Lecture (BA)
Economics of Innovation

Fachbereich Wirtschaftswissenschaften

Economic Policy Research Group

Professor Dr. Guido Bünstorf

Winter Term 2013/14

Time and location
Tuesday, 8.15 – 10.00 (first class on October 22, 2013)

Nora-Platiel-Strasse 6; Room 0207

Overview
Innovative products and services provide the foundation of economic change and development. Just 20 years ago, some of the products and services that we take for granted today had not even been invented or were barely known to a broad public. Explaining how innovations are generated, how they diffuse in the economy and how they affect economic growth is associated with substantial theoretical and empirical challenges for economics. Over the past decades, a rich and diverse literature has dealt with these challenges. In this course, fundamental concepts, theories and findings in the economics of innovation are introduced first. Subsequently, selected contributions to growth theory will be discussed that focus on innovation.

Credits and requirements
This is a two-hour-per-week (2 SWS) course. In various combinations with other courses, a total of 3 to 6 credits can be earned.

- 3 credits can be earned by successful participation in the final exam written in this course (60 minutes; graded).
- 6 credits can be earned by successful participation in the final exam (60 minutes; pass/fail) and successful participation in the seminar Innovationsnetzwerke (taught in German; credit requirements: oral presentation and written essay).
- 6 credits can be earned by successful participation in the final exam (60 minutes; pass/fail) and successful participation in the course Machen! – Experimente in der Ideenwerkstatt)

(Contact instructor for further options to obtain 6 credits in combination with other courses.)
Structure and content

1. Introduction: innovation as a challenge to economics
   1.1 Innovation and economic development: a preview
   1.2 Conceptual background: theorizing about the unknown future
   1.3 Schumpeter and beyond: innovation as a subject of research in economics


2. Conceptualizing innovation
   2.1 Invention, innovation, diffusion
   2.2 Innovation as recombination
   2.3 The innovation process
   2.4 Paradigms and trajectories
   2.5 Innovation networks and systems


3. The economics of intellectual property rights
   3.1 Economic properties of knowledge and the rationale of intellectual property rights
   3.2 Patents: an introduction
   3.3 Markets for technology and open innovation
   3.4 Patent thickets and patent trolls
   3.5 Genomic patenting
   3.6 The debate about intellectual property rights


4. Individuals as innovators: motives and performance
   4.1 Inventor motivation
   4.2 Inventor mobility and inventor productivity
   4.3 User innovation / crowd sourcing

5. Firms as innovators: motives and performance

5.1 Why do firms patent? Economic models of patent races and competition for innovation
5.2 Why do firms patent? Empirical findings

(Introductory reading: to be announced)

6. Learning by doing

6.1 Theoretical foundations
6.2 Empirical findings


7. Diffusion of innovations


8. Innovation and economic development

8.1 Theories of economic growth
8.2 Growth or development? The evolutionary critique
8.3 Some empirical findings

(Introductory reading: to be announced)