COURSE DESCRIPTION

Sampling in Psychology, Sociology and Pedagogics

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Gender Studies Curriculum: A Step For Democracy and Peace in EU-Neighbouring Countries with Different Traditions (GeSt)


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MA TITLE:

Branch of knowledge: 01 Education
Specialty: 011 Educational Sciences
Specialization Educational Measurement. Gender Studies: Scientific aspect

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<table>
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<tr>
<th>Course code</th>
<th>Course title</th>
<th>Number of hours</th>
<th>Study Form</th>
<th>Course valid from</th>
<th>Course valid to</th>
<th>Course type (Obligatory/Optional)</th>
<th>Semester</th>
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<tr>
<td>ПП 2.09</td>
<td>Sampling in Psychology, Sociology and Pedagogics</td>
<td>120 (4)</td>
<td>Lectures, laboratory works</td>
<td>1.09.2018</td>
<td>7.01.2019</td>
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1. **A brief description of the course**

One of the main conditions of objective statistical analysis is correct construction of the studied sample. This course is dedicated to study the rules and laws of Sample design.

This is an applied statistical methods course. It differs from most statistics courses because it is concerned as much with the design of data collection as with the analysis of data. The course will concentrate on problems of applying sampling methods to human populations particularly in gender research.

This course is designed for students of Specialization “Educational Measurement. Gender Studies: Scientific aspect”.

2. **Objective of the course**

The objectives of this course are to teach basic ideas of sampling from an applied perspective. The course will cover the main techniques used in actual sampling practice — simple random sampling, stratification, systematic selection, cluster sampling, multistage
sampling, and unequal selection probability. The course will also cover sampling frames, cost models, sampling error estimation techniques, non-sampling errors and compensation for missing data.

3. Learning outcomes

After successful completion of the course, the students should be able to:

- choose a sampling design in accordance with the objectives, and conditions of the survey;
- form a simple random, systematic, stratified, and clustered sample for surveys in psychology, sociology, and pedagogy;
- evaluate the required sample size;
- evaluate the results of sampling surveys (total, mean, and proportion), and their errors;
- evaluate the confidence interval of the studied variables and parameters;
- evaluate the efficiency of sampling design;
- apply sampling in gender studies.

4. Teaching method

The main forms of teaching and training in the course “sampling in psychology, sociology and pedagogy” are lectures and laboratory classes.

On the lectures explanatory and illustrative methods are often used so as the method of teaching through problem situations. Educational demonstrations and illustrations are often used too.

In laboratory classes problems which are associated with the evaluation of target population parameters based on the results of sample surveys are solved. Than the effectiveness of the applied sample designs compared to simple random selection, and so on.

In carrying out independent and individual tasks different research methods are used (statistical research, review, preparation of data and graphs, etc.), working with a different of sources (publications, Internet sources, materials of real survey).

5. Distribution of workload for students (i.e. lectures, seminars, individual in hours, and total hours)

Total hours - 120 h
including: lectures – 36 h
laboratory classes – 18 h
individual – 66 h
consultations – 4 h
6. Assessment

Assessment of knowledge in the discipline consists of current assessment on laboratory classes, modular tests, evaluation of the home exam and final exam.

Percentage allocated to each method of assessment:

- laboratory classes works – 30%;
- Take-home exams – 30%;
- real survey review – 10%;
- Final exam – 30%.

7. Course schedule

Week 1
1. INTRODUCTION. Objectives and mechanics of the course; Introduction to sample surveys and survey methodology. Concepts relating to populations. Probability and non-probability sampling. Sampling frames, sampling units, analytical units. Sampling measurements and summary statistics.

Reading: [1-3, Chapter 1; 4, Chapter 1].

Week 2

Reading: [1-4, Chapter 1].

Week 3

Reading: [3, Chapter 9].

Week 4, 5.

Reading: [1-4, Chapter 2; Chapter 4].
Week 6

Reading: [1-2, Chapter 2].

Week 7-8.

Reading: [1, Chapter 5; 2, Chapter 4; 3, Chapter 3].

Week 9-12.

Reading: [1, Chapter 3; 2, Chapter 4; 3, Chapter 7; 4, Chapter 3].

Week 13-14

Reading: [1, Chapter 6; 2, Chapter 8; 3, Chapter 5; 4, Chapter 5].

Week 15-16

Reading: [1, Chapter 6; 2, Chapter 8; 3, Chapter 5; 4, Chapter 5].

Week 17.
10. RATIO, REGRESSION, AND DIFFERENCE ESTIMATION. Surveys that Require the Use of Ratio Estimators. Ratio Estimation Using Simple Random Sampling. Selecting the Sample

**Reading:** [1, Chapter 4; 2, Chapter 9; 4, Chapter 4]

**Week 18.**


**Reading:** [6-28].

8. **Recommended readings**

   **Required reading:**


   **Recommended readings on gender studies:**


Portuguese engineering students. European Journal of Engineering Education 41:1, pages 105-121.


