

# Theoretical and Empirical Modelling

*Theoretische und Empirische Modellierung*

**Module Number |**

**Degree |** Doctoral studies

**Semester |** Winter

**Course Type |** Seminar

**Participation Limit |** max 15 students

**Creditable for |** Elective

**Contact Hours |** 2 hours/week

**Number of Credits |** 5 ECTS

**Language |** English

**Chair |** Economics, esp. Microeconomics; Economics, esp. Public Finance; Economics, esp. Macroeconomics

**Lecturers |** Prof. Dr. Alexander Danzer, Prof. Dr. Dominika Langenmayr, Prof. Dr. Simon Wiederhold

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## Learning Outcomes

- PhD students are enabled to formulate research questions and find suitable strategies to address these research questions theoretically and empirically.
- They are able to set up mathematical models.
- Students learn to choose appropriate empirical methods and apply them to their questions.
- They have improved their skills for scientific presentations.
- They can evaluate current economics and business research.

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## Module Content

- Strategies for developing mathematical models
- Strategies for empirical modelling, especially identification strategies
- Discussion of the PhD students' own research with a focus on modelling strategies

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## Teaching Methods

- Presentation
- Discussion

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## Grading

- Presentation of own research strategy

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## Assessment criteria in detail

- Students have to present their own research with a focus on the theoretical and/or empirical strategy.

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## Average Workload

30 h = Time of attendance of seminar

120 h = Preparation of term paper and the seminar

150 h = Total workload

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## Previous Knowledge

- Intermediate Econometrics and Microeconomics

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## Readings

- Angrist, Joshua D. and Jörn-Steffen Pischke (2009). Mostly Harmless Econometrics. Princeton University Press.
- Cochrane, John (2005). Writing Tips for Ph. D. Students.
- Varian, Hal R. (1997). How to build an economic model in your spare time. The American Economist, p. 3-10.