

Course and Examination Fact Sheet: Autumn Semester 2021

3,307: Quantitative Methods

ECTS credits: 4

#### Overview examination/s

(binding regulations see below)

Central - Written examination (70%, 90 mins.)

Examination time: inter-term break

Decentral - examination paper written at home (individual) (30%)

Examination time: term time

### Attached courses

Timetable -- Language -- Lecturer
3,307,1.00 Quantitative Methods -- Englisch -- Lopes da Fonseca Mariana
3,307,2.00 Quantitative Methods: Exercises -- Englisch -- Görgen Yves Maurice

### Course information

# Course prerequisites

None.

#### Learning objectives

At the end of this course, students will have acquired solid training in the basics of descriptive and inferential statistical research methods. This includes knowledge of the elementary mathematical techniques and probability theory related to the foundations of statistical methods. Furthermore, students will also be familiar with basic techniques of preparing, managing, visualizing, and analyzing statistical data using a computer software.

#### Course content

This course provides a systematic introduction to the techniques and instruments of basic quantitative methods in the social sciences. The course is divided into three main parts. The first part deals with questions related to quantitative research design, measurement, and descriptive statistics. Part two covers basic topics of univariate statistics, such as point estimation, interval estimation, and hypothesis testing. The final part is concerned with the skills needed to understand critically discuss social science research that uses statistical methods.

### Course structure and indications of the learning and teaching design

Weekly: 9 lectures, 3 exercises.

#### Course literature

Required readings: Agresti, Alan and Finlay, Barbara. 2017. Statistical Methods for Social Sciences, 5th Edition. Additional literature and materials: tba.

### Additional course information

In the case of the President's Board having to implement new directives due to the SARS-CoV-2 pandemic in AS2021, the course information listed above will be changed as follows:

- The course is conducted online via the platform Zoom;
- The recordings of the course are available for 30 days;
- The lecturer informs via Canvas on the changed implementation modalities of the course.



The examination information listed below would be changed as follows:

• There are no changes necessary to the examination information.

### **Examination information**

## Examination sub part/s

# 1. Examination sub part (1/2)

Examination time and form

Central - Written examination (70%, 90 mins.)

Examination time: inter-term break

Remark

Central exam

Examination-aid rule

Extended Closed Book

The use of aids is limited; any additional aids permitted are exhaustively listed under "Supplementary aids". Basically, the following is applicable:

- At such examinations, all the pocket calculators of the Texas Instruments TI-30 series and mono- or bilingual dictionaries (no subject-specific dictionaries) without hand-written notes are admissible. Any other pocket calculator models and any electronic dictionaries are inadmissible.
- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as notebooks, tablets, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

### Supplementary aids

Pocket calculators that cannot be programmed of the Texas Instruments TI-30 series.

Examination languages Question language: English Answer language: English

# 2. Examination sub part (2/2)

Examination time and form

Decentral - examination paper written at home (individual) (30%)

Examination time: term time

Remark

3 problem sets each of which counts 10 percent.

Examination-aid rule

Term papers

Written work must be written without outside help according to the known citation standards, and a declaration of authorship must be attached, which is available as a template on the StudentWeb.

Documentation (quotations, bibliography, etc.) must be carried out universally and consistently according to the requirements of the chosen/specified citation standard such as e.g. APA or MLA.

The legal standard is recommended for legal work (cf. by way of example: FORSTMOSER, P., OGOREK R., SCHINDLER B., Juristisches Arbeiten: Eine Anleitung für Studierende (the latest edition in each case), or according to the recommendations of the Law School).



The reference sources of information (paraphrases, quotations, etc.) that has been taken over literally or in the sense of the original text must be integrated into the text in accordance with the requirements of the citation standard used. Informative and bibliographical notes must be included as footnotes (recommendations and standards e.g. in METZGER, C., Lern- und Arbeitsstrategien (latest edition)).

For all written work at the University of St.Gallen, the indication of page numbers is mandatory, regardless of the standard chosen. Where page numbers are missing in sources, the precise designation must be made differently: chapter or section title, section number, article, etc.

Supplementary aids

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Examination languages Question language: English Answer language: English

#### **Examination content**

Exam-relevant materials are the lecture slides and other lecture materials (e.g. computer scripts), the exercises as well as the required and (if explicitly indicated in the syllabus) complementary readings.

The topics include quantitative research design, measurement, and descriptive statistics, basic topics of univariate statistics, such as point estimation, interval estimation, and hypothesis testing, and finally critically discussing social science research that uses statistical methods.

#### Examination relevant literature

Required readings: Agresti, Alan and Finlay, Barbara. 2017. Statistical Methods for the Social Sciences, 5th edition. Further readings: tba. (until the end of the lecture period).

### Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are is binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 34 (Thursday, 26 August 2021);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 18 October 2021);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 18 October 2021);

Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 45 (Monday, 8 November 2021).