

Economics, Applied
Course Number: 22:223:752
Course Title: Microeconomics

COURSE MATERIALS

Primary Text:

David M. Kreps, *Microeconomics for Managers* (2nd edition) Princeton: Princeton University Press, 2019).

Note that the order of the chapters in this book is not standard. The more common sequence is the one I outline below. I will cover the economics of security pricing which Kreps does not cover since the book is geared more towards developing tools for managers. Given that some of you may have more interest in Finance, I will try to cover this in the section of Demand Analysis.

During class you will have the opportunity to further develop your skills. Your grade will depend upon two class presentations and a final exam.

Other popular textbooks include:

MasColler, A., M. Whinston, and J. Green, *Microeconomic Theory* (New York: Oxford University Press, 1995).

G. Jehle and P. Reny, *Advanced Microeconomic Theory* (Boston: Addison- Wesley, 2011)

Varian, H., *Microeconomic Analysis* (3rd edition) (New York: Norton, 1992). Kreps, D., *A Course in Microeconomic Theory*, (Princeton: Princeton University Press, 1990).

Felix Munoz-Garcia, *Advanced Microeconomic Theory*, MIT Press, 2017.

W. Nicholson and C. Snyder, *Microeconomic Theory* (South-Western, 11th edition) at a less advanced level than the above.

A classic text covering consumer theory is:

Deaton, A. and J. Muellbauer, *Economics and Consumer Behavior*, Cambridge University Press, 1980.

PREREQUISITES

This course will be taught assuming that students have taken an intermediate microeconomics course. Furthermore, students should have a working knowledge of multivariate calculus at a minimum.

ACADEMIC INTEGRITY

I do NOT tolerate cheating. Students are responsible for understanding the RU Academic Integrity Policy (<http://academicintegrity.rutgers.edu/>). I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.” [I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work.] Don’t let cheating or plagiarism destroy your hard-earned opportunity to learn and advance. See business.rutgers.edu/ai for more details.

Guidance on the use of AI at Rutgers

As noted in [Rutgers Academic Integrity Policy 10.2.13](#), the principles of academic integrity require that students make sure that all submitted coursework be “the student’s own and created without the aid of impermissible technologies, materials, or collaborations.”

READING LIST

Mathematical Tools: Optimization and the Envelope Theorem

For those who are interested in learning some of the mathematical techniques, I recommend *Fundamental Methods of Mathematical Economics* by Alpha Chiang and K. Wainwright or *Mathematics for Economists* by Carl Simon and Lawrence Blume. Others interested in a more rigorous mathematical treatment are referred to *Mathematical Optimization and Economic Theory* by Michael Intriligator, *Mathematical Methods and Models for Economists* by Angel de la Fuente and *Real Analysis with Economic Applications* by Efe Ok. A recommended book for game theory is *Game Theory for Applied Economists* by Robert Gibbons. You can find other recommended books in Kreps’ text. An exercise book for game theory is *Strategy and Game Theory* by Felix Munoz-Garcia and Daniel Toro-Gonzalez.

You may want to review Felix Munoz-Garcia, *Advanced Microeconomic Theory*, Appendix 1. Jehle and Reny, Appendix 1 and 2. Nicholson and Snyder, Chapters 1-3. Other reviews include Varian, Chapters 26-27 and M-W-G, Mathematical Appendix.

Some classic articles in Microeconomics are the following and I have made them available to you on Canvas.

THE ECONOMIC APPROACH TO HUMAN BEHAVIOR

* David M. Kreps, *Microeconomics for Managers* Chapters 1-5.

*Friedman, M., "The Methodology of Positive Economics," in Friedman, M., Essays in Positive Economics (U of C Press, 1966), pp. 3-43.

*Becker, G., "The Economic Approach to Human Behavior," in Becker, G., The Economic Approach to Human Behavior, (U of C Press, 1976), pp. 3-14.

DEMAND ANALYSIS AND PREFERENCES

* David M. Kreps, *Microeconomics for Managers* Chapter 10,18-21. Jehle and P. Reny, *Advanced Microeconomic Theory*, Chapters 1-2. Nicholson and Snyder, Chapters 3-7.

*Rosen, S., "Hedonic Prices and Implicit Markets," *Journal of Political Economy* 82 (January 1974): 34-55.

*Becker, G., "A Theory of the Allocation of Time," *Economic Journal* 75, September 1965. Reprinted in Becker, G., *The Economic Approach to Human Behavior*, (U of C Press, 1976), Chapter 5.

Deaton and Muellbauer, *Economics and Consumer Behavior* (Cambridge), chapters 1-4. Deaton and Muellbauer, chapters 5, 7, 10.

Becker, G.S. and Murphy, K. M., "A Theory of Rational Addiction," *Journal of Political Economy* (4, August, 1988): 675-700.

Chiappori, P., "Collective Labor Supply and Welfare," *Journal of Political Economy* 100 (3, June 1992): 437-67.

Hirshleifer, J. *Investment, Interest, and Capital*, Prentice Hall, Chapter 8. Deaton and Muellbauer, chapter 14.

