

PSY-213: Psychological Test Construction (3CHs)

Pre-requisites: Introduction to Statistics, Applied Statistics; *Basic familiarity with SPSS* is expected for item analysis.

Course Description:

This course offers a comprehensive introduction to the theory and practice of psychological test construction. Students will explore core psychometric concepts and gain applied skills in designing, developing, evaluating, and adapting psychological tests. Topics include test types, item writing, reliability, validity, standardization, score interpretation, and essential statistical methods for test evaluation. The course also considers the historical, cultural, and ethical dimensions of testing, with a focus on responsible test use in diverse contexts. By integrating classical principles with contemporary psychometric approaches, students will be equipped to critically assess and construct psychological tests.

Course Objectives:

This course will facilitate students to:

- Understand key psychometric concepts, principles, and statistics used in psychological testing.
- Apply techniques of test construction, item writing, and item analysis in practical testing scenarios.
- Evaluate the reliability, validity, and discriminatory power of psychological tests.
- Explore issues of test adaptation, cultural sensitivity, and ethical considerations in psychological assessment.

Course Learning Outcomes:

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

1. Develop knowledge of psychometric theory and test construction.
2. Describe and apply standardization procedures and norming techniques.
3. Understand the application psychological tests, including scoring and interpretation.
4. Evaluate the psychometric properties (reliability, validity, discriminatory power) of psychological measures.
5. Demonstrate ethical awareness and cultural sensitivity in test development and adaptation.
6. Design test items and analyse their performance using statistical methods.

Course Contents

- **What Psychological Testing Is**

- Principles of Psychological Measurement
- Characteristics of Good Tests
- Understanding Reliability
- Understanding Validity
- Foundations of Test Construction
- Item Writing
- Item Analysis
- Test Norms and Standardization
- Construct Validity and MTMM
- Advanced Topics in Reliability
- Computing Discriminatory Power
- Test Adaptation and Cultural Sensitivity
- Ethical and Legal Issues in Testing

Reference material:

Textbook

- Rust, J., & Konsiski, M. (2021). *Modern Psychometrics: The Science of Psychological Assessment*. Routledge.

Recommended

- Urbina, S. (2004). *Essentials of Psychological Testing*. John Wiley & Sons.
- Kline, P. (1986). *Handbook of Test Construction: Introduction to Psychometric Design*. Routledge.
- Thorndike, R. L., & Hagen, E. P. (1995). *Measurement and Evaluation in Psychology and Education* (4th ed.). Macmillan.
- APA (2017). *Ethical Principles of Psychologists and Code of Conduct*. *ITC Guidelines for Test Use and Adaptation*.