

CATALOG 2003-2004  
(Please use separate form for each add/change)

COLLEGE: College of Education

Catalog Page(s) Affected: To Be Determined

Course: Add:   x   Delete:      Change: Number      Title     

(check all that apply) SCH      Description      Prerequisite     

If new, provide Course Prefix, Number, Title, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current catalog, provide change and attach page with changes in red and provide a brief justification. Please see reverse side of this page.

The Department of Curriculum & Instruction requests authority to offer:

*EDCI 5340 Measurement and Assessment in Education. Three semester credit hours.*

Course examines educational assessment; issues involving reliability, validity, and bias; construction of different types of tests, performance assessments, and portfolios for specific purposes; use of assessment data for defined purposes; and best practices in educational assessment. Prerequisite: Graduate standing.

**Rationale for Course:** The School of Nursing at TAMIU has requested that we offer this course to help prepare graduate students seeking to become nursing educators. Also, course can add an important component to our Curriculum & Instruction program by focusing deeply on how different forms of measurement can be used to generate multiple forms of data and how these data can be interpreted and used to help educators make informed decisions.

Program: Add:      Change:      Attach new/changed Program of Study description and 4-year plan. If in current catalog, provide change and attach page with changes in red.

Minor: Add:      Delete:      Change:      Attach new/changed minor.  
If in current catalog, provide change and attach page with changes in red.

Faculty: Add:      Delete:      Change:      Attach new/changed faculty entry.  
If in current catalog, provide change and attach page with changes in red.

College Introductory Pages: Add information:      Change information:       
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

Approvals:

Chair  
Department Curriculum Committee

Signature: Juan Lira for Barbara Campbell Date: 30 Nov. 05

Chair  
Department

Signature: Juan L. Lira Date: 30 Nov. 05

Chair  
College Curriculum Committee

Signature: Humberto Conzalez Date: 11/30/05

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Signature: Humberto Conz Date: 11/30/05

## Draft of Syllabus for EDCI 5340 Measurement and Assessment in Education

Prepared by Juan R. Lira

EDCI 5340 Measurement and Assessment in Education. Three Semester Credit Hours. Course examines educational assessment; issues involving reliability, validity, and bias; construction of different types of tests, performance assessments, and portfolios for specific purposes; use of assessment data for defined purposes; and best practices in educational assessment. Prerequisite: Graduate standing.

### **Required Text:**

Reