

Lecture (B.Sc.)

Economics of Innovation

Professor Dr. Guido Bünstorf

Economic Policy, Innovation and Entrepreneurship Group

Summer Term 2020

Time and Location

Time: Tuesday, 8:30-11:45 (class starts on April 21, 2020)

Location: Room 0210 (Nora-Platiel-Strasse 6)

Overview

Innovative products and services provide the foundation of economic change. Many of the products and services that we take for granted today were not even invented or barely known to a broad public 20 years ago. Explaining how innovations are generated, how they diffuse in the economy and how they affect economic growth and development is associated with substantial theoretical and empirical challenges for economics. A rich and diverse literature deals with these challenges. In this course, fundamental concepts, theories and findings in the economics of innovation are introduced. We will also discuss intellectual property rights and selected contributions to growth theory that focus on innovation.

Credits and requirements

6 ETCS credits can be earned based on successful participation in the final exam (90 minutes).

Outline: Economics of Innovation

1. Introduction: innovation as a challenge to economics

- 1.1 Innovation and economic development: a preview
- 1.2 Conceptual background: theorizing about the unknown
- 1.3 Schumpeter and beyond: innovation as a subject of research in economics

(MANDATORY reading: Chapter 2 of Schumpeter, J. A. (1911/1934): The Theory of Economic Development, Harvard University Press.)

2. Conceptualizing innovation

- 2.1 Invention, innovation and diffusion
- 2.2 The innovation process
- 2.3 Innovation as recombination
- 2.4 Technological paradigms and trajectories
- 2.5 Competing technologies, path dependence and lock-in
- 2.6 Innovation networks and innovation systems

(Background reading: Soete, L., B. Verspagen und B. Ter Weel (2010): Systems of Innovation, in: B. Hall and N. Rosenberg (eds.) Handbook of the Economics of Innovation, Elsevier, pp. 1160-1180.)

3. Individuals as innovators

- 3.1 Motives, incentives and performance of individual innovators
- 3.2 User innovation
- 3.3 Mobility, migration and innovation

(Background reading: Von Hippel, E. (2010): Open user innovation, in: B. Hall and N. Rosenberg (eds.) Handbook of the Economics of Innovation, Elsevier, pp. 411-427.); Lissoni, F. (2018). International migration and innovation diffusion: an eclectic survey. Regional Studies, 52(5), 702-714.

4. The economics of intellectual property rights

- 4.1 The case for intellectual property
- 4.2 Patents: an introduction
- 4.3 Why do firms patent? Theoretical models and empirical evidence
- 4.4 Empirical findings on patents and technological change
- 4.5 Markets for technology
- 4.6 Patent thickets and patent trolls

(Background reading: Shy, O. (1995): Industrial Organization: Theory and Applications, MIT Press; Bessen, J. and M. J. Meurer (2008): Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk, Princeton University Press.)

5. Innovation and growth

- 5.1 Theories of economic growth
- 5.2 Some empirical findings

(Background reading: Aghion, P. and P. Howitt (2009): The Economics of Growth, MIT Press)

6. Innovation policy

- 6.1 Theoretical foundations
- 6.2 Current issues

(Background reading will be announced in class.)