



**PSYCHOMETRICS**

<b>Credit points</b>	<b>6 CP</b>		
<b>Study course annotation</b>	Conversance with the assessment of questionnaires and tests, with psychological methods' validity and reliability, with psychological measures elaboration, adaptation and verification.		
<b>Aim of the study course</b>	Acquisition of understanding on study methods' elaboration and verification, assessment of research tools and their improvement.		
<b>Objectives of the course</b>	<ul style="list-style-type: none"> <li>• Initiate with main applications of scales of measurement;</li> <li>• Initiate with inventories and tests reliability and validity, what it is and how is possible to assess these features using qualitative and quantitative analysis,</li> <li>• Acquisition of approaches to inventories and tests' elaboration and adaptation.</li> </ul>		
<b>Study course results</b>	<b>Knowledge</b>	<b>Skills</b>	<b>Competences</b>
	<ul style="list-style-type: none"> <li>• Main concepts and notions in psychometrics.</li> <li>• Main psychometric variables of tests and inventories.</li> <li>• Statistical tests in psychology.</li> <li>• Adaptation and verification of tests and questionnaires.</li> </ul>	<ul style="list-style-type: none"> <li>• Skills for qualitative and quantitative analysis of data on nominal scale using <math>\chi^2</math> test for associations.</li> <li>• Skills for verification of test's construct validity.</li> <li>• Skills for verification of test's reliability.</li> <li>• Skills for verification of test's evident validity.</li> <li>• Skills for objective analysis and comparison of different</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to identify appropriate scale for measurement.</li> <li>• Ability to combine qualitative and quantitative analysis for verification of statistical hypotheses.</li> <li>• Ability to identify and apply the necessary type of measures' validity verification.</li> <li>• Ability to identify and apply the necessary type of measures' reliability verification</li> </ul>
<b>Study course content</b>	<b>Topics</b>		
	1	The subject-matter of psychometrics and its	
	2	history.	
	3	Main concepts and notions.	
	4	Scales of measurement.	
	5	Qualitative and quantitative analysis of	
	6	narratives. $\chi^2$ test.	
	7	Types of measures.	
	8	Elaboration and adaptation of measures.	
	9	Validity of measures.	
	10	Reliability of measures. Cronbah' $\alpha$ .	
	11	Statistical hypotheses.	
	12	Factor analysis in psychometrics.	
	13	Construct validity.	
	14	Evident validity.	
15	Statistical tests (criteria) and its choice.		
<b>Form of assessment:</b>	Exam		



**Obligatory literature:**

1. Rust, J., Kosinski, M., & Stillwell, D. (2020). Modern Psychometrics: The Science of Psychological Assessment . 4th Edition. Routledge.
2. Furr, M.R., & Bacharach, V.R. (2008). Psychometrics: An Introduction. Los Angeles, CA: SAGE Publications.
3. Hersen, M. (ed) (2003). Comprehensive handbook of psychological assessment. Hoboken, N.J.: J. Wiley & Sons.
- Breslavs, G. (2009-2023). Psihometrika. Lekcijas kurs. Power Point programmā

**Further reading list:**

1. Nunnally, J.C. & Bernstein, I.H. (1994). Psychometric theory. 3rd ed. New York: McGraw- Hill.
2. Riessman, C. K. (2008). Narrative Methods for the Human Sciences. Los Angeles, CA: SAGE Publications.
3. Breslavs, G. (kopā ar Ābele, Derjabo, Pišinska, & Roze). (2008). Vai mēs esam iecietīgi Sabiedrības etniskās iecietības monitoringa metodikas izveide. Rīga, Salus.
4. Kaplan, R.M., & Saccuzzo, D.P. (2010). Psychological Testing: Principles, Applications and Issues. (8th ed.). Belmont, CA: Wadsworth, Cengage Learning

**Other sources of information (electronic journals):**

1. Psychometrika,
2. Applied Psychological Measurement,
3. Journal of Personality Assessment,
4. Psychological Assessment

**Changes and additions to the program and literature list are possible during the study process**