

# Epidemiology and Empirical Health Economics

Summer Term 2020

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## 1 Target Group:

Students from the Master Program Economic and Business Analytics (compulsory) and anyone who is interested in topics of Epidemiology and health economics

## 2 Language:

Course will be offered in English

## 3 Prerequisites:

KS+IK Empirical Economics and ideally Health Economics I and Microeconomic Theory

## 4 Course requirements:

- Exam: you are required to achieve at least 50% of possible points; 35% of the grade
- Presentation: You are assigned to present a research paper; 30% of the grade
- Paper: You are requested to write a short paper (max. 8 pages); 30% of the grade
- There will be no mandatory attendance for lectures, although it is of course highly recommended. Attendance is incentivized by giving credits for attendance 5% of the grade. You are required to be present at students' presentations

## 5 Time and place:

Tuesday, 13.45-15.15, K269 D

## 6 Course material:

Material will be available on KUSSS

## 7 Literature:

- David Celentano and Moyses Szklo, **Gordis Epidemiology**, 6th Edition, Elsevier
- List of papers will be announced in class

## 8 Outline of the course: (Syllabus is subject to changes)

1. Introduction into Epidemiology, historical overview
2. Epidemiological measures:
  - morbidity
  - mortality
  - risk
  - reliability of diagnostic and screening tests
3. Global Health Developments
4. Introduction into survival models and measures of prognosis: (5-year survival, relative survival, Kaplan-Meier estimate)
5. Methods in epidemiology and empirical health economics:
  - Overview over study types in epidemiology (observational, cohort studies, case-control studies)
  - Randomized Controlled trials
  - Differences-in-Difference method
  - Event-Study Design
6. Topics in Epidemiology and Empirical Health Economics (mainly for student presentations):
  - Occupational Epidemiology and Aging
  - Vaccinations and infectious diseases
  - Environmental risk factors
  - Screening and prevention
  - Economic consequences of diseases
  - Bad health behavior: Smoking, alcohol, drugs
  - ...