

ECONOMICS OF INFORMATION

ECO-210-01 | Winter 2024 | Union College

Course Basics

Meets:

T/TH 1:55pm - 3:40pm

Karp Hall 008

Instructor:

Dolores Garrido

Karp Hall 118

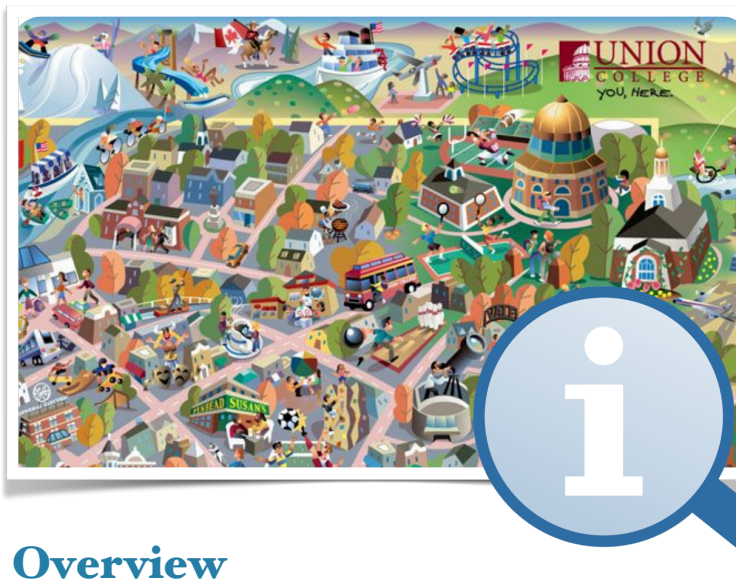
(518) 388-6365

garridom@union.edu

www.dolores-garrido.com

Prerequisites: ECO-101

Textbook: No mandatory textbook is required. This course is based on class lectures, selected papers and other readings to be provided to students on Nexus.



Overview

Economics of Information studies how information affects the decision-making process and strategic behavior of individual economic units, such as firms and consumers.

Information has economic value because it enables us to make better decisions that yield a higher payoff than we would obtain from choices made in the absence of information. However, in many real economic situations, (e.g., when we buy a used car), we make decisions without full information while others are better informed, benefiting from this situation of asymmetric information.

In this course we'll learn concepts, models and tools to analyze how individual economic units (e.g., firms and consumers) make decisions when faced with more or less

information than others in an economic transaction, agreement or situation. We'll see applications to pricing strategies, consumer behavior and marketing strategies, insurance markets, environmental information, auctions, and digital information and the Economics of the Internet.

The **primary objective** of this course is you become familiar with how economists think about real-life problems involving different information scenarios, and you understand the kind of patterns of behavior and strategies that firms and consumers develop in response to them. A **secondary goal** is you develop discussion, critical-thinking, problem-solving and writing skills, as well you improve your argumentation and presentation techniques.

Logistics

Office Hours

I wish you enjoy and succeed in this course. If you have questions about the class dynamics, assignments, assessments or want to chat with me about any other aspect, please join my office hours. **I do love working with my students!**

Drop-in (in person office hours) in Karp Hall 118 (my office):

- M: 12:30pm – 2:00pm
- W: 9:30am – 11:00am

First come, first served. If you arrive and I'm with other student, please wait, I'll be with you as soon as possible.

By appointment: If the above office hours do not work for you, you can [email](#) me and we'll find another time to meet. Note that if you request to meet with less than 24 hours, it may happen I cannot find a time to meet with you. So, please plan in advance.

Class Dynamics

We'll regularly meet at scheduled days, times and classroom. Class starts promptly. Plan to arrive on time, and do not leave the classroom until class is dismissed. Each class will combine my lectures with participation activities (e.g., games, debates). There will be a 5-7—minute break in every class.

NO requests to Zoom into class will be responded. If you cannot attend class because of COVID-19 positive testing/isolation, or any other important reason officially communicated to me by the Dean of Students Office, your absence will not affect your attendance and participation grade. In such a case, I'll do my best to provide you access to the material/content you missed. For any other missed class, see the attendance and participation grading criteria. It will be your responsibility to catch up with the class.

