

ERASMUS

SOCIOLOGY

1	Name of the course	Survey Analysis in R
2	Name and surname of the lecturer, title / academic degree	Kamil Filipek, doctor
3	Language	angielski
4	Strona WWW	
5	Semestr	Winter and summer
6	ECTS and number of hours	<p>Hours with the participation of an academic teacher:</p> <p>Lecture 30h, 5 ECTS Consultations 5h Total number of hours with the participation of an academic teacher 35h Number of ECTS credits with the participation of an academic teacher 2</p> <p>Non-contact hours (student's own work): Studying literature 50h Preparation to the exam 25h Total number of non-contact hours 75h Number of ECTS points for non-contact hours 3</p> <p>Total number of ECTS points 5</p>
7	Prerequisites	English B2
8	Description of the course	<p>The survey methods are used in a contemporary social science to examine people's behavior in diverse social contexts. Recently, we observe a substantial rise of data collected through online and mobile surveys (CAI, CASI), that replace traditional paper-and-pencil interviewing (PAPI). Simultaneously, there are new tools and methods emerging designed to handle, analyze and visualize survey data. Last few years brought an unprecedented rise of R-related methods, methodologies and tools helping to examine survey data. Thus, in this course students will learn how to:</p> <ul style="list-style-type: none"> - download and transform survey data - use statistics to describe and explore data - model data in order to understand dependencies between variables - visualize survey data <p>Knowledge of basic statistical concepts (mean, variance, correlation etc.) is essential here. Some previous knowledge of working with R or other statistical software SPSS or STATISTICA will be an advantage but it is not necessary.</p>
9	Topics	<p>1. R Analytical environment – installation and setup</p> <p>2-3. Markdown documents in R and Python (Google Colab) + own project</p> <p>4-5. Data uploading (.csv, .sav) & cleaning</p>

		6. Advantages and disadvantages of survey research 7. Starting survey research? Why basic statistical knowledge is essential at this stage? 8. Descriptive stats 9. Mathematical stats - linear regression 10. Mathematical stats – factor analysis 11. Mathematical stats – missing data 12. How to validate scales? 13-14. Introduction to data science in R (time series and forecasting) 15. Own project presentation
10	Literature	Compulsory literature: - Jones, T. L., Baxter, M. A. J., & Khanduja, V. (2013). A quick guide to survey research. The Annals of The Royal College of Surgeons of England, 95(1), 5-7. - Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. Journal of computer-mediated communication, 10(3), JCMC1034.- Loewenthal, K., & Lewis, C. A. (2018). An introduction to psychological tests and scales. Psychology press. - Robinson, M. A. (2018). Using multi-item psychometric scales for research and practice in human resource management. Human resource management, 57(3), 739-750. - Lumley, T. (2011). Complex surveys: a guide to analysis using R(Vol. 565). John Wiley & Sons, pp. 185-202. Supplementary literature: - Cwynar, A., Świecka, B., Filipek, K., & Porzak, R. (2021). Consumers' knowledge of cashless payments: Development, validation, and usability of a measurement scale. Journal of Consumer Affairs.
11	Learning outcomes	Knows and understands at an advanced level selected facts, objects and phenomena in the field of sociological sub-disciplines as well as other detailed social issues (K_W02) P6U_W P6S_WG Student can use his/her sociological knowledge in predictable conditions and in conditions requiring non-standard solutions (K_U01) P6U_U P6S_UW Can discuss social issues and critically evaluate the positions of other debaters (K_U06) P6U_U P6S_UK
12	Method of verification of learning outcomes (separately for each effect)	K_W02: Discussion K_U01: Project K_U06: Discussion
13	Teaching methods	Presentation, R studio, discussion

14	1	Assessment methods	Student's project in R Usage of introduced concepts and methods, completeness of the code
	2	Assessment criteria	