| BS02: Statistical Methods II | | | | | Study Programme | В | |
|---|---------------|-----------|-----------------|-------------------|----------------------------|--------------------------|---|
| Module Type: | ECTS Credits: | Workload: | Study semester: | | Module Duration: | | |
| Compulsory | 6 | 180 | 2. | | one semester | | |
| Courses (HPW=hou | rs per week): | | | Contact hours: | Indepen- dent study: | Planne Group Size: |) |
| Course 1: Statistical Methods II (3 HPW) | | | | 45h | 90h | 450 | |
| Course 2: Statistical Methods II – Tutorial (1 HPW) Group Event It will be offered several groups for course 2. | | | | 15h | 30h | 50 | |

Intended Learning Outcomes (ILOs):

By the end of the module, students will be able to

- describe and demarcate statistical methods of probability calculation and inductive statistics;
- adopt self-reliant and interpret the results;
- carry out self-reliant analyses under consideration of utilisation of raw data;
- create self-reliant evaluations manual as well as computer-aided;
- describe benefits and application orientation of the software R and apply this software referring to concrete statistical problems.

The gained knowledge of course 1 will be adopted actively by exercises.

Key competences:

- Academic research and writing
- Critical thinking
- Analytical skills
- Willingness to learn and accomplish

Description/Contents:

Course 1: Statistical Methods II

- 1. Probability Calculation
 - 1.1 Discrete Random Variables
 - 1.2 Continuous Random Variables
 - 1.3 Multi-dimensional Random Variables
- 2. Inductive Statistics
 - 2.1 Sampling
 - 2.2 Asymptotic Analyses
 - 2.3 Point Estimation
 - 2.4 Confidence Intervals

- 2.5 Statistical Testing Cf. contents of course 1. Language: **Teaching Methods:** Lectures, group work, self-study. **Module Applicability:**

 - 2.6 The most important Tests
 - 2.7 Fundamentals of Regression Analysis

Course 2: Statistical Methods I - Tutorial

The language of the module is German.

B.Sc. Business Administration; B.Sc. Economics; BA Philosophy, Politics and Economics

Pre-requisites/Requirements:

Admission to study Business Administration, Economics or BA Philosophy, Politics and Economics for a Bachelor's degree.

Examination Types:

online-examination

Requirements for Award of Credit Points:

Successful participation in the exam. The exam will be passed if the grade is at least "sufficient" (4,0).

Availability:

The module will be offered generally every term.

Assessment:

This course will be graded and is part of the calculation for the overall grade of your bachelor degree. Particular information concerning the calculation of the overall grade can be gathered in the respective examination regulations.

Person Responsible and Main Lecturer:

<u>Prof. Dr. Florian Heiß</u> and teaching/research assistants.

Further Information:

Further information can be found at the website of the person responsible as ILIAS and His-LSF.

Stand: 02.05.2023