Communication



All class materials will be posted on Nexus. [Email](#) is the best way to reach me outside class time for very quick inquiries. For complex questions, please use my office hours.

Plan of Study

Introduction to Economics of Information:

- *Guess What, Why, Who, How, So What?*

Price Discrimination:

- *Why did your airline ticket cost so much less than mine?*
- *How can Disneyland charge different prices for entry into the park?*



Asymmetric Information:

- *How likely are you to buy a used car which is not what you expected? Why?*
- *Why private health insurance is so expensive?*
- *Is going to college about learning skills or about signaling skills?*



Auctions:

- *How much "X" is worth to you? And to others?*



Digital Information:

- *How do digital technology and digital information affect economic activity?*



Group Project:

- Let's investigate! *What, Why, Who, How, So What?*

Grading Criteria

Attendance and Participation (10%)

Regular attendance and active participation are expected. They are very important for the success of the classroom as a whole and for your individual success.

Attendance (5%) will be graded as follows:

| | |
|----------------------|---------------------|
| 5%: miss 0-1 classes | 2%: miss 4 classes |
| 4%: miss 2 classes | 1%: miss 5 classes |
| 3%: miss 3 classes | 0%: miss >5 classes |

Participation (5%) will be graded based on engagement in class activities and submission of pre/in/post-class activities (see participation rubric at the end of this syllabus).

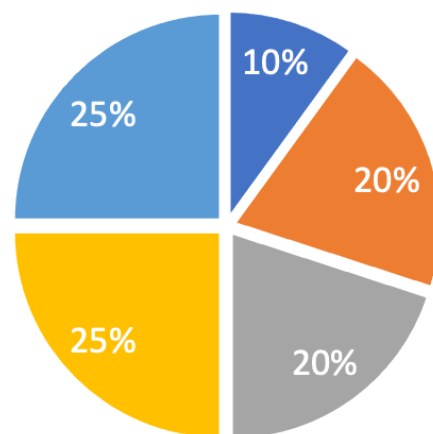
Homeworks (20%)

Homeworks are designed to help you grasp the basic class material. They also serve to test your abilities to learn on your own and help you become life-long learners.

- Homeworks will be listed each week under a mix of these categories:
 - Economic analysis: Numerical calculations, graphical analysis, interpretation and intuition.
 - Source materials: Readings, listening to audios, watching videos, finding articles.
 - Expression: Writing essays, discussions, and reflections.
- Homeworks will be posted to Nexus and they will be due at the announced day and time.
- Grade and feedback will be communicated via Nexus in the next days after submission. A late homework means you are getting behind the course content and the pace of the class. Therefore, no late submissions will be accepted.

Group Project (25%)

In group of approximately 4 people, you will conduct a research about any of the class topics. You will have to write a project and make a presentation. Instructions to develop this project to be announced in the 4th/5th week of class.



- Attendance and Participation
- Homeworks
- Mini Tests
- Exam
- Group Project

Mini Tests (20%)

Mini Tests are aimed to evaluate your understanding of the class content.

There will be 3 tests:

- Date, content, format and instructions will be announced at least one week in advance.

Exam (25%)

There will be one exam (all class time) *tentatively* scheduled for week 7-8.

- Date, content, format and instructions will be announced at least one week in advance.

Grading Scale



| | | | |
|-----------------|----|---------------|----|
| 93.00 and above | A | 77.00 – 79.99 | C+ |
| 90.00 – 92.99 | A- | 73.00 – 76.99 | C |
| 87.00 – 89.99 | B+ | 70.00 – 72.99 | C- |
| 83.00 – 86.99 | B | 60.00 – 69.99 | D |
| 80.00 – 82.99 | B- | Below 60.00 | F |

Note: Grades will NOT be curved or rounded.

Professional Ethics and Honor Code

Union College recognizes the need to create an environment of mutual trust as part of its educational mission. Responsible participation in an academic community requires respect not only for oneself, but also for the thoughts and work of others, whether expressed in the present or in some distant time and place. As a student, it is your responsibility to ensure that all submitted work including assignments and assessments is your own and does not involve any form of academic misconduct. Academic dishonesty is a rejection of the very purposes and ideals for which the College stands: personal integrity, independence of thought, critical understanding, and responsibility for one's own work.