*Friedman, M. and Savage, L., "The Utility Analysis of Choices Involving Risk," in AEA, *Readings in Price Theory*.

*Pauly, M., "The Economics of Moral Hazard," *American Economic Review*, June 1968: 531-37.

Machina, M.J., "Choice Under Uncertainty: Problems Solved and Unsolved," *Journal of Economic Perspectives* 1 (Summer, 1987).

Kreps, David, *Microeconomic Theory*, Chapter 3

SUPPLY OF PRODUCTS AND THE STRUCTURE OF FIRMS

* David M. Kreps, *Microeconomics for Managers* Chapters 6-9, 11-12 Jehle and P. Reny, *Advanced Microeconomic Theory*, Chapter 3-4. Nicholson and Snyder, Chapters 9-15.

*Friedman, Milton, *Price Theory* (Aldine 1976), chapter 5. Stigler, G.J., *Theory of Price*, 4th ed. (Macmillan, 1988), ch. 7-9.

Topel, R. and Rosen, S., "Housing Investment in the United States", *Journal of Political Economy*, (1988): 718-740.

Rosen, S., "The Economics of Superstars," *American Economic Review*, 1981.

Romer, P., "Increasing Returns and Long-Run Growth," *Journal of Political Economy* 94 (October, 1986): 1002-37.

Pindyck, Robert S. "Irreversibility, Uncertainty, and Investment," *Journal of Economic Literature*, (September 1991): 1110-1152.

- *Arrow, K. "The Economic Implications of Learning by Doing," *Review of Economic Studies* (June 1962).
- Nordhaus, W.D. "Do Real Output and Real Wage Measures Capture Reality? The History of Lighting suggests not." in Bresnahan and R.A Gordon, *The Economics of New Goods*, (1997): 29-66.
- Carlton and Perloff, *Modern Industrial Organization* (Scott-Foresman, 1990), chapter 3.
- *Coase, Ronald, "The Nature of the Firm," *Economica*, 1937; reprinted in Stigler and Boulding (eds.), *Readings in Price Theory*.
- Grossman and Hart, "The Costs and Benefits of Ownership: A Theory of Lateral and Vertical Integration," *Journal of Political Economy* 94 (1986): 691-719.
- *Coase, Ronald, "The Problem of Social Cost," *Journal of Law and Economics* 3 (1960): 1-44.
- *Alchian, A.A. and Demsetz, H., "Production, Information Costs, and Economic Organization," *American Economic Review*, 1972
- Holmstrom, Bengt, "Moral Hazard in Teams," *Bell Journal of Economics* 13 (Autumn,1982): 324-40.

MARKET EQUILIBRIUM

- * David M. Kreps, *Microeconomics for Managers* Chapters 13-17. Jehle and P. Reny, *Advanced Microeconomic Theory*, Chapters 5 and 8. Jehle and P. Reny, *Advanced Microeconomic Theory*, Chapter 9.
- Hildebrand and Kerman, *Introduction to Equilibrium Analysis*, ch. 1.
- Mas-Colell, A, Whinston, M. and Green, J., *Microeconomic Theory*, Chapters 13-16, 17- 20
- Jones, R. "The Structure of Simple General Equilibrium Models," *Journal of Political Economy*, 1965.
- *Stigler, G.J., "Economics of Information," *Journal of Political Economy* 72 (Feb. 1964): 44-61.
- *Hayek, F.A., "The Use of Knowledge in Society," *American Economic Review* 35 (September 1945): 519-30.
- *Akerlof, George, "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism," *Quarterly Journal of Economics* 84 (1970): 481-500.
- *Rothschild, M. and Stiglitz, J., "Equilibrium in Competitive Insurance Markets," *Quarterly Journal of Economics*, 1976.
- Kreps, op cit, chapters 6, 16, 17
- Rubenstein, A., "Perfect Equilibrium in a Bargaining Model," *Econometrica*, 1982: 97- 110.
- Carlton and Perloff, chapter 6.
- Roth, Alvin, "The Evolution of the Labor Market for Medical Interns and Residents: A Case Study in Game Theory," *Journal of Political Economy* 92 (1984): 991-1016.
- *Lazear, E. and Rosen, S., "Rank-Order Tournaments as Optimal Labor Contracts," *Journal of Political Economy* 89 (1981): 841-64.
- Tirole, Jean, *The Theory of Industrial Organization* (MIT Press, 1988), Chapter 3, sections 3.0-3.4.
- *Alchian, A.A., "Uncertainty, Evolution, and Economic Theory," *Journal of Political Economy* 58 (3, June 1950): 211-21.

BUSINESS PRACTICES AND MARKET STRUCTURE

* David M. Kreps, Microeconomics for Managers Chapters 3-5. Carlton and Perloff, Chs. 9, 11, 19, 20.
Dixit, A. and J. Stiglitz, "Monopolistic Competition and Optimum Product Diversity," American Economic Review 67 (1977).
Spence, Michael, "Product Selection, Fixed Costs and Monopolistic Competition," Review of Economic Studies 43 (1976): 217-35.
Tirole, op cit., Chapters 5.0-5.6, 6.0-6.6, 8.0-8.2, 9.0-9.4.
Baumol, W., Panzer, J, and Willig, R., Contestable Markets and the Theory of Industry Structure (Harcourt Brace, 1982), ch. 2.
Loury, G.C., "Market Structure and Innovation," Quarterly Journal of Economics (August 1979): 395-410.
Farrell, J., and Saloner G. "Standardization, Compatibility and Innovation," Rand Journal, 1985: 70-83.
*Klein, Benjamin and Leffler, Keith B., "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 89 (August 1981):615-41.

