**COURSE/MODULE DESCRIPTION (SYLLABUS)**

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|  | Course/module  Quantitative data analysis | | |
|  | Department or unit  Institute of Sociology, University of Wrocław | | |
|  | Course/module code | | |
|  | Course/module type: core (mandatory) or elective (optional)  mandatory | | |
|  | University subject (program or major)  Master in Sociology, Speciality Intercultural Mediation | | |
|  | Program level: (undergraduate, graduate, postgraduate)  graduate | | |
|  | Year: (1st, 2nd, 3rd, 4th)  2nd | | |
|  | Semester: (fall, spring)  Fall | | |
|  | Form of tuition and number of hours  class work, 30h | | |
|  | Instructor’s full name and academic title  Grzegorz Kozdraś, PhD | | |
|  | Prerequisites for taking the course/module  Principles of statistics and methodology | | |
|  | Objectives  The main objective of this course is to get students acquainted with the methods and techniques of quantitative analysis of survey data. Students will be acquainted with computer programs for statistical analysis of the data (*SPSS* and *Statistica*), methods of data aggregation and techniques of preparation a research report. | | |
|  | Learning outcomes  A student knows in an in-depth manner the methods of empirical data collection for quantitative analysis and the basic techniques of data processing which are used in the sociological descriptions of social phenomena.  A student can apply the principles of statistical inference to reconstruct the causes and courses of social process with regard to all dimensions of social life distinguished by sociology. A student knows the procedures of verification and falsification of research hypotheses. A student can formulate complex hypotheses concerning the relationships between various social characteristics.  A student can apply causal and predictive models which are used in the statistical analysis of sociological data for the modeling of social processes involving complex phenomena and taking into account their multidimensional characteristics.  A student possesses skills at preparing complex report from empirical research which explores in an in-depth manner the problem under study and includes the correctly prepared and presented analysis of empirical data in accordance with the rules of its presentation established for quantitative data, as well as conclusions which relate to this data.  A student understands the need for enhancing and developing his/her specialised and methodological knowledge with respect to the techniques of collecting, processing and analysing empirical data and with regard to basic facts and data concerning various aspects of life in contemporary societies. S/he can independently define the areas of knowledge which s/he needs to supplement and is well acquainted with similar (social sciences) disciplines. | Outcome symbols  **K2A\_WO6**  **K2A\_UO3**  **K2A\_UO4**  **K2A\_UO9**  **K2A\_KO6** | |
|  | Content  Introduction to quantitative data analyses with computer programs (*SPSS* and *Statistica*) (class 1);  Working with the SPSS Statsistics Data Editor – Data View and Variables View, techniques of agregation and coding, data transformations, sorting data (class 2 – 3);  Working with the SPSS Report Editor – simple frequency distributions, data exploration and descriptive statistics (class 4);  Design of custom, cross and multiple responses sets tables (class 5 - 6);  Latent variables analyses – index, reliability analyses (class 7 – 8);  Factor analyses (9 - 10)  Curve estimation (11)  Simple and multiple regression models (class 12 – 13);  Classification methods – hierarchical cluster, k-means cluster (14 – 15) | | |
|  | Sources and readings  Andy Field, *Discovering Statistics Using SPSS*, Sage 2005;  Colin D. Gray, Paul R. Kinnear, *IBM SPSS Statistical 19 Made Simple*, Psychology Press, NY, 2012;  Mark R. Sirkin, *Statistics for the Social Sciences*, Sage 2006; | | |
|  | Course assessment  Assessment of the participation in group discussions during the classes -40%  One computer test – 60% | | |
|  | Language of instruction  English | | |
|  | Student’s workload | | |
| Activities | | Estimated workload |
| Classroom instruction  contact hours with academic teacher during classes  irregular contact hours with academic teacher | | 30  10 |
| Student’s own work  pre-reading for classes  preapering for tests | | 60  20 |
| Total hours | | 120 |
| ECTS credit value | | 4 |