

# **Evolutionary Game Theory**

## **Sommersemester 2023**

**Lehrveranstaltungsleiter/-in:** Fabian Mankat

**Lehrveranstaltungsform:** Seminar

**Teilnahmevoraussetzung:** Knowledge of basic concepts from Game Theory and Microeconomics.

**Modulzuordnung:**

Modul B25: Schlüsselkompetenzen

Modul B23: Wahl - Weitere Angebote und Schlüsselkompetenzen

**Lerninhalte:**

- Static Concepts of Evolutionary game theory (Population games, ESS, relations to Nash equilibria)
- Dynamic concepts of Evolutionary game theory (replicator dynamics, best response dynamics, steady states and convergence, relations to Nash equilibrium and ESS, the direct and indirect evolutionary approaches)

**Qualifikationsziele:** This course is an introduction to Evolutionary Game Theory. We will investigate static and dynamic evolutionary equilibria concepts and investigate how these relate to concepts used in classical game theoretical analyses (such as mixed strategy Nash Equilibria etc.).

**Prüfungsleistung:** A presentation and a written paper.

**Notenschema:**

0-39: 5	40-44: 4	45-49: 3,7	50-54: 3,3	55-59: 3	60-64: 2,7	65-69: 2,3	70-74: 2	75-79: 1,7	80-84: 1,3	85-94: 1	95-100: 0,7	(Punkte von 100 möglichen: Note)
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**Pflichtlektüre und Literaturempfehlungen:**

Weibull, J. W. (1997). Evolutionary game theory . MIT press.

**Termine:** The course takes place each tuesday (from 11.4 onwards) at 10:15-11:45am in Kurt-Wolters 5 - Raum -1029.

**Alle Kursunterlagen und Infos s. moodle:**

<https://moodle.uni-kassel.de/course/view.php?id=8145>