

Course description

Course abbreviation:	KMO/DMVN	Page:	1 / 4
Course name:	Methodology of Science		
Academic Year:	2023/2024	Printed:	03.07.2025 04:19

Department/Unit /	KMO / DMVN			Academic Year	2023/2024
Title	Methodology of Science			Type of completion	Exam
Accredited/Credits	Yes, 10 Cred.			Type of completion	Combined
Number of hours	Lecture 12 [Hours/Semester] Seminar 12 [Hours/Semester]				
Occ/max	Status A	Status B	Status C	Course credit prior to	No
Summer semester	0 / -	0 / -	0 / -	Counted into average	NO
Winter semester	6 / -	0 / -	0 / -	Min. (B+C) students	10
Timetable	Yes			Repeated registration	NO
Language of instruction	Czech			Semester taught	Winter semester
Optional course	Yes			Internship duration	0
Evaluation scale	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:

To present the methodology of science; to concentrate on the design of one's own research, its orientation, working with sources, implementation of the quantitative, qualitative, and mixed research methods applied on economics and management. To familiarize students with the essentials of dissertation, and also with ways how to report research outcomes including their own works published. This course is designed to lay the foundations of empirical research in the economics disciplines.

Requirements on student

To take an active part in at least four workshops (block tuition) and self-study of recommended sources.
To write a term paper: research design of one's own dissertation and consultations with a supervisor/tutor (the extent of the term paper is from 20 to 25 standard pages). Students demonstrate knowledge of research processes.
The oral exam is in the form of a defence of the student's term paper.

Content

The course is intended for doctoral studies.

Science and scientific knowledge

What is research? Definition of basic terms and research orientation

Selecting a research topic, study of literature and work with sources, citing sources

Research project, research phases

Qualitative research methods

Methods: observation, discussion groups, in-depth interviews, projective methods, case studies, etc.

Quantitative research

Validity, reliability, representativeness, variables, hypotheses, research set

Standardization of methods, obtaining research data, statistical methods of evaluation, examples of selected applications for economics

Research models and variants - examples, examples of the use of special methods focusing on economics and management
 Introduction to the essentials of doctoral dissertation according to the standards and guidelines of the Faculty of Economics, UWB
 in Pilsen, publications - recommendations

Fields of study

Guarantors and lecturers

- **Guarantors:** doc. PaedDr. Ludvík Eger, CSc. (100%)
- **Lecturer:** doc. PaedDr. Ludvík Eger, CSc. (100%), doc. RNDr. Mikuláš Gangur, Ph.D. (100%)
- **Seminar lecturer:** doc. PaedDr. Ludvík Eger, CSc. (100%), doc. RNDr. Mikuláš Gangur, Ph.D. (100%)

Literature

- **Basic:** Gray, David E. *Doing research in the real world*. 2nd ed. Los Angeles : SAGE, 2009. ISBN 978-1-84787-337-8.
- **Basic:** Creswell, John W. *Research design : qualitative, quantitative, and mixed methods approaches*. 3rd ed. Thousand Oaks : SAGE Publications, 2009. ISBN 978-1-4129-6557-6.
- **Basic:** Saunders, Mark; Lewis, Philip. *Research methods for business students*. 11th ed. Harlow : Prentice Hall, 2009. ISBN 978-0-273-71686-0.
- **Basic:** Bryman, Alan. *Social research methods*. Oxford : Oxford University Press, 2008. ISBN 978-0-19-920295-9.
- **Recommended:** Hendl, J. *Kvalitativní výzkum: Základní metody a aplikace*. Praha: Portál, 2005.
- **Recommended:** Hendl, J. *Přehled statistických metod: analýza a mataanalýza dat*. Praha, 2009. ISBN 978-80-7367-482-3.
- **Recommended:** Myers, Jerome L.; Well, A. *Research design and statistical analysis*. 3rd ed. New York : Routledge, 2010. ISBN 978-0-8058-6431-1.
- **Recommended:** Hebák, Petr. *Statistické myšlení a nástroje analýzy dat*. Vyd. 1. Praha : Informatorium, 2013. ISBN 978-80-7333-105-4.
- **Recommended:** Hendl, Jan. *Statistika v aplikacích*. Vydání první. 2014. ISBN 978-80-262-0700-9.
- **Recommended:** Punch, Keith. *Úspěšný návrh výzkumu*. Vyd. 1. Praha : Portál, 2008. ISBN 978-80-7367-468-7.
- **Recommended:** Eger, Ludvík; Egerová, Dana. *Základy metodologie výzkumu*. 2. přepracované a rozšířené vydání. 2017. ISBN 978-80-261-0735-4.
- **Recommended:** Eger, Ludvík; Egerová, Dana. *Základy metodologie výzkumu : pro studenty ekonomických oborů*. 1. vyd. V Plzni : Západočeská univerzita, 2014. ISBN 978-80-261-0418-6.

Time requirements

All forms of study

Activities	Time requirements for activity [h]
Contact hours	24
Presentation preparation (report) (1-10)	36
Individual project (40)	100
Preparation for an examination (30-60)	100
Total:	260

assessment methods

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

- Combined exam
- Seminar work
- Oral exam

Skills demonstration during practicum

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

Seminar work

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

Combined exam

prerequisite

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

Knowledge acquired in the intermediate courses of study programme economics and management is recommended. Also prerequisite is at least one course in descriptive and inferential statistics.

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

work with scientific text and evaluate resources

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

N/A

N/A

teaching methods

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

Seminar

Task-based study method

Self-study of literature

Lecture with visual aids

E-learning

Students' portfolio

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

Interactive lecture

Textual studies

Individual study

Students' portfolio

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

Interactive lecture

Self-study of literature

Individual study

One-to-One tutorial

learning outcomes

Knowledge - knowledge resulting from the course:

Students will be able:

- demonstrate knowledge of research processes,
- perform literature reviews using print resources and online databases,
- compare quantitative, qualitative and mixed methods research paradigms,
- identify, explain, and prepare the key elements of a research proposal,
- define, develop and use specific research design,
- describe, compare, and contrast descriptive and inferential statistics, and provide examples of their use in planned research,
- explain the rationale for research ethics.

Skills - skills resulting from the course:

is able to prepare research design

Competences - competences resulting from the course:

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.
Economics and Management	Doctoral	Full-time	Economics and Management	1	2021	2023	Blok A: Povinné předměty	A	1	ZS
Economics and Management	Doctoral	Combined	Economics and Management	1	2021	2023	Blok A: Povinné předměty	A	1	ZS
Economics and Management	Doctoral	Full-time	Economics and Management	1	2017	2023	Blok A: Povinné předměty	A	1	ZS
Economics and Management	Doctoral	Combined	Economics and Management	1	2017	2023	Blok A: Povinné předměty	A	1	ZS