According to Union College's Honor Code, **submitting work (e.g., homeworks, projects) that is produced by any source, whether it be another person or a technological entity (e.g., AI), and falsely claiming it as your own constitutes an act of academic dishonesty and could result in disciplinary action.**

Information about the Academic Honor Code is available at www.honorcode.union.edu. You are responsible for understanding the Honor Code and for meeting its requirements. So, please ask any questions you have about the Honor Code. **Ignorance is not an excuse for academic dishonesty.**

In a spirit of mutual respect and of dedication to your education, I affirm my commitment to the faculty's standards of professional ethics as laid out in the Faculty Manual.

Notes on mini tests and exam

- The purpose of mini tests and exam is to evaluate your understanding of the class content and the acquisition of learning skills.
- The coverage, format, and instructions will be communicated in class and posted on Nexus one week prior to the test/exam.
- **Answers must clearly show your work to get full credit.**
- **Mini tests and exam are expected to be taken as scheduled.** Makeups will not be given. I only do make an exception in the case of an emergency and officially documented reason showing you were unable to take the test/exam at the scheduled time.

Course Schedule

The following course schedule is TENTATIVE and subject to change depending upon the progress of the class and/or Union College mandates:

| Week | Section | Topic | Assignments Assessments |
|------------------|------------------------|--|--|
| Weeks 1-3 | Getting Started | <ul style="list-style-type: none"> • Introduction to Economics of Information | |
| | Price Discrimination | <ul style="list-style-type: none"> • Pricing strategies • Price Discrimination • Case study: Specialty teas • The Parking Game • Tying and Bundling | Homework 1 Homework 2 Mini Test 1 |
| Weeks 4-6 | Asymmetric Information | <ul style="list-style-type: none"> • What and Why? • Adverse Selection • Moral Hazard • Signaling | Homework 3 Homework 4 Mini Test 2 |
| | Group Project (GP) | <ul style="list-style-type: none"> • GP Overview: Objectives, topic and deliveries • Group work | GP: Group selection GP: Topic selection and motivation |
| Weeks 6-7 | Auctions | <ul style="list-style-type: none"> • What and Why? • Type of auctions • Bidding behavior | Homework 5 Mini Test 3 |
| | Group Project (GP) | <ul style="list-style-type: none"> • Tips on writing a research project • GP grading rubrics • Group work | GP: Progress I |
| | Exam (TBA) | | |
| Weeks 8-9 | Digital Information | <ul style="list-style-type: none"> • The Internet and Information | Homework 6 |
| | Group Project (GP) | <ul style="list-style-type: none"> • Tips on oral presentations • Group work | GP: Progress II |
| Week 10 | Group Project (GP) | <ul style="list-style-type: none"> • Oral presentations • Group and individual deliveries | GP: Group presentation GP: Group written report GP: Individual self-evaluation GP: Individual evaluation of group presentations |

Note: Any modification in this schedule will be announced in class and posted to Nexus.

Recommended Reading



[Required readings will be posted to Nexus]

Books (selected chapters)

Baye, M.R. and J.T. Prince (2016) *Managerial Economics and Business Strategy*, 6th edition. McGraw-Hill.

Besanko, D. and R. Braeutigam (2020) *Microeconomics*, 6th edition. Wiley.

Brousseau, E. and Curien, N. (2007) *Internet and Digital Economics. Principles, Methods and Applications*. Cambridge University Press.

Cellini, P. (2015) *Internet Economics. Understanding Digital and New Media Markets*. Luiss University Press.

Cowen, T. and A. Tabarrok (2015). *Modern Principles: Microeconomics*, 3rd edition. Worth Publishers.

Karlan, D. and J. Morduch (2020) *Economics. Improve Your World*, 3rd edition. McGraw Hill.

Klein, G. and Y. Bauman (2010) *The Cartoon Introduction to Economics: Volume One: Microeconomics*. Hill & Wang.

Moho, I. (1997) *The Economics of Information. Lying and cheating in markets and organizations*. Blackwell Publishers.

Oyer, P. (2014) *Everything I ever needed to know about economics I learnt from online dating*. Harvard Business Review Press.

