

		The 4 th IPSA – HSE Summer School for Methods of Political & Social Research Course Syllabus	
Course title:		Applied Regression	
Instructor:		Eduard Ponarin	
ECTS / academic hours		2 ECTS / 76 academic hours: 38 contact hours, 38 self – study hours	
Brief course description (up to 100 words):		The purpose of this course is to acquaint the student with basic regression methods, including linear regression, logistic regression, and Poisson regression. The course assumes knowledge of basic statistics. Some prior experience with the R programming language will be very helpful but is not required. Each session has a lecture and a lab component. Labs review examples of problems discussed in the lecture.	
Indicative concepts (up to 10):			
Workshop's overview:		Day 1	Linear regression. Outliers, non-linearity, multicollinearity, heteroscedasticity.
		Day 2	Binary response variable. Logit models.
		Day 3	Multinomial response variable.
		Day 4	Poisson response variable.
		Day 5	Poisson regression for log-linear models to analyze complex contingency tables.
Assessment techniques to receive graded certificate:		The course concludes with a written in-class examination where students will have to solve two problems using R.	
Essential readings:		Fox, John and Sandy Weisberg (2011). An R companion to applied regression (Sage). Kabacoff, Robert (2011). R in action: Data analysis and graphics with R (Manning).	
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