



FLORIDA INTERNATIONAL UNIVERSITY
DEPARTMENT OF LEADERSHIP & PROFESSIONAL STUDIES

EDF 3430: Section U02
Measurement and Evaluation in the Classroom (03 credits)
Semester: Spring 2018
Tuesdays 5-7:40pm
Location: DM 194

Instructor:

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Office Hours: Mondays 3-5pm, Fridays 3-5pm, or after class
Other times by appointment: E-mail ahead

I. Course Description

The goal of this course is to teach the principles of measurement and evaluation in education with an emphasis on the development of classroom assessments. It is designed to develop a comprehensive approach to the basic concepts in educational measurement, utilizing measurement in instruction, construction of teacher-made tests or assessments, portfolio and performance assessment, interpretation of standardized test scores, and other measures used in the evaluation of teaching and learning in the classroom.

II. COE Conceptual Framework

The desired future of the College of Education (COE) at *Florida International University* is one in which candidates, faculty, and staff embrace the shared experiences of a diverse, international, professional learning community (Vision Statement of the Conceptual Framework of the College of Education – Revised 2007, p.1). The three major outcomes become the lens through which each program organizes learning experiences and contributes to the vision and aim of the College. The outcomes include: a) Unit Content Outcome: Stewards of the Discipline (Knowledge); b) Unit Process Outcome: Reflective Inquirer (Skills); and c) Unit Dispositions Outcome: Mindful Educator (Dispositions). The desired performance learning outcomes, or institutional standards, of teacher candidates at the initial level are aligned with state and professional standards (e.g., FEAPs, NCATE, NCME, AERA).

EDF 3430/5443 Major Unit Outcome: Stewards of the Discipline (Knowledge), Reflective Inquirer (Skills), and Unit Dispositions Outcome: Mindful Educator (Dispositions).

III. Course Objectives and Outcomes

The objectives and outcomes for this course are organized by knowledge, skills, and dispositions. Each is aligned with the professional principles and standards. Students will acquire the following competencies:

Knowledge:

- Describe and distinguish between testing, assessment, measurement, and evaluation.
- Understand measurement scales, central tendency, and variability.
- Understand evaluation criteria such as reliability, validity, test bias and test fairness.
- Develop different types of test formats such as multiple choice, essay, matching, and true/false items to measure instructional objectives.
- Define between formative and summative evaluation, and norm referenced and criterion referenced measurement.
- *Describe ways to modify the test and avoid bias in testing and interpreting results (EDF 5443).*
- *Describe major trends in assessment (EDF 5443).*

Skills:

- Classify objectives into the categories of cognitive, affective, aptitude, and psychomotor domain.
- Calculate and interpret standard test scores, e.g., percentile ranks, standard deviation, and standard scores, stanines, deviation I.Q.
- Do item analysis procedures for paper pencil tests.
- Compute and interpret indices of item difficulty and item discrimination.
- Give examples of different types of score interpretations.
- *Choose assessment methods appropriate for instructional decisions in their prospective fields (EDF 5443).*

Dispositions

- Develop the strengths and limitations of different item formats used for paper and pencil tests.
- Communicate the meaning of standardized test scores to students, parents, and educational personnel.
- Become familiar with assessment issues among cultural minorities, and with assessment of student who speak English as a second language.
- Develop and utilize performance assessment instruments for classroom use.
- Perform formative evaluation of student progress by utilizing the results of assessment.
- *Use assessment information in an ethical and legal manner (EDF 5443).*
- *Develop a variety of instruments that will measure five target areas of achievement – knowledge, thinking, behaviors, products, and affect to match instructional objectives (EDF 5443).*
- *Find sources of information to learn about tests and other assessments for specific areas (EDF 5443).*

IV. Required/Recommended Textbooks**Required:**

Reynolds, C. R., Livingston, R. B., and Willson, V. (2009). *Measurement and assessment in education* (2nd ed.). Boston, MA: Pearson, Allyn & Bacon.

Recommended:

Nitko, A. J. & Brookhart, S. M. (2011). *Educational assessment of students* (6th ed.). Boston, MA: Pearson, Allyn & Bacon.

Wortham, S. C. & Hardin, B. j. (2016). *Assessment in Early Childhood Education* (7th ed.). Boston, MA: Pearson.

Popham, J. W. (2008). *Classroom assessment: What teachers need to know* (5th ed.). New York: Allyn & Bacon.

V. Program Standards/Competencies Covered in Course

The objectives listed here were developed in line with the standards, principles, competencies, and practices of: National Council for Accreditation of Teacher Education (NCATE:#1,#2,#4), Recommendations for Florida Educator Accomplished Practices (FEAPs:#1,#2,#4,#5,#8,#10), and principles of measurement established by the National Council on Measurement in Education (NCME:#A1,#A5,#B4,#B6,#C4,#C6), and the American Educational Research Association (AERA:#1.4,#2.2,#4.1,#4.3,#5.4,#7.3).

VI. TaskStream eFolio Artifact and 3-point Rubric

TaskStream is the COE's new web-based electronic portfolio application that will allow you to upload and share selected work via the world wide web. TaskStream also has tools that allow you to create standards-based lesson plans, evaluation rubrics, and entire instructional units. Beginning in Fall 2008, all students enrolled in the College of Education are required to subscribe and maintain a TaskStream account throughout their FIU career so that they can generate and maintain an electronic portfolio of their work in the college. You can purchase TaskStream directly online at anytime of the year. You have the option of selecting the terms of their subscription. However, the Taskstream account must be maintained throughout your professional preparation program. Costs and other TaskStream information can be found at this COE website:

http://www.taskstream.com/main/?/chang28/COE_WEBSITE.html

VII. Course Policies

Attendance Policy: Attendance at each class session is required. All students are expected to attend all classes and be on time for each class meeting. Illness or an emergency must be reported to the professor the day of the absence by e-mail. You are allowed TWO-excused absences for illness or an emergency. Students with more than FOUR absences may be dropped from the course. Your attendance grade will be determined based on the Sign-in sheet (Don't forget to sign in).

Make-Up Exam/Assignment Due Date Policy: Opportunities for make-up exams and/or assignments are limited to documented medical emergencies or personal emergencies pre-approved by the professor. Any assignment turned in late will result in an automatic 2 pt. loss each week that it is late. Late is defined as the end of the class session in which the assignment is due.

Academic Misconduct: Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that *if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions*, as outlined in the Student Handbook. Academic misconduct includes: (a)cheating, (b)plagiarism, (c)misrepresentation, (d)misuse of computer services, (e)bribery, (f)conspiracy and collusion, (g)falsification of records, and (h)academic dishonesty.

Disability Resource Center (<http://drc.fiu.edu/>): The Disability Resource Center's mission is to provide FIU students with disabilities the necessary supports to successfully complete their education and participate in activities available to all students. If you have a diagnosed disability and need assistance or instructional accommodations, please contact the Center at 305-348-3532 or visit them at the Graham Center (GC) 190.

EPS Code of Professional Decorum: The following expectations constitute the Code of Professional Decorum governing conduct in the Department of Educational & Psychological Studies (EPS). These expectations are essential to the department's goal of providing students with a quality education in an environment conducive to learning. A committee of EPS students and faculty developed this Code. Students and faculty in the department of EPS shall: a) be respectful of the learning environment; b) be respectful of all individuals in class; c) have a professional commitment to learning; and d) have professional integrity.

VIII. Course Requirements and Assignments with Professional Standards

All papers and assignments should be typed and should observe the conventions of Standard English spelling, usage, and punctuation with **12 point font, double-spaced**. Proofread and edit your papers. Any act of dishonesty will constitute in academic misconduct. The usage of already made or duplication of past projects for assignments and tests will be considered a breach of *academic misconduct policy*. All assignments are due **at the beginning of class on the date noted on the syllabus**. **Work submitted late will not be accepted or will result in continuous point reduction**.

- **Project 1: Test Item Development (20 pts.)**

(FEAPs: #8, NCATE:#1, NCME: #A-5, #B-4,#B-6, #C-4,#C-6, AERA: #1.#4)

Students can choose any interesting topics and will develop the test including different types of items (selected and constructed response format). The test format should be like real test (including names, directions, weight of points, etc.). This assignment will be evaluated based on the overall quality (contents and formats) of the work product. The number of items should be assigned as followed:

- Selected Response Test Format with Answer Key
 1. 10 Binary-choice items (pp. 211-213),
 2. 5 Multiple binary-choice items (pp. 211-213)
 3. 15 Matching Items (pp. 216-217),
 4. 15 Multiple-choice items (pp.196-204): (a)direct, (b)best, (c) sentence completion
- Constructed Response Test Format with Scoring Rubrics
 1. 3 Restricted-response essay items (p.228) with 3 Holistic scoring rubrics (pp. 234-235)
 2. 3 Extended-response essay items (p.228) with 3 Analytic scoring rubrics (pp. 234-235)

You can use "Test Item Development" project for your TaskStream e-folio.