Papers and Reports (a selection will be provided)

Andrews, R.J. and Stange, K.M. (2019) "Price Regulation, Price Discrimination, and Equality of Opportunity in Higher Education: Evidence from Texas." *American Economic Journal: Economic Policy*, 11(4):31-65.

Akerlof, G. (1970) "The Market for Lemons: Quality Uncertainty and the Market Mechanism." *Quarterly Journal of Economics*, 84:488-500.

Atkinson, L. and S. Rosenthal (2014) "Signaling the Green Sell: The Influence of Eco-Label Source, Argument Specificity, and Product Involvement on Consumer Trust." *Journal of Advertising*, 43(1):33-45.

Berrone, P., Fosfury A. and L. Gelabert (2017) "Does Greenwashing Pay Off? Understanding the Relationship Between Environmental Actions and Environmental Legitimacy." *Journal of Business Ethics*, 144:363-379.

- Botelho, A., Dinis, L., Lorenzo-Gomes, L., Moreira, J., Costa Pinto, L. and O. Simoes (2017) "The effect of sequential information on consumers' willingness to pay for credence food attributes." *Appetite*, 118:17-25.
- Chulkov, D. and D. Nizovtsev (2016) "Exploring price discrimination in an e-commerce environment." *Journal of the International Academy for Cases Studies*, 22(3):157-164.
- Coiera, E. (2000) "Information Economics and the Internet." *Journal of the American Medical Information Association*, 7(3):215-221.
- Connelly, B.L., Certo, S.T., Ireland, R.D. and C.R. Reutzel (2011) "Signaling Theory: A Review and Assessment." *Journal of Management*, 37(1):39-67.
- Delmas, M.A. and V.C. Burbano (2011) "The Drivers of Greenwashing." *California Management Review*, 54(1):64-87.
- Garrido, D., Gallardo, R.K., Ross, C.F., Montero, M.L., and J. Tang. (2021) "Does the order of presentation of extrinsic and intrinsic quality attributes matter when eliciting willingness to pay?" *Journal of Food Science*, 86(8):2358-3671.
- Garrido, D., Gallardo, R.K., Ross, C.F., Montero, M.L., and J. Tang. (2021) "The effect of intrinsic and extrinsic quality on the willingness to pay for a convenient meal: A combination of home-use-test with online auctions." *Journal of Sensory Studies*, 36(5):e12682.
- Garrido, D., Espinola-Arredondo, D. and F. Munoz-Garcia (2020) "Can mandatory certification promote greenwashing? A signaling approach." *Journal of Public Economic Theory*, 22:1801-1851.
- Greenstein, S. (2020) "The Basic Economics of Internet Infrastructure." *Journal of Economic Perspectives*, 34(2):192-214.
- Jin, G.Z. and Wagman, L. (2021) "Big data at the crossroads of antitrust and consumer protection." *Information Economics and Policy*, 54:100865.
- Lucking-Reiley, D. (2000) "Vickrey Auctions in Practice: From Nineteenth-Century Philately to Twenty-First Century E-Commerce." *Journal of Economic Perspectives*, 14(3):183-192.
- McCluskey, J. (2000) "A Game Theoretic Approach to Organic Foods: An Analysis of Asymmetric Information and Policy." *Agricultural and Resource Economics Review*, 29/1:1-9.
- Michale, J. Zillante A., Stafford, S., Bunchholz, G., Guthrie, K. and J. Heath (2005) "The Campus Parking Game: A Demonstration of Price Discrimination and Efficiency." *Southern Economic Journal*, 71(3):688-682.
- Milgrom, P. (199) "Auctions and Bidding: A Primer." *Journal of Economic Perspectives*, 3:3-22.
- NYC Department of Consumer Affairs (2015) *From Cradle to Cane: The Cost of Being a Female Consumer*. A Study of Gender Pricing in New York City.
- OECD (2016) *Price Discrimination. Background paper*.
- Puller and Taylor (2012) "Price discrimination by day-of-week of purchase: Evidence from the U.S. airline industry." *Journal of Economic Behavior & Organization*, 84:801-812.

