Lecture (B.Sc.)
Economics of Innovation

Professor Dr. Guido Bünstorf
Winter Term 2014/15

Time and location

Time: Tuesday, 8.15-9.45h (first meeting on October 21, 2014)
Location: Room 0213 (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 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
This is a two-hour-per-week (2 SWS) course. 3 credits can be earned based on successful participation in the final exam (60 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 future
   1.3 Schumpeter and beyond: innovation as a subject of research in economics


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 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 / crowd sourcing
   3.3 Individual mobility and productivity of innovators

   (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.)

4. The economics of intellectual property rights
   4.1 Economic properties of knowledge and the rationale of intellectual property rights
   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 Current debates in the economics of intellectual property rights

5. Learning by doing

5.1 Theoretical foundations
5.2 Empirical findings


6. Diffusion of innovations

6.1 Theoretical foundations
6.2 Empirical findings


7. Innovation, growth and development

7.1 Theories of economic growth
7.2 Growth or development? The evolutionary critique
7.3 Some empirical findings