and want to expand your readings, I am an avid follower of these websites, hopefully you can find something interesting in them too:

- [Global Development](#)
- [Poverty Matters](#)
- [Poverty Action Lab](#)
- [The Atlantic](#)
- [Fixes](#)
- [Chris Blattman - International Development, economics, politics, and policy](#)

You found an interesting article, debate, material related to a topic and you want to share it? Make sure you reach out, we can post it in the class website. I love it when students take an active role and find applications of the models we study in real life!

**Economists often help draft and design contracts. A syllabus is a contract** between the instructor and students that provides information about the course and serves as a commitment device to prevent arbitrary behavior. I will assume that you are familiar with, and agree to, all policies delineated in this contract. If you object to, or do not understand, any part of this contract, please contact me within Week 1 (before the “add” deadline).