Friedrich-Alexander-Universität School of Business, Economics and Society



Syllabus

Economics of Innovation

Department of Economics

Assistant Professorship for Labor & Innovation Economics

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Summer Term 2025

Aim of the course

The lecture provides an introduction to economic issues around innovation and new ideas. The course first sets out general problems in the economics of innovation such as the public goods nature of ideas and the importance of innovation for economic prosperity. In the second part, the course discusses labor and personnel issues in innovation policy, for example the impact of immigration on innovation. In the last part, the course analyses issues in intellectual property rights and public economics topics such as the economics of science and the consequences of innovation for inequality.

Students should be familiar with undergraduate micro- and macroeconomics. They should also have a good understanding of empirical methods to estimate treatment effects.

The course will be in person. It will take place on **Wednesdays**, **4pm-5.30pm**, LG 5.155, and on **Thursdays**, **11.30am-1pm**, LG 0.143. The lecture will take place in the first half of the term twice a week until June 26th, 2025.

At the end of the course, students will have to present one paper (potentially in groups) that picks up a topic from the lecture. In addition, students have to produce a referee report on a paper related to the topics of the lecture. I will provide a list of possible papers for both assignments in the first weeks of lectures. Both assignments will be marked independently, with the final grade reflecting the average of both single grades.

The potential presentation day is **July 3rd**. The exact day will be determined in the first weeks of the lectures.

The course is mostly complementary and slightly overlapping with the course "Labor Markets in the Knowledge Economy", which is offered each winter term.

Note that at most 20 students can participate in the course. To receive a spot, please send an e-mail including a brief description of your motivation and of completed prior courses to markus.nagler@fau.de.



Topics

- 1. Introduction to the Economics of Innovation
- 2. Innovation and Economic Growth
- 3. Measurement of Innovation
- 4. The Supply of Inventors
- 5. Immigration and Innovation
- 6. Incentives for Innovation
- 7. Intellectual Property Rights
- 8. From Science to Innovation
- 9. Taxes and Innovation
- 10. Competition and Innovation
- 11. Innovation and Inequality

If you have any questions about the content, please let me know.

Reading List

a) Textbooks

Angrist, Joshua and Jörn-Steffen Pischke (2008). "Mostly Harmless Econometrics", Princeton University Press.

Stephan, Paula (2012). "How economics shapes science". Harvard University Press.

b) General Reading

Arrow, Ken (1962), "Economic Welfare and the Allocation of Resources for Invention," in *The Rate and Direction of Inventive Activity*: 609-619, National Bureau of Economic Research.

Bloom, Nicholas, John Van Reenen and Heidi Williams (2019): "A Toolkit of Policies to Promote Innovation," Journal of Economic Perspectives 33(3): 163-184

Bryan, Kevin and Heidi Williams (2021): Markets for innovation: Market failures and public policies, Handbook of Industrial Organization 5(1): 281-388, Chapter 13