* indicates required reading

SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at ods.rutgers.edu.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <http://vpva.rutgers.edu/>.

[Rutgers University-New Brunswick incident report link: <http://studentconduct.rutgers.edu/concern/>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link: https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7 . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

Bias incidents: an act – either verbal, written, physical, or psychological that threatens or harms a person or group on the basis of actual or perceived race, religion, color, sex, age, sexual orientation, gender identity or expression, national origin, ancestry, disability, marital status, civil union status, domestic partnership status, atypical heredity or cellular blood trait, military service or veteran status.

Bias incidents can be reported online at:

[New Brunswick Bias Incident Report Form](#)
[Newark Bias Incident Report Form](#)

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <https://temporaryconditions.rutgers.edu> .

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: <http://counseling.newark.rutgers.edu/>]

[Rutgers Counseling and Psychological Services–New Brunswick: <http://rhscaps.rutgers.edu/>]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: <http://health.newark.rutgers.edu/>]

[Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>]

If you are in need of *legal* services, please use our readily available services:

<http://rusls.rutgers.edu/>

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers–Newark: PALS@newark.rutgers.edu]

[Rutgers–New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: <http://www.ncas.rutgers.edu/rlc>

[Rutgers University-Newark Writing Center: <http://www.ncas.rutgers.edu/writingcenter>]

[Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.

- Students must sign, date, and return a statement declaring that they understand this syllabus.]

CODE OF PROFESSIONAL CONDUCT

[If you prefer to direct students to the conduct policy online instead, please use the following link and place it beneath the header above:

<https://myrbs.business.rutgers.edu/students/code-professional-conduct>]

Rutgers Business School is recognized for its high-quality education. To that end, maintaining the caliber of classroom excellence, whether in person or online, requires students to adhere to the same behaviors expected in professional career environments. These include the following principles:

Discussion and Correspondence

- Each student is encouraged to participate actively in class discussions and exercises. Substantive dialogue requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. Disagreement and the challenging of ideas must happen in a supportive and sensitive manner. Hostility and disrespectful behavior will not be tolerated.
- In correspondence and in the classroom, students should demonstrate respect in how they address instructors. Students should use proper titles unless there is an explicit understanding that the instructor accepts less formal alternatives. Similarly, appropriate formatting in electronic communication and timely responsiveness are all expectations in every professional interaction, including with instructors. Everything said and written should demonstrate respect and goodwill.

Punctuality and Disruption

- Class starts and ends promptly at the assigned periods. Students are expected to be in their seats or present online and ready to begin class on time.
 - Take your responsibility to attend class seriously. Your attendance is a critical element of the learning experience for in-person classes. Failure to show up disrupts

your learning and signals disrespect to your peers and instructors. (Of course, illness is a legitimate exception requiring advanced reporting to the [University](#) and your instructors.)

- Barring emergencies and within reason, students are expected to remain in their seats for the class duration. In person, packing belongings before the end of class disturbs both other students and the instructor. Online, attending to other tasks is distracting. In addition, even if webcams are not required in your course, your attention is fundamentally lacking if you are engaged in multiple tasks simultaneously.

Technology

- The use of technology is sanctioned only as permitted by the course instructor. As research on learning shows, peripheral use of technology in classes negatively impacts the learning environment in three ways:
 1. Individual learning and performance directly suffer, resulting in the systemic lowering of grades earned.
 2. In the classroom, one student's use of technology automatically diverts and captures other people's attention, thus impeding their learning and performance. Moreover, even minor infractions have a spillover effect and result in others doing the same.
 3. Subverting this policy (e.g., using a phone during class, even if hidden below the table or out of sight from your webcam; tapping on a smartwatch; using a laptop for non-course related matters) is evident to the course instructor and offensive to the principles of decorum in a learning environment.
- Networking, computing, and associated resources in the trading rooms, advanced technology rooms, and general classrooms are to be used in the manner intended.
- Sharing links to private online classes, attempting to join an online class you are not enrolled in, or posting disruptive content during these sessions are strictly prohibited and may lead to disciplinary action.
- For more instructions on information technology resources at Rutgers University, please refer to the [Acceptable Use Policy for Information Technology Resources](#).

Misappropriating Intellectual Property

- Almost all original work is the intellectual property of its authors. These works may include syllabi, lecture slides, recorded lectures, homework problems, exams, and other materials, in either printed or electronic form. The authors may hold copyrights in these works, which U.S. statutes protect. Copying this work or posting it online (on sites such as Chegg or Course Hero) without the author's permission may violate the author's rights. More importantly, these works are the product of the author's efforts; respect for these efforts

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