Course title: Pedagogical Statistics

Lecturer: Snežana Babić-Kekez

Subject status: elective

Number of ESPB: 15

Condition: -

Subject Aim

Introducing pedagogical statistics and its use in pedagogical research.

Subject Outcome

Mastering and using statistics in research projects.

Subject Content

Theoretical teaching

Statistics, pedagogical statistics and its branches. Basic notions of pedagogical statistics: statistical unit, unit's mark. Scales of numerical data expressions. Data arrangement. Organization of the arrangement. Graphic presentation of pedagogical phenomena. Characteristics of distribution of frequencies. edium values (Mod, Mediana, Arithmetic Mean). Measures of dispersion (Variation span, Quarterly deviation, Average deviation, Standard deviation, Coefficient of variation). Normal distribution curve. Statistical procedure when calibrating. Making and using scales of standard deviation. Transformation of standard markings (T-scale, C-scale). Correlation and regression. Pearson's coefficient of correlation. Correlation of ranks. Curving correlation. Biserial coefficient of proportion of the basic set. Sample size. Testing hypothesis – null hypothesis. Selection of significance level. Use of HI squares in testing hypothesis. Other kinds of samples. Systematic sample. Stratified sample. Intentional sample. Use of computers and softwares in statistical data processing. *Practical teaching*

Classes (2 h per week, during semester), making and presenting seminar essay-making and realization of project.

Recommended literature

- 1. Vukadinović, S. (1990), Elements of probabilistic theory and mathematical statistics, 6th edition, Economic review, Belgrade
- 2. Vukadinović S., Popović, J.(1988), Workbook with solved problems in mathematical statistics, Science book, Belgrade
- 3. Peti B. (1981), Basics in statistical method for non-mathematicians, SNL, Zagreb
- 4. Gilezan, S., Lužanin, Z.(2005) Workbook in statistics, Novi Sad
- 5. Mužić, V.(1982), Methodology of pedagogical research, Svjetlost, Institute for teaching means, Sarajevo
- 6. A.M. Džordan (1966), Measuring in pedagogy, Vuk Karadžić, Belgrade

Hours of active teaching	classes:	study research work:
	5	5
Teaching methods		
classes (4 h per week, during semester), making and presenting seminar essay-making and realization of project.		

Grade (maximum number of points won 100) Practical teaching (10 поена), koloquium (10), seminars (20 поена), written exams (60 поена)