

## **PSY – 311: Psychological Test Construction– II (3 CHs)**

**Pre-requisite:** Psychological Test Construction-I (PSY – 354)

### **Course Description:**

This course is the continuation of psychological test construction I. The aim is to develop an understanding among the students regarding the application of the basic psychometric principles, and use of psychological tests. This course will also shed light on the steps of test construction, the current advances of psychometric properties of tests and their statistical relevance.

### **Course Objectives:**

The course is designed to facilitate students in developing:

- Understanding and application of the basic principles of psychological measurement and the techniques of test construction, adaptation, and related processes.
- Understanding and application of statistical concepts relevant to psychological test construction and adaptation processes are emphasized.

### **Course Learning Outcomes:**

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

- Understand and apply the basic theoretical psychometric concepts relevant to the construction of psychological tests.
- Understand and apply the basic principles of psychological measurement and the techniques of test translation and adaptation.

### **Course Contents:**

- Application of basic psychometric principles
- Steps of test construction
  - Item writing: Personality tests
  - Item writing: Intelligence and Ability tests
- Examining Construct Validity and current advances
  - Construct validity- Multi Trait-Multimethod Matrix Approach (MTMM)

- Examining Convergent and Discriminant Validity
- Concurrent and predictive validity
- Reliability
  - Understanding Alpha Coefficient
  - Inter rater agreement.
  - Sources of unreliability
- Computing the discriminatory power of tests
- Standardizing the test
  - Understanding Norms in context of test development/adaptation
- Ethical consideration in test use

### **Textbook:**

- Rust, J., and M. Konsiski. "Stillwell.(2021)." *Modern Psychometrics The Science of Psychological Assessment*.

### **Reference Books:**

- Urbina, S. (2004). *Essentials of psychological testing*. John Wiley & Sons.
- Kline, P. (1986). *Handbook of Test Construction. Introduction to Psychometrics design*. Routledge.
- Thorndike R. L., & Hagen, E. P. (1995). *Measurement and evaluation in psychology and education* (4<sup>th</sup> ed.). New York: Macmillan.
- Other articles/study materials for exercise purposes shall be shared later.