# Course description

Course abbreviation: KSS/KVAZ Page: 1/4

**Course name:** Applications for Quantitative Data

**Academic Year:** 2023/2024 **Printed:** 03.07.2025 04:19

Department/Unit /	KSS / KVAZ			Academic Year	2023/2024			
Title	Applications f	or Quantitative	Data	Type of completion	Exam			
Accredited/Credits	Yes, 7 Cred.			Type of completion	Combined			
Number of hours	Lecture 2 [Hours/Week] Tutorial 2 [Hours/Week] Seminar 2 [Hours/Week]							
Occ/max	Status A	Status B	Status C	Course credit prior to	Yes			
Summer semester	0 / -	9 / -	0 / -	Counted into average	YES			
Winter semester	0 / -	0 / -	0 / -	Min. (B+C) students	10			
Timetable	Yes			Repeated registration	NO			
Language of instruction	Czech			Semester taught	Winter, Summer			
Optional course	Yes			Internship duration	0			
Evaluation scale	1 2 3 4			Ev. sc. – cred.	S N			
No. of hours of on-premise								
Auto acc. of credit	Yes in the case of a previous evaluation 4 nebo nic.							
Periodicity	every year							
Specification periodicity								
Substituted course	None							
Preclusive courses	N/A							
Prerequisite courses	N/A							
Informally recommended courses		N/A						
Courses depending on this Course		N/A						

### Course objectives:

The class teaches students how to use STATA- a general multipurpose package for the analysis of quantitative data. The class covers both data management and data analytic skills. It complements the introductory statistics class by teaching students how to compute basic statistics in a computer environment

In this practically oriented course students learn how to analyse quantitative data while they also become familiar with particular phases of a research, so they would be prepared for an independent empirical work. During the semester students have to manage work with a statistical software - from creating the data matrix and saving it to making the univariant and bivariant analysis. The course prepares students for writing an emipirical Bachelor or Master dissertation.

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### Requirements on student

The processing of learning tasks is the essential part of this course. The learning tasks are controlled continuously by teacher. Texts for

study are elaborated in required form (essay, presentation, resume, synopsis, abstract).

Students have good knowledge of taught literature.

Students elaborate:

- critical reflexions of assigned literature
- own research proposal
- data collection report/ technical information
- own data analyses
- research report

Students prompt research proposals of their colleagues.

Students obtain appropriate data autonomously.

Students present draft of reserch report.

Students prompt draft research reports of their colleagues.

Students defend their final research report.

### Content

- 1. types and sources of data
- 2. tabular data
- 3. association
- 4. interpretation of data
- 5.-6. STATA software
- 7. data matrix
- 8. putting-in data
- 9.-10. data management
- 11. descriptive statistics in STATA
- 12. Stat-Transfer software
- 13. research report

### Fields of study

Základní informace a studijní materiály můžete najít na CourseWare předmětu KSS/KVAS.

<a

href="https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html">https://portal.zcu.cz/portal/studium/courseware/kss/kvas/zaverecna\_prace.html

#### Guarantors and lecturers

• Guarantors: PhDr. Mgr. František Kalvas, Ph.D. (100%)

• Lecturer: Mgr. Patrik Galeta, Ph.D. (100%), PhDr. Mgr. František Kalvas, Ph.D. (100%), PhDr. Eva Krulichová,

Ph.D. (100%)

• Tutorial lecturer: PhDr. Eva Krulichová, Ph.D. (100%)

• Seminar lecturer: Mgr. Patrik Galeta, Ph.D. (100%), PhDr. Mgr. František Kalvas, Ph.D. (100%), PhDr. Eva Krulichová,

Ph.D. (100%)

#### Literature

• Basic: Acock, Alan C. A gentle introduction to STATA. College Station: Stata Press, 2006. ISBN 1-59718-

009-2

• Basic: Hamilton, Lawrence C. Statistics with STATA: updated for version 9. Belmont: Brooks/Cole, 2006.

ISBN 0-495-10972-X.

• Basic: Becker, Howard Saul. Writing for social scientists: how to start and finish your thesis, book, or

article. Chicago: University of Chicago Press, 1986. ISBN 0-226-04108-5.

• Recommended: Rabe-Hesketh, S., Everitt, B. A Handbook of Statistical Analyses Using Stata. (3rd. Ed.). Boca Raton.

Chapman & Hall/CRC, 2004.

• Recommended: Fox, John. Applied regression analysis, linear models, and related methods. Thousand Oaks: SAGE

Publications, 1997. ISBN 0-8039-4540-X.

### Time requirements

### All forms of study

Activities	Time requirements for activity [h]		
Individual project (40)	40		
Undergraduate study programme term essay (20-40)	24		
Contact hours	78		
Preparation for an examination (30-60)	40		

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#### assessment methods

### Knowledge - knowledge achieved by taking this course are verified by the following means:

Combined exam

Skills demonstration during practicum

Seminar work

Individual presentation at a seminar

Continuous assessment

Project

### Skills - skills achieved by taking this course are verified by the following means:

Combined exam

Skills demonstration during practicum

Seminar work

Individual presentation at a seminar

Continuous assessment

**Project** 

### Competences - competence achieved by taking this course are verified by the following means:

Combined exam

Skills demonstration during practicum

Individual presentation at a seminar

Project

### prerequisite

### Knowledge - students are expected to possess the following knowledge before the course commences to finish it successfully:

to describe and explain the basic sociological methods

to describe the formation of sociological perspectives in the use of sociological methods

to enumerate and describe the basic quantitative methods

to describe the basic knowledge resulting from empirical quantitative research

### Skills - students are expected to possess the following skills before the course commences to finish it successfully:

to form a formally acceptable professional output

to use foreign databases of professional journals

to apply and interpret knowledge resulting from the application of quantitative methods

to use adequate concepts corresponding terminology of the field in Czech and English

### Competences - students are expected to possess the following competences before the course commences to finish it successfully:

N/A

N/A

N/A

### teaching methods

## Knowledge - the following training methods are used to achieve the required knowledge:

Lecture

Seminar

Task-based study method

Textual studies

Skills demonstration

Project-based instruction

Individual study

Students' portfolio

### Skills - the following training methods are used to achieve the required skills:

Lecture

Seminar

Task-based study method

Textual studies

Skills demonstration

Individual study

Project-based instruction

Students' portfolio

### Competences - the following training methods are used to achieve the required competences:

Skills demonstration

Project-based instruction

Students' portfolio

### learning outcomes

### Knowledge - knowledge resulting from the course:

to enumerate and describe key studies and requisites corresponding with the topic of quantitative research

to describe and intepret theoretical approaches used during quantitative research

to describe and interpret methods used during quantitative research

### Skills - skills resulting from the course:

to sort key knowledge resulting from quantitative research

to demonstrate and apply selected research methods used during quantitative research

to critically evaluate the acquired knowledge

### Competences - competences resulting from the course:

N/A

N/A

N/A

### Course is included in study programmes:

Study Programme	Type of	Form of	Branch	Stage St. plan v. Year	Block	Status R.year	R.
Sociology	Bachelor	Full-time	Společnost a politika	1 23- 2023 1,2	Metodologicky blok	ý B 3	ZS
Sociology	Bachelor	Full-time	Společnost a politika	1 23- 2023 1,2	Metodologick blok	ý B 2	LS