Specification of the course for the Book of courses

Study program		Applied statistics	
Title of the course		Statistical Methods in Psychology	
Teachers (for lectures)		Lazar Tenjović	
Teacher/fellow teacher (for exercises)		Aleksandar Zorić	
ESPB	6	**Status of the course (obligatory (O) /elective (E))**	O

Conditions	
Aim of the course	The aim of the course is to introduce students to advanced statistical meethods in psychology.
Course outcomes	Upon th completition of the course, student will be able to use statistical methods learned in this course and interpretate results obtained with these methods.
Content of the course	
Theoretical classes	Classic test theory: statistical procedures. Theory of responses (IRT): procedures. Exploratorial and confirmatory factorial analysis. Path analysis. Structural modeling. Generalized linear model. Mixed linear models. Hierarchical linear model. Basic procedures in meta-analysis.
Practical classes	Practical classes will consist of the application of statistical procedures from the theoretical classes on real data from psychological research.
References	
1	Fajgelj, S. (2009). *Psihometrija* (odabrani delovi). Beograd: Centar za primenjenu psihologiju.
2	Hambleton, R.K., Swaminathan, H. (2010). *Item Response theory: Principles and Application*. Dordrecht: Kluwer♦Nijhoff Publishing.
3	Thompson, B. (2005). *Exploratory and Confirmatory Factor Analysis*. Washington, DC: American Psychological Association.
4	Kline, R. B. (2005). *Principles and practice of structural equation modeling (Second edition)*. New York: Guilford Press
5	Byrne, B. B. (2010). *Structural equation modeling using AMOS. Basic concepts, applications, and programming (2nd edition)*. New York: Routledge
6	Raudenbush, S.W. & Bryk, A.S. (2002). *Hierarchical linear models: Application and Data Analysis Methods*. Thousand Oaks: Sage Publications
7	Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2009). *Introduction to meta-analysis*.Chichester: John Wiley & Sons, Ltd.

The number of contact hours per week during the semester / trimester / year

Lectures	Exercises	DON	Research work	Other classes
2	2	----	------	------

Teaching methods	Lectures, exercises and practical work

Evaluation of knowledge (maximum score 100)

Pre exam duties	points	Final exam	points
practical work	20	**written exam**	60
colloquia	20		