SYLLABUS

1. Course title:

Construction of measurement instruments

2. Code:

3. Cycle of study:

1

4. ECTS credits:

6

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

none

7. Class restrictions:

none

8. Duration / semester:

1 7

9. Weekly contact hours:

9.1. Lectures:	3
9.2. Seminars:	0
9.3. Laboratory/Practice classes:	2

10. Faculty:

Humanities and Social Sciences

11. Department/study program:

Pedagogy-Psychology/PSYCHOLOGY

12. Lecturer:

13. Lecturer's e-mail:

14. Web site:

www.unitz.ba

15. Course aims:

Upon finishing the course, students should accomplish the following goals:
- Solve problems in the application, development, validation, and evaluation of psychodiagnostic instruments,
- Acquire basic knowledge and skills on the construction and analysis of psychological tests and scales,
- Acquisition of necessary skills for modification of psychological instruments and their standardization

16. Learning outcomes:

Based on program contents and set aims, students will be able to:
- Understand basic principles of measurement in psychology,
- Construct simple conative psychological instruments and assessment of their metric properties,
- Construction of simple cognitive tests and assessment of their metric characteristics,
- Standardization and renormalization of psychological measures,
- Revision of psychological measures,
- Practical application of psychometric and statistical packages (Winsteps, Parscale, jMetrik, AMOS).

17. Course content:

- Measurement instruments construction procedures,
- Optimization of measurement accuracy: item analysis, real score, measurement error and reliability, assessment of measurement reliability, alternative scoring methods, ipsatization,
- Fundamentals of psychological measures construction,
- Test validation process and test results,
- Measurement of individual differences with psychological measures: knowledge, abilities, attitudes, and dimensions of personality,
- Standards for pedagogical and psychological testing,
- Conducting testing and the consequences of using tests,
- Major psychological tests that are used to assess cognitive and conative traits (WAIS, MMPI)

18. Learning methods:

Lectures and practical classes with the use of various multimedia teaching aids, including active participation of students.
In lectures and practical classes will be used: the method of oral presentation, method of demonstration and illustration, seminar discussions, interactive teaching methods.

19. Assessment methods:

a) Written Exam
b) Oral Exam

The written exam includes written knowledge assessment (objective and essay tests). Assessment will be realized through questions and answers regarding the course content. It will be done after the realization of planned lectures. Minimum number of points for passing the written exam is 24 (more than 60%).
Oral exam is meant for students with minimum number of points in the written exam (24).
Written exam
Written exam follows after the end of the course. Students will be presented a combination of essay and objective questions. Students who pass the written exam (achieve 24 to 40 points), gain conditions to take the oral exam. Students can earn a maximum of 40 points in the written exam. Minimum number of points required to pass the exam is 24.

Oral exam
Oral exam will include questions and students' answers regarding the course content and it will last for 15 to 30 minutes. Maximum number of points that can be earned in the oral exam is 10. Minimum number of points required to pass the exam is 6.

Pre-exam points amount to a total of 50 points (20 points for attendance and active in-class participation, 20 point s for the individual project and 10 points for the group project). By fulfilling all of their requirements, students can thus earn a maximum of 100 points.
The points count towards the final grade cumulatively if students score at least 60% points on the final exam (written and oral exam).
In order for students to earn the minimum passing grade, they need to score at least 54 cumulative points, of which at least 25 on the final exam. The final grade is formed as a sum of all points earned in-class and the final exam.

Exchange of any belongings between students is not allowed during the written exam. Students caught cheating or talking to others will be removed from the exam.

20. Assessment components:

Attendance in lectures and practical classes: 5 points
Active participation in lectures and practical classes: 15 points
Individual project: 10 points
Group project: 20 points
Final written exam: 40 points
Final oral exam: 10 points
Total points: 100
The following is the grading scale, showing the points, numerical grade, descriptive grade and letter grade:
0-53 5 (five) fail F
54-63 6 (six) satisfactory E
64-73 7 (seven) good D
74-83 8 (eight very good C
84-93 9 (nine) excellent B
94-100 10 (ten) outstanding A

21. Required reading list:

- Reynolds, C. R., Altmann, R. A., & Allen, D. N. (2021). Mastering Modern Psychological Testing: Theory and Methods (2nd ed.). Springer.
- Furr, R. M. (2021). Psychometrics: An Introduction (4th Ed.). Sage Publications.
- Fajgelj, S. (2020). Psihometrija. (5. izdanje). Centar za primenjenu psihologiju.
- Crocker, L. & Algina, J. (2008). Introduction to classical and modern test theory. Cengage Learning.
- Finch, H., French, B. F., & Immekus, J. C. (2016). Applied Psychometrics using SPSS and AMOS (NA). Information Age Publishing.
- Meyer, P. J. (2014). Applied Measurement with jMetrik. Routledge.
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd Ed.). McGraw-Hill.
- *** (2006). Standardi za pedagoško i psihološko testiranje. Naklada Slap.

22. Web sources:

http://www.measurementdevices.com/mtheory.html
http://suppes-corpus.stanford.edu/display_article.html?articleid=392
http://www.socialresearchmethods.net/kb/scalgutt.htm

23. Applicable starting from the academic year:

2022/2023

24. Adopted in the Faculty/Academy session: