**Lagos State University**

**Faculty of Education**

**EDU 302: Educational Measurements, Tests, Research Methods and Statistics**

**(2 Units C: LH 30)**

**Reference: Page 206 in Education CCMAS**

**Lecturers:** Professor Peter A. Okebukola, Professor Tunde Owolabi and Professor Rasheed Sanni

**Introduction**

The technique for determining what the learner knows or does not know is an important skill for teachers. More importantly is the skill for developing and validating various instruments for assessing learner behaviour and the interpretation of data so gathered.  The primary goal of this course, therefore, is to provide practical experiences in the preparation and administration of tests, questionnaires, interview guides and observation instruments and the interpretation of data gathered from the use of these instruments.

**Objectives**

At the completion of the course, students should have acquired competence in the following:

      Recognizing the importance of measurement and testing in education.

      Differentiating between tests, assessment, measurement and evaluation.

      Planning of classroom tests.

      Identifying strengths and weaknesses of and when it is appropriate to use essay, multiple-choice and performance tests.

      Construction of different varieties of objective tests and essay tests.

      Construction of questionnaires, interview guides and observation schedules.

      Determination of validity and reliability of assessment instruments.

      Interpreting test scores.

COURSE OUTLINE:

UNIT                                        CONTENT

**Topic 1 : Basic Issues in Tests and Measurement in Education**

Why do we measure in education?  Clarifying/differentiating between the terms – measurement, assessment, tests and evaluation.  Usefulness of tests.  Types of tests.

**Topic 2 : Planning Classroom Tests**

Stages in planning classroom tests.  Test blue-print development following familiarity with Bloom’s taxonomy.

**Topic 3 : Strengths and weaknesses of tests**

Merits and demerits of essay-type tests.  When to use essay tests.  Merit and demerits of completion, true/false, matching and multiple – choice tests and when to use them.  Performance test- what they are and their strengths and weaknesses.

**Topic 4 : Construction of essay, objectives and performance tests**

Guidelines for writing essay, objective and performance tests.  Practicum in test construction – from test blue print to construction of test papers.

**Topic 5 : Construction of questionnaires, interview guides and observation schedules**

Techniques for constructing questionnaires (Likert-type and Osgood Semantic Differential), interview guides and observation schedules.  Questionnaire administration and scoring.

**Topic 6 : Item analysis, determination of validity and reliability**

Computation and interpretation of item difficulty and discrimination indices.  Procedures for validating instruments-face, content, construct, predictive and concurrent.  Procedures for determining the reliability of instruments – test-retest, split half, Cronbach alpha and Kuder-Richardson.

**Topic 7 : Scoring/grading and reporting learner performance**

Preparation of marking schemes/guides.  Techniques of scoring/grading scripts.  Guidelines for reporting learner performance.

**Course Assessment**:  Attendance…………... 5%

                                         Project ………………25%

                                        Examination …………70%

**Assignments:** Students will submit three assignments on any three topics in the course. Assignments are due at the end of three weeks.

**Course textbook**: Okebukola, P.A.O and Rufa’i (Eds.). (2023). ***NUC CCMAS Series Fundamentals of Education Volume 1.*** Abuja, NUC

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**Lecture Room**: Room 3 Faculty of Education Main Building

**Lecture Hours**: 10-12 on Wednesdays for onsite; virtual as announced.

**Office Hours**: 2-4p.m. Monday to Thursday