- Roth, A.E. and A. Ockenfels (2002) “Last-Minute Bidding and the Rules for Ending Second-Price Auctions: Evidence from eBay and Amazon Auctions.” *The American Economic Review*, 92(4):1093-1103.
- Spence, M. (1973) “Job Marketing Signalling.” *Quarterly Journal of Economics*, 87:355-374.
- Stigler, G.J. (1961) “The Economics of Information.” *The Journal of Political Economy*, 69(3):213-225.
- Stiglitz, J.E. (2017) “The Revolution of Information Economics: The past and the future.” *National Bureau of Economics Research Working Paper*, 23780.
- Terrachoice (2010) *The sins of greenwashing. Home and family edition 2010. A report of environmental claims made in North America consumer market*. Northbrook, IL: Underwriters Laboratory.
- Truong, Y. and J. Pinkse (2019) “Opportunistic behaviors in green signaling: When do firms engage in symbolic green product preannouncement?” *International Journal of Production Economics*, 218:287-296.
- Vickrey, W. (1961) “Counterspeculation, Auctions, and Sealed Tenders.” *Journal of Finance*, 16:8-37.
- Zeithaml, V.A., Rust, R.T. and Lemon, K.N. (2001) “The Customer Pyramid: Creating and Serving Profitable Customers.” *California Management Review*, 43(4):118-142.
- Zhang, K.M. and Z. Vickers (2014) “The order of tasting and information presentation in an experimental auction matters.” *Food Quality and Preference*, 26:12-14.

Other readings and resources

Newspaper and magazine articles (Wall Street Journal, the Economist, The New York Times), podcasts, documentaries and movie clips.

DISCLAIMER: It may become advisable or necessary to adjust in the course plan, including assignments and exam dates. Consequently, this syllabus and class dynamics are subject to change due to College mandates and/or to facilitate instructional and/or students' needs.

Course Policies

Class Environment



Let's create an atmosphere in which everyone feels comfortable with the class. The use of electronic items (such as cell phones or music devices, laptops), late arrival, leaving the class while meetings, making noise, conversations that interfere with class activity, and similar conducts can disrupt the class dynamic. Please refrain to do any of these practices.

Accommodation



It is the policy of Union College to make reasonable accommodations for qualified individuals with learning differences. If it is your case and you wish to request accommodations for this course, please visit the Accommodative Services Office (located in Shaffer Library - Room 222), call them at (518) 388-8785, or email their Director, Shelly Harrington at harrings@union.edu. Once you have received approved accommodations from them, please contact me as soon as possible to discuss your needs. Please be aware that no accommodations will be provided without documentation from the Accommodative Services Office.

Diversity + Inclusion



I would like to create a **l e a r n i n g** environment for my students that supports a diversity of thoughts, perspectives, and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- If you have a name and/or set of pronouns that differ from those that appear in your official Union College records, please let me know!
- If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to stop by my office and talk with me. I want to be a resource for you.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone, including me!) that made you feel uncomfortable, please talk to me about it.
- As a participant in class activities, you should also strive to honor the diversity of your classmates. Let's do not (pre)judge others!

Please express yourself! A significant part of a college education is learning about the complexity of various issues. Therefore, it is important that we listen and respect one another but we do not have to agree. A richer discussion will occur when a variety

I DO NOT OFFER EXTRA CREDIT. This is because if everyone knows about it, it's not really extra credit. It's just another assignment. If some people don't know about it (for instance, if a specific student asks for extra credit at the end of the term), then I'm treating my students differently, which I make every attempt to avoid because I don't find it fair.

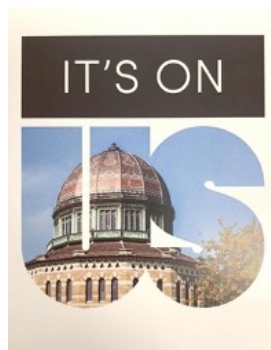
Based-Gender Misconduct and Harassment



I will listen and believe you if someone is threatening you.

