Advanced Research Methods in Psychology
E-411-RATO

Year	2
Semester	Spring
Type of course	Core
Prerequisites	E-114-RATO
Schedule	4 hours per week for 12 weeks; 6 ECTS
Lecturer	Þorlákur Karlsson
Content	
The course examines advanced data analytic methods common in psychological research, including within-subjects, between-groups, and mixed-model factorial designs in complex ANOVA, ANCOVA, and MANOVA; multiple regression; concepts and computation of statistical power; and advanced applications of SPSS.	
Learning outcome - On completing the course, each student should be able to:	
• Know the multivariate statistical methods regression analysis, analysis of variance, and factor analysis when they are described and be able to explain them to others. • Choose the correct multivariate statistical method, that is, regression analysis, analysis of variance, and factor analysis or state that none is applicable for processing research results. • Use these three statistical methods with the support of software (for example, SPSS) to process research results. • Interpret the results of processing by statistical software (for example, SPSS) where the three methods are used. • Write about, explain, and evaluate results from the statistical methods in a report. • Evaluate whether the premises of each method hold in specific research data. • Compare the methods so that others can understand how they are different and how they are alike.	
Course assessment	
Assignments and final exam. Grades are given on a 0 – 10 point scale. The minimum grade to pass the course is 5.0. The student needs to get a minimum grade of 5.0 in the final exam and a minimum average grade of 5.0 for all course assessment.	
Reading material	
Field, A. (2009). Discovering statistics using SPSS. London: Sage.	
Teaching and learning activities	
Lectures, in class exercise and discussions.	
Language of instruction	Icelandic