

## Jonathan Schiller

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(30026 - 2 SWS)

Winter Semester 2021/2022

# **Interactive Case-Study Seminar: Introduction to Decision and Game Theory**

(Fallstudienseminar in englischer Sprache)

## 1. Course Description and Learning Goals

This seminar deals with the basic concepts of decision and game theory and how these can be applied to make rational and wise choices in real-life situations. Students are supposed to rethink their own decision-making, acquire the necessary techniques and methods to decide and play rationally, and learn the correct terminology to communicate their decisions to others.

## 2. Intended Learning Outcomes

At the end of this seminar course students will have acquired

- an understanding of the key concepts of classical decision theory, game theory, and collective choice,
- 2. a basic ability to systematically structure real-world problems within a decision-theoretic framework,
- 3. a basic ability to analyze a real-world problem with decision-theoretic solution concepts at an introductory level

#### 3. Pre-requisites

None.

## 4. Teaching and Learning Strategies / Seminar Programme

This is an intensive seminar course that will provide students with an introduction to the three main areas of decision theory:

- 1. Decisions under uncertainty and risk (classical decision theory)
- 2. Strategic decision-making (game theory)
- 3. Committee decision-making (collective choice)

Complementing the three lectures on these topics, students will define and solve a selection of case studies in working groups, and present their analyses in class. The lectures will be interrupted by exercise sessions. Students are expected to present their results in class.

#### 5. Seminar Course Schedule

The seminar will be held twice. You can register for one of the two offered groups. For more information see below. For both groups, the seminar course is provided via a blocked seminar on two days. These will take place as follows:

Group	Day	Date	Time	Room
I	Thursday	25 November	09:00 - 18:00	Tba.
I	Friday	26 November	09:00 - 18:00	Tba.
II	Thursday	02 December	09:00 - 18:00	Tba.
II	Friday	03 December	09:00 - 18:00	Tba.

#### 6. Assessment

Economics (BA) and IWE students (5 ECTS):

- One hour unseen written examination. If the total number of participating students for the written examination is less than five, an oral examination may replace the written one. (Students will be informed about the form of examination as soon as possible.) There will be **no retake exam** at the beginning of the next semester!
- Once published, the date of the examination can be found on https://www.bwl5.uni-bayreuth.de/ de/studiendekan/Klausurtermine/
- Students have to register for the examination via CAMPUSonline. Only if students cannot register via CAMPUSonline they can register via e-mail by sending an e-mail to Manja Melcher: manja.melcher@uni-bayreuth.de. This e-mail must only contain the title of the course, the student's surname, first name, ID number, and degree of study as well as a brief indication why registration via e-mail is required.
- The registration deadline is one week in advance to the date of the examination. Later registrations will not be accepted.

Furthermore, for passing the seminar course students are expected to participate in all seminar sessions.

## 7. Reading Resources

- Required pre-reading: none
- Recommended reading:

Students will be given a list of recommended reading at the beginning of each of the seminar session.

### 8. Accreditation

Economics (BA):

Modulbereich SQ: Schlüsselqualifikation / Modul SQ3: Fallstudienseminar in englischer Sprache

#### ■ IWE:

Modulbereich SQ: Schlüsselqualifikation / Modul SQ2b: Fallstudienseminar

## 9. Registration

There is joint registration procedure for all three case-study seminars in English language offered this winter semester:

## ■ 30026 - Group I - Class Room Teaching

*Interactive Case Study Seminar: Introduction to Decision and Game Theory* (Jonathan Schiller)

## ■ 30026 - Group II - Class Room Teaching

*Interactive Case Study Seminar: Introduction to Decision and Game Theory* (Jonathan Schiller)

#### **33030**

Interactive Case-Study Seminar: Fundamentals of Decision Theory (Frank Steffen)

Further information on all seminars can be found under Teaching Winter Semester 2021/2022 on www.governance.uni-bayreuth.de.

Students must register via e-mail by sending an e-mail to Manja Melcher: manja.melcher@uni-bayreuth.de until **Fri 22 October 2021**. To register the content of the e-mail should **exactly** follow the instructions as given. Those failing to do so **will not be registered**.

### Subject line

Fallstudienseminar in englischer Sprache

#### Content

In the mail please give the following information in a comma-delimited list without any further details exactly as follows:

Last name, First name, Mat-Nr., Degree, Semester, Seminar Preference

*Note:* No spaces between commas.

For the degree use the following coding:

Degree = Econ, IWE, P&E

Seminar Preference:

Students should use the above seminar numbers of the alternatives (33008, 34011) to order the seminars according to their preference. In case students would like to apply for one seminar only, they should use only one number, respectively. In case students are indifferent between seminars an '=' should be written between the corresponding numbers.

## Examples

Ricardo, David, 1561, Econ, 1, 30026-I

Rawls, John, 18752, IWE, 2, 33030, 30026-II

Mill, John, 10101, P&E, 35, 30026-II = 33030, 30026-I

Smith, Adam, 12501, Econ, 3, 30026-II

Allocation of seminar places will be made by **Sun 24 October 2021**. Students will be notified by e-mail.

*Note:* Given the nature of the seminar course priority in the allocation of places will be given to Economics students in the  $1^{st}$  and  $2^{nd}$  semester. The number of participants, which can be accepted for <u>each</u> seminar, is restricted to 20 students.

## 10. Responsible Student Assistants for this Seminar

All requests regarding this seminar should, in the first instance, be addressed to:

Manja Melcher: manja.melcher@uni-bayreuth.de

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