

Liverpool John Moores University

Title: PSYCHOMETRICS
Status: Definitive
Code: **5008PSYSCI** (113647)
Version Start Date: 01-08-2011

Owning School/Faculty: Natural Sciences & Psychology
Teaching School/Faculty: Natural Sciences & Psychology

Team	Leader
David McIlroy	Y

Academic Level: FHEQ5
Credit Value: 12.00
Total Delivered Hours: 24.00
Total Learning Hours: 120
Private Study: 96

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	12.000
Workshop	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Assignment of 2,500 words	100.0	

Aims

1. To examine key theoretical concepts in the area of psychometrics and to examine the methods used in developing psychometric materials.
2. To provide coursework material to serve as the basis for written report outlining the process of developing a psychological measure.
3. To illustrate the application of psychometrics in the areas of occupational, clinical and educational psychology.
4. To discuss the issues of training and registration for professional use of psychometric materials.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically discuss the process for constructing and evaluating psychological measure.
- 2 Describe the different applications of psychometric tests and questionnaires in occupational, clinical and educational settings.
- 3 Outline the criteria for competence in the administration and interpretation of psychometric tests and questionnaires.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

assignment 1 2 3

Outline Syllabus

The students will be introduced to historical and contemporary issues of psychometrics. This will be followed by a 'worked example' of the development of a psychological measure: the construct; the items; item analysis; reliability; standard error of measurement; validity; standardisation.

As a result of this, students will be introduced to the following concepts:

Concurrent Validity, Construct Validity, Criterion Related Validity, Cronbach's Alpha, Error, Face Validity, Individual Differences, Inventory, Item, Item Analysis, Item Discrimination, Item Facility Index, Pearson Product Moment Correlation, Predictive Validity, Psychological Construct, Questionnaire, Split-half Reliability, Test Re-test Reliability, Measurement Error, Theory of True Scores, Trait Constructs, True Score. The use of psychometric tests and questionnaires in occupational, clinical and educational settings.

British Psychological Societies criteria for competence in the administration and interpretation of psychometric tests and questionnaires.

Learning Activities

Lectures and workshops

References

Course Material	Book
Author	Kline, P. (1993). The Handbook of Psychological Testing. London: Routledge.
Publishing Year	0
Title	

Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	Murphy, K.R., & Davidshofer, C.O. (1998). Psychological Testing: Principles and Applications.
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	Englewood Cliffs, NJ: Prentice-Hall.
ISBN	

Course Material	Book
Author	Rust, J., & Golombok, S. (1999). Modern Psychometrics: The Science of Psychological Assessment.
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	London: Routledge.
ISBN	

Course Material	Book
Author	Furr, R.M. & Bacharach, V.R.
Publishing Year	2008
Title	Psychometrics: An Introduction
Subtitle	
Edition	First
Publisher	Sage Publications, Inc.
ISBN	9781412927604

Notes

A practical understanding of psychometrics is presented through the process of constructing a test or questionnaire. Students will also see how psychometric tests and questionnaires are used in occupational, clinical and educational settings. Training and standards of competence in psychometric use are outlined based on BPS guidelines.