EKN-812: Microeconomics
Semester I, 2021

Instructors: Jesse Naidoo (**jesse.naidoo@up.ac.za**)
Teaching Assistants: Frederica Simaanya (**u19276398@tuks.co.za**)

This is a course in (mostly classical) microeconomic theory. Our goal is for you to become competent users of that theory. A secondary goal is to learn to read economic research critically. The way to achieve both of these goals is by practicing: that is, by solving lots of problems and reading lots of papers.

Below are the topics we will cover, stated "abstractly". However, this course is heavily biased towards applications; we want to use the theory to help us understand and explain real-world applications. As you will see, the scope of applications for these tools is very wide.

Lectures are from 4.30 PM - 7.30 PM on Wednesday evenings. These will be online, at least initially; we may switch to in-person instruction, if circumstances allow it.

Tutorials: TBA.

Problem Sets: I will post six problem sets (about one every two weeks). ***These are not for credit.*** I will also provide suggested solutions.

Grades will be determined by a weighted average of your scores on the final exam and the midterm. The respective weights will be either (40% midterm, 60% final), or (25% midterm, 75% final) - whichever is in your favor.

Prerequisites: No prior knowledge of economics is strictly required, but you do need to understand how to solve a constrained optimization problem, and you need to know the envelope theorem. Basic algebra and calculus are required. You should also know how to compute the mean and variance of a random variable. Although we will cover some of these things in the first week, you may have to revise them on your own.

Advice: I strongly encourage you to form study groups to help each other work on the problem sets and to discuss the readings. You will learn a lot more from your classmates than from me, if you take the time to seriously attempt the assignments.

Important Dates

Midterm: Wednesday, April 21st (in class).

Final Exam: TBA.

Required Texts

None. However, you may find useful complementary material in the following:

- Becker (2007)[1]
- Deaton & Muellbauer (1980)
- Friedman (2017)
- McCloskey (1985)
- Silberberg & Suen (2000)
- Stigler (1987)
- Jaffe *et al.* (2019)

Some of these are hard to come by, but I have asked the library to put all of them on reserve; at the time of writing, Stigler (1987), Deaton & Muellbauer (1980) and Silberberg & Suen (2000) are available.

McCloskey (1985) is **available for free download from her website**, and Deaton & Muellbauer (1980) is still relatively easy to find. Becker (2007) and Friedman (2017) are now available in Kindle format from Amazon, as are Deaton & Muellbauer (1980) and Jaffe *et al.* (2019).

---

[1] Note: this book was written and first published in the mid-1960s. As such, it uses outdated and possibly offensive terms to refer to black Americans in its discussion of certain labor market issues. You are welcome to use any of the other texts instead.

As we study different models in class, I will (where possible) provide references to empirical papers that apply them.

Syllabus

This is a list of topics that we *may* cover. A topic's inclusion on this list is neither necessary nor sufficient to ensure that it will be discussed in class, or that it will appear on an assignment or an exam. Think of the list below as a set of imperfect predictions.

Prelude [0 lectures] Tools for economic theory: qualitative analysis of systems of equations (existence and uniqueness). Optimization; first-order (necessary) and second-order (sufficient) conditions. Kuhn-Tucker conditions for constrained problems. Envelope theorem. Comparative statics. Philosophy: what is economics? Methodology: testable predictions and falsifiability.

References: Silberberg & Suen (2000), Ch. 1, 6; Stigler & Becker (1977); Becker (1993); Jaffe *et al.* (2019), Ch 1.

Demand for Final Products [4 lectures] Marshallian and Hicksian demand; elasticities of substitution and income elasticities. Adding up, homogeneity, and symmetry restrictions. Tools for welfare economics: CV, EV, and consumer's surplus. The composite commodity theorem. Special cases for consumer theory: homothetic, quasilinear, and separable preferences. Weak and strong separability. Consumption and savings. Durables and the user cost of capital. Choice under uncertainty; risk-sharing and self-protection.

References: Silberberg & Suen (2000), Ch. 10, 13; Becker (2007), Ch. 2-3, 10; Deaton & Muellbauer (1980), Ch. 1-2, 4-7, 12-14; Friedman (2017), Ch. 2,4; Varian (1992), Ch. 7-9, 11; Jaffe *et al.* (2019), Ch 1-4, 6.

Supply of Final Products [2 lectures] Aggregation: firm vs. market supply. Short-run vs. long-run supply. Marginal and average costs. Transaction costs and hold-up problems. Moral hazard and incentives in organisations. Competition and profit maximisation. Externalities.

References: Becker (2007), Ch. 5; Friedman (2017), Ch. 5-6; Varian (1992), Ch. 1-6; Jaffe *et al.* (2019), Ch. 10-11.

Market Equilibrium [4 lectures] Implications of market clearing. Comparative statics of partial equilibrium; tax incidence under competition. Spatial equilibrium and compensating differentials. General equilibrium: existence and uniqueness. The first and second welfare theorems. Nonprice allocation: queuing, rationing, and other mechanisms. Rent-seeking. The social costs of monopoly and regulation. Collusion. Price discrimination and the Coase conjecture. Monopolistic competition.

References: Silberberg & Suen (2000), Ch. 8-9; Becker (2007), Ch. 6-7; Stigler (1987) Ch. 11-13; Varian (1992), Ch. 13-14; Jaffe *et al.* (2019), Ch. 7-8, 12-13.

Demand for Productive Factors [2 lectures] Scale and substitution effects. Returns to scale, factor shares and "exhaustion of the product". Marshall's laws of derived demand. Monopsony in factor markets.

References: Silberberg & Suen (2000), Ch. 8-9; Becker (2007), Ch. 8; Friedman (2017), Ch. 7-10; Jaffe *et al.* (2019), Ch. 10-11.

Supply of Productive Factors [2 lectures] Labor supply, home production, and time use. Human capital investment in the family and over the life-cycle. Long-run implications of productivity growth. Baumol's "cost disease".

References: Becker (2007), Ch. 9; Jaffe *et al.* (2019), Ch. 9, 10-11, 15-20.

One class will be taken up by the midterm; another one will be taken up by a pre-exam review session.

This version: February 8, 2021

References

Becker, Gary S. 1993. Nobel Lecture: The Economic Way of Looking at Behavior. *Journal of Political Economy*, **101**(3), 385–409.

Becker, Gary S. 2007. *Economic Theory*. 2 edn. New York: Routledge.

Deaton, Angus, & Muellbauer, John. 1980. *Economics and Consumer Behavior*. Cambridge, UK: Cambridge University Press.

Friedman, Milton. 2017. *Price Theory*. Routledge.

Jaffe, Sonia, Minton, Robert, Mulligan, Casey B, & Murphy, Kevin M. 2019. *Chicago Price Theory*. Princeton University Press.

McCloskey, Donald N. 1985. *The Applied Theory of Price*. 2nd edn. New York: Macmillan.

Silberberg, E, & Suen, W C. 2000. *The Structure of Economics: A Mathematical Analysis 3rd Edition*. McGraw-Hill.

Stigler, George J. 1987. *The Theory of Price*. Pearson.

Stigler, George J, & Becker, Gary S. 1977. De Gustibus Non Est Disputandum. *American Economic Review*, **67**(2), 76–90.

Varian, Hal R. 1992. *Microeconomic Analysis*. 3rd edn. New York: WW Norton & Co.