



FRIEDRICH-ALEXANDER  
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Labor Markets in the Knowledge Economy  
Winter Term 2021/22

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Nürnberg, 24. August 2021

## **Syllabus „Labor Markets in the Knowledge Economy“**

### *Aim of the course*

The world today is a world of ideas. Knowledge, technology, and human capital are drivers of wealth and economic growth more than ever. The increasing reliance on technology and new ideas has influenced labor markets tremendously: New technologies impact labor demand and labor supply. At the same time, the roles that human capital, collaboration, and discrimination play in the labor market have arguably changed.

The idea of this course is to analyze topics in labor economics and their connection to innovation and technology. We will mostly discuss classical topics in labor economics which are seen through a different perspective. It is mainly an empirical course: labor economics is a front-runner in the use of econometrics and data.

The lectures are mostly based on recent and classical empirical papers at the frontier of research. In class, we will discuss current empirical research papers in depth. I expect students to have read these papers in advance and to have answered some brief questions about the papers before the tutorials via e-mail.

I am happy to include topics or papers that students suggest if these fit the course. If you have any questions, please feel free to get in touch!

**Note:** To allow students who cannot attend the lecture in person to join the course, the content has not been changed from the last year. Thus, the lecture recordings of last year can be made available.

## Topics

1. Introduction
2. Skill-biased Technological Change
3. Automation at Work
4. Labor Supply
5. Economics of Migration
6. Compensating Differentials and Rent-Sharing
7. Human Capital
8. Peer Effects and Collaboration
9. Gender Wage Gap

## Preliminary Reading List

### *a) Textbooks*

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

### *b) General Reading*

Angrist, Joshua D., and Steve Pischke (2010). "The credibility revolution in empirical economics: How better research design is taking the con out of econometrics." *Journal of Economic Perspectives* 24.2: 3-30.

Autor, David H. "Why are there still so many jobs? The history and future of workplace automation." *The Journal of Economic Perspectives* 29.3 (2015): 3-30.

### *c) Papers for the Tutorials by topic*

(Topic 2) Akerman, Anders, Ingvil Gaarder, and Magne Mogstad (2015). "The skill complementarity of broadband internet". *Quarterly Journal of Economics* 130.4, pp. 1781–1824.

(Topic 2 & 3) Bessen, James, Maarten Goos, Anna Salomons, Wiljan van den Berge (2019). "Automatic Reaction - What Happens to Workers at Firms that Automate?"

(Topic 3) Webb, Michael (2020). "The Impact of Artificial Intelligence on the Labor Market". Mimeo.

(Topic 4) Fenton, George and Felix Koenig (2018). "Labor Supply and Innovation in Entertainment: Evidence from TV". Mimeo.

(Topic 5) Clemens, Michael A., Ethan G. Lewis, and Hannah M. Postel (2018). "Immigration restrictions as active labor market policy: Evidence from the mexican bracero exclusion". *American Economic Review* 108.6, pp. 1468–87.

(Topic 5) Borjas, George J., and Kirk B. Doran. "The collapse of the Soviet Union and the productivity of American mathematicians." *The Quarterly Journal of Economics* 127.3 (2012): 1143-1203.

(Topic 6) Mas, Alexandre and Amanda Pallais (2017). "Valuing alternative work arrangements". *American Economic Review* 107.12, pp. 3722–59.

(Topic 7) Goodman, Joshua, Julia Melkers, and Amanda Pallais (2019). "Can online delivery increase access to education?" *Journal of Labor Economics* 37.1, pp. 1–34.

(Topic 8) Cornelissen, Thomas, Christian Dustmann, and Uta Schönberg (2017). "Peer Effects in the Workplace." *American Economic Review*, 107.2: 425-56.

(Topic 9) Lundborg, Petter, Erik Plug, and Astrid Würtz Rasmussen. "Can women have children and a career? IV evidence from IVF treatments." *American Economic Review* 107.6: 1611-37.