



Department of Psychology

General information		
Name of the course	Teorije mjerenja Theory of measurement	
Course instructor	Doc. dr. sc. Tamara Mohorić	
Study programme	Preddiplomski studij psihologije Undergraduate study programme in Psychology	
Status of the course	Obavezan Compulsory	
Year of study	2022-2023	
Language	Hrvatski (predavanja) / engleski (konzultacije) Croatian (lectures) / English (consultations only)	
ECTS credits and manner of instruction	ECTS credits	3
	Number of class hours (Lectures + Exercises + Seminars)	30+30+0

1. COURSE DESCRIPTION
1.1. Course objectives
Upoznati studente s osnovnim načinima i modelima skaliranja osobina odgovora ispitanika, formiranja ukupnih rezultata mjerenja. Deskriptivni parametri i relacije linearnih kombinacija osnova su za složenije analize. The objective is to introduce students to basic modes and models of scaling traits, examinees' responses, and yielding the overall results of measurement. Descriptive parameters and the relations between linear combinations form the bases for more complex analyses.
1.2. Course enrolment requirements and entry competences required for the course
Položen ispit iz kolegija <i>Metodologija psihologijskih istraživanja</i>, <i>Upotreba računala u psihologiji</i> i <i>Psihologijska statistika</i>. A successful completion of the following courses: <i>Research methods in psychology</i>, <i>The use of computers in psychology</i>, and <i>Psychological statistics</i>.
1.3. Expected course learning outcomes
Nakon položenog ispita studenti će moći: - Objasniti razvoj i probleme mjerenja u znanosti; - Opisati i usporediti skaliranje podražaja i ljudi; - Objasniti osobine glavnih skala mjerenja i modela skaliranja; - Objasniti matematičke operacije i pojmove koji se koriste u formiranju ukupnog rezultata;

- Izračunati osnovne pojmove i izvesti operacije u formiranju ukupnog rezultata;
- Opisati i izračunati osnovne pojmove iz teorije pouzdanosti mjerenja.

By the end of the course, students will be able to:

- explain the development and problems of measurement in science;
- describe, as well as compare the scaling of stimuli with the scaling of people;
- explain the features of the main measurement scales and the models of scaling;
- explain basic mathematical operations, and terms used to present the overall results;
- calculate basic terms and perform the operations in order to yield the overall result;
- describe and calculate basic concepts from the theory of measurement reliability.

1.4. Course content

Uvod i povijesni pregled; Mjerenje u znanosti; Transformacije bruto rezultata mjerenja i efekti na osnovne parametre (aritmetičke sredine, standardne devijacije i varijance), kao i korelacije s drugim varijablama. Osnovne matematičke operacije i pojmovi koji se koriste u formiranju ukupnih rezultata (jednostavne i diferencijalno ponderirane linearne kombinacije) u psihologijskim mjernim instrumentima; Aritmetičke sredine, standardne devijacije i varijance linearnih kombinacija, kao i njihove kovarijance i korelacije s drugim varijablama. Upoznati osnovne pojmove teorije pouzdanosti mjerenja i klasične teorije testova.

Introduction and historical overview; Measurement in science; Transformations of measurement results and effects on basic parameters (arithmetic means, standard deviations and variances), and correlations with other variables. Basic mathematical operations and terms used to present the overall results yielded by psychological measuring instruments (simple and differentially weighted linear combinations); Arithmetic means, standard deviations and variances of linear combinations, as well as their covariances and correlations with other variables. Basic concepts of reliability theory and classical test theory.

1.5. Manner of instruction

- ✓ Predavanja
- ✓ Vježbe
- ✓ Drugo: konzultacije
- ✓ Lectures
- ✓ Exercises
- ✓ Other: consultations