Lauren McCluskey, a 21-year-old honors student athlete, was murdered on Oct 22, 2018, by a man she briefly dated on the University of Utah campus. We must all take actions to ensure that this never happens again.

www.laurenmccluskey.org



It's on Us pledge is a personal commitment to help women and men safe from sexual assault. It is a promise not to be a bystander to the problem, but to be a part of the solution, by:

- Recognizing that non-consensual sex is sexual assault.
- Identifying situations in which sexual assault may occur.
- Intervening in situations where consent has not or cannot be give.
- Creating an environment in which sexual assault is unacceptable and survivors are supported.

www.ItsOnUs.org

If you are in immediate danger, call 911.

If you are experiencing sexual assault, domestic violence, and stalking, please report it to me and I will connect you to [resources](#), or call Campus Safety (518) 388-6911 or call the Union College Sexual Assault Resource Hotline at (518) 388-6600 ext. 1 (an advocate is available 24/7 to confidentially explain all available resources and options).

Union College is committed to promoting a welcoming campus environment where sexual misconduct in all forms is strictly prohibited and recognized as unacceptable. If you (or someone you know) may have been sexually assaulted or subjected to sexual harassment, relationship violence or stalking, there are numerous avenues of support and options you can pursue. Seek help even if you are not sure if sexual misconduct has occurred; Union encourages you to report any form of sexual misconduct. Please visit the [Title IX site](#) for more detailed information regarding Union College's Sexual Misconduct Policy and Grievance Procedures.

Other confidential campus resources include Wicker Wellness Center Counseling Center (518) 388-6161 and Health Services (518) 388-6120.

COVID-19 / Other Uncertainties



I understand we live in a world of uncertainties (most recently the COVID-19 pandemic) that may require changes in this course plan. In such a case, I will be monitoring the situation closely. If I need to change the format of the course temporarily due to outbreaks of illness/other, I'll announce this via email and Nexus. We are expected to abide by all current Union College policies and guidance. **Let's all be responsible!**

ECO 210-01
Winter 2024

Class Participation (evaluate your engagement) Rubric (5% of total grade)

| | Excellent 5% | Competent 3-4% | Poor – 2% | Very Poor – 0-1% |
|--|---|---|---|--|
| ENGAGEMENT | <i>I am fully engaged.</i> | <i>I'm occasionally engaged.</i> | <i>I'm not sure how to be engaged; I need some direction.</i> | <i>I am totally disengaged.</i> |
| PREPARATION (outside class) | <i>I read carefully and research background information on the class topic ahead of time.</i> <i>I consider the course's essential questions as I prepare.</i> Required pre-class participation activities <u>always</u> submitted (no missing submission) | <i>I do basic research to understand the material, but I do not go beyond the obvious.</i> <i>Sometimes I consider the course's essential questions as I prepare.</i> Required pre-class participation activities <u>frequently</u> submitted (1 missing submission) | <i>Sometimes I do the readings. I don't research to understand the material, nor do I go beyond the obvious.</i> Required pre-class participation activities <u>sometimes</u> submitted (2 missing submissions) | <i>I rarely read nor research before class.</i> Required pre-class participation activities <u>rarely</u> submitted (>= 3 missing submissions) |
| PARTICIPATION (in class) | <i>I try to speak daily and advance the conversation by presenting evidence to support my ideas.</i> Constant voluntary and thoughtful contribution beyond participation activities. | <i>I speak occasionally. Sometimes I present general evidence to support my position.</i> Occasionally voluntary and thoughtful contribution beyond participation activities. | <i>I sometimes speak. Mostly when I'm asked by the professor.</i> Brief participation only when prompted. | <i>I rarely or never do speak in class.</i> No active participation or no speaking in class at all. |
| SELF-REFLECTION (outside class) | <i>I always make a self-reflection after each class.</i> Required post-class participation activities <u>always</u> submitted. | <i>I frequently make a self-reflection after each class.</i> Required post-class participation activities <u>frequently</u> submitted (1 missing submission) | <i>I occasionally make a self-reflection after each class.</i> Required post-class participation activities <u>sometimes</u> submitted (2 missing submissions) | <i>I rarely or never make a self-reflection after each class.</i> Required post-class participation activities <u>rarely</u> submitted (>= 3 missing submissions) |

Bold – criteria I'll be using for your participation grade.

Italics – criteria to be used for you to self-evaluate your level of engagement in the class.