

## **MACROECONOMICS (II)**

This course is concerned with the application of the recursive methods to the study of various macroeconomic problems, such as asset pricing, risk and uncertainty, efficient market, economic growth and development, and information theory. The *Smith-Coase framework* is useful, and will be used repeatedly in the study of these problems.

### **Requirements**

Four homework assignments: 20%

Midterm/Final exam: 40% for each

### **Office Hours**

Tuesdays, 2:00-3:00 p.m. (Social Sciences Building 302); otherwise, by appointment

Web: <https://web.ntpu.edu.tw/~guan>

## **Course Outline**

### **Introduction to Recursive Methods (or Dynamic Programming)**

Nancy L. Stokey, Robert E. Lucas, Jr., and Edward C. Prescott, *Recursive Methods in Economic Dynamics*, Harvard University Press, 1989, Ch. 3.

### **Efficient Market Hypothesis and Kelly Criterion**

Robert E. Lucas, Jr., “Asset Prices in an Exchange Economy,” *Econometrica*, 1978, 1429-1445.

Daniel Bernoulli, “Exposition of a New Theory on the Measurement of Risk,” *Econometrica*, 1954, 23-36.

Harry M. Markowitz, *Portfolio Selection*, 2nd edition, Wiley, 1991, Ch. VI and Note.

John L. Kelly, Jr., “A New Interpretation of Information Rate,” *Bell System Technical Journal*, 1956, 917-926.

Andrew Metrick, “The Failure of Silicon Valley Bank and the Panic of 2023,” *Journal of Economic Perspectives*, 2024:1, 133-152.

## **Introduction to the Smith-Coase Framework**

Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 5th edition, 1789; Modern Library, 1994, Bk. I.

Ronald H. Coase, *The Firm, the Market, and the Law*, University of Chicago Press, 1988, Ch. 2, 4, and 5.

--- “Durability and Monopoly,” *Journal of Law and Economics*, 1972, 143-149.

## **Midterm Exam**

### **Economic Growth and Development**

Adam Smith, *Wealth of Nations*, Bk. III, Ch. III.

Paul M. Romer, “Endogenous Technological Change,” *Journal of Political Economy*, 1990, S71-S102.

--- “New Goods, Old Theory, and the Welfare Costs of Trade Restrictions,” *Journal of Development Economics*, 1994, 5-38.

Robert E. Lucas, Jr., “Ideas and Growth,” *Economica*, 2009, 1-19.

--- “What Was the Industrial Revolution?” *Journal of Human Capital*, 2018, 182-203.

### **Economics and Information Theory**

Kenneth J. Arrow, “Coase’s Theory of the Firm: The Next Steps,” in *The Elgar Companion to Ronald H. Coase*, edited by Claude Ménard and Elodie Bertrand, Edward Elgar Publishing, 2016, 45-50.

Christopher A. Sims, “Implications of Rational Inattention,” *Journal of Monetary Economics*, 2003, 665–690.

N. Gregory Mankiw and Ricardo Reis, “Sticky Information versus Sticky Prices: A Proposal to Replace the New Keynesian Phillips Curve,” *Quarterly Journal of Economics*, 2002, 1295-1328.

Bartosz Maćkowiak, Filip Matějka, and Mirko Wiederholt, “Rational Inattention: A Review,” *Journal of Economic Literature*, 2023, 226-273.

## **Final Exam**