- **Project 2: Test/Assessment Critique (15pts.) + Presentation (Extra credit: 3pts. Max.)**

(FEAPs: #1, #2, #4,#8,#10, NCATE:#1,#2, NCME: #A-1, #A-5, #B-6, #C-4,#C-6, AERA: #1.4, #2.2, #4,1, #4.3, #7.3)

Student selects a commercially available educational or psychological test or assessment that reflects one of your interest areas. (a) Write a summary about it, (b) evaluate your assessment/test based on three test evaluation criteria, such as reliability, validity and absence-of-bias, and (c) make recommendations on how the assessment might be improved (5 page long). **For an extra credit (3pts. Max.)**, prepare a **5-10 minute** presentation using a power point and bring a copy or a sample of a test/assessment to class on the day of the presentation (See instructor for details).

- **Project 3: Learning Objectives & Answers (20 pts.)**
 (FEAPs: #8, NCATE:#1, NCME: #A-5, #B-4,#B-6, #C-4,#C-6, AERA: #1.#4)
 For *Learning Objectives*, choose any five questions answer the questions with an appropriate response in chapters of 1-10, 13, 14 and 16.

XI. Evaluation and Grading Standards

Evaluation will be performed through two exams composed of multiple choice, and open-ended questions, and independent/group projects. Written assignments and exams will evaluate student’s ability to construct test items and other assessment tools, evaluate different assessment formats, and interpret assessment results. Your grade in this class will be determined by your performance in the following areas:

| Activity | Points | Grading Scales |
|---|--------|--|
| Exam I (15%) & Exam II (20%) | 35 | |
| Test Item Development (25%) | 25 | |
| Test Critique (15%) + Presentation (3%) | 15 (3) | A=94 or higher, A-=90-93 B+=87-89, B=84-86, B-=80-83, C+=77-79, C=74-76, C-=70-73, D+=67-69, D=64-66, D-=60-63, F=less than 60 |
| Learning Objectives (20%) | 20 | |
| Attendance (5%) | 5 | |
| Total (100%) | 100 | |

*** Deadline to drop a course with a DR grade: March 19th, 2018***

X. Course Schedule

The following represents a tentative schedule. Specific dates and assignments may be changed at the instructor's discretion.

| Date | Chapter Reading | Assignment Due |
|------|--|---|
| 1/9 | Introduction: Course Overview, Policies, Requirements | |
| 1/16 | Test, Assessment, Measurement, Evaluation (Ch. 1) The Usage of Assessment Selected-Response Items (Ch. 8) | |
| 1/23 | Constructed-Response Items (Ch. 9) Measurement and Number (Ch. 2) Measurement Scales: nominal, ordinal, interval, ratio | |
| 1/30 | Central Tendency: Mean, Median, Mode Variability: Range, IQR, Standard Deviation, Variance | |
| 2/6 | Correlation, Causality The Meaning of Test Scores (Ch. 3) Criterion-Referenced Tests, Norm-Referenced Tests | |
| 2/13 | Normal Curve, Raw Scores, Standard Scores Derived Scores, Types of Norms | *Test Item Development Due |
| 2/20 | Reliability (Ch. 4) Test-Retest, Equivalent-Form, Split-Half, Internal Consistency, Inter-Rater Reliability | |
| 2/27 | Exam (I) 5-7pm | *Learning Objectives (I) Due: Chapters 1,2,3,8,9 |
| 3/6 | Project work week | |
| 3/13 | Spring Break | |
| 3/20 | Measurement Error (SEM) , How to Improve Reliability Validity (Ch. 5) Content, Construct, Concurrent, Predictive | |
| 3/27 | Item Analysis (Ch. 6) Difficulty, Discrimination, Distracters The Initial Steps in Developing a Classroom Test (Ch. 7) Taxonomy of Educational Objectives, Test Blueprint | *Test/Assessment Critique Due |
| 4/3 | Performance Assessments (Ch. 10) Actual/Analogue/Artificial Performance, Grading Errors The Use of Aptitude Tests in the Schools (Ch. 13) | |
| 4/10 | Assessment of Behavior and Personality (Ch. 14) The Problem of Bias, Current Issues (Ch. 16) | |
| 4/17 | Course Review | *Learning Objectives (II) Due Chapters 4-7,10,13,14,16 |
| 4/24 | Final Exam: 5PM - 7PM | |

Note. March 19th, 2018 is the last day to drop a course with a DR grade.

NORMS AND UNITS FOR MEASUREMENT

