MASUDEM
MASTER STUDIES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

SYLLABUS

Name of course	**RESEARCH METHODS FOR SUSTAINABLE DEVELOPMENT**				
Code of course					
University	**ICO NIDA/ UGM/ELTE**				
Faculty					
GENERAL INFORMATION					
Degree level	Master degree				
Year of study	2025	**Semester**	2		
Subject of study	Research methods				
Language required for the course	English				
List of degree programs	Management/MBA				
ACTIVITIES					
Number of credits, ECTS					
Lectures, hours	36	**Seminar Practices (laboratories, workshop), hours**	9	**Project, hours**	20
Per week	4	**Per course**	45		

COURSE DESCRIPTION

Sustainability is a key concept used by scientists interested in interactions between human society and the environment. Sustainable development covers the three pillars of a corporate sustainability strategy: the environmental, the socially responsible, and the economic. Systematic research and comprehensive analysis allow to monitor the implementation of the sustainable development goals. The focus of this course is on furnishing solutions and equipping students with both conceptual understanding and technical skills. This course describes how to use qualitative and quantitative methods in sustainability research. The theoretical basis of methods is presents e.g. the essences of each methods. The methods for example a focus group, sampling, survey design and development, data analysis.

AIM OF COURSE

This course aims to enhance a student's skills and body of knowledge of how to conduct research and equip students qualitative and quantitative methods in the area of sustainable business management.

Students should

1) be able to formulate research questions and conceptual framework as well as to design suitable methods for data collection and analyses of relevant issues related to sustainable business management and sustainability as overall
2) understand research ethics of applying different research methods
3) be able to conduct both quantitative and qualitative methods can be applied in business studies

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4) be able to develop report/academic paper, references, etc

CONTENT

Chapter 1: Introduction to the research methodology (ELTE)

- Research in business and sustainability development
- Research design
- Scientific thinking
- Research ethics

Chapter 2: Identified research focus on sustainable development (ICO NIDA)

Chapter 3: Research paradigms and stages (ELTE)

- Qualitative vs. quantitative research vs mixed methods

Chapter 4: Stages of conducting research (UGM)

- Conducting literature review
- Defining research problems (the need for research)
- Formulating research questions and goals
- Designing research methodology
- Runing pilot study
- Conducting data collection / population and sampling procedures
- Conducting data analysis
- Developing reports

Chapter 5: Theory and conceptual framework (ICO NIDA)

- Theories in social science and sustainability
- Hypothesis development
- Population, sampling design and sampling procedures
- Research variable (independent dependent, mediating, moderating, and control variable

Chapter 6: Data collection for qualitative research methods I (ELTE)

- Observational technique
- Participant observation
- Non-participant observation
- Covert observation
- Overt observation

Chapter 7: Data collection for qualitative research methods II (ELTE)

- Interview

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- Interview design objective and protocol of interview
- Structure/Semi-structure interview
- Focus group

Chapter 8: Data collection for quantitative research methods (UGM)

- Survey design objectives
- Survey questions

Chapter 9: Measurement (ICO NIDA)

- Scale
- Ordinal
- Nominal
- Interval
- Ratio

Chapter 10: Quality of research (UGM)

- Validity and reliability for quantitative research
- Triangulations for qualitative research

Chapter 11: Quantitative data analysis (ICO NIDA)

- Data preparation
- Descriptive statistic
- Correlation
- Multiple regression
- Hypothesis testing

Chapter 12: Qualitative data analysis (UGM)

- Data analysis: Coding and qualitative interpretation
- Using MaxQDA (qualitative analysis tool)

EVALUATIONS *(add lines as needed)*		
1	Assignment	25%
2	Class participation and discussion	20%
3	Mini-project	25%
4	Final exam	30%

ASSESSMENT CRITERIA

The assignment will be distributed to students every lecture. It is individual work. Mini-project will be the showcase to test student understanding on how to apply appropriate methods. The final exam will evaluate all methods.

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Percentage	Grade
80 - 100	A
75 to < 80	A-
70 to < 75	B+
65 to < 70	B
60 to < 65	B-
55 to < 60	C+
50 to < 55	C
< 50	F
Extra Assign	I

Grade Description Student achievement

A	Highly outstanding work	Technically flawless and original work /demonstrating insight / understanding and independent application or extension of course expectations
A-	Outstanding work	Demonstrates a very high level of integration of material demonstrating insight understanding and independent application or extension of course expectations
B+	Excellent work	Represents a high level of integration, comprehensiveness and complexity as well as mastery of relevant techniques/concepts
B	Good work	Represent a satisfactory level of integration/comprehensiveness and complexity/demonstrates a sound level of analysis with no major weaknesses
B-	Acceptable work that fulfills the expectations of the course	Represent a satisfactory level of integration of key concepts/procedures. However, comprehensiveness or technical skills may be lacking

PRE-REQUIREMENTS FOR STUDENTS

No-prerequisite course

LEARNING OUTCOMES

Competencies:

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-The students should be able to apply appropriate research methods into different context
-The students should be able to systematically design, collect, and analyze data to support sustainable development

Skills:

Statistical and mathematical skills, application of computer technology, operational research, and statistics to solve problems.

LEARNING STRATEGIES

- Powerpoint
- Additional journals and supplementary readings will be provided during the class.

RECOMMENDED SOURCES

Compulsory literature:

Schindler, P. S. (2022). *Business Research Methods* (14th ed.). McGraw-Hill/Irwin. [SPS]

Jingzheng Ren (2021) Methods in Sustainability Science Assessment, Prioritization, Improvement, Design and Optimization (p.426), Elsevier, ISBN 978-0-12-823987-2 https://doi.org/10.1016/C2020-0-00430-5

Frances Fahy and Henrike Rau (2013) Methods of Sustainability Research in the Social Sciences, (p.232) SAGE Publications Ltd.

Janette Hartz-Karp and Dora Marinova (2017) Methods for Sustainability Research (p. 352) ISBN: 978-1-78643272-8

Suggested reading:

Selected internet sources:

UNECE, 2020, Measuring and Monitoring progress towards the Sustainable Development Goals, *https://unece.org/sites/default/files/2021-04/2012761_E_web.pdf*

UN, 2023, SDG Indicators, https://unstats.un.org/sdgs/metadata/

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Arman Bidarbakhtnia, Measuring Sustainable Development Goals (SDGs): an inclusive approach, *https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.32/2020/mtg1/W_2__B_ENG_Measuring_SDG_progress_ESCAP.pdf* *REPESEA Final report*
GROUP OF COURSE DEVELOPERS
Course Leader: ICO NIDA **Board:**

Date of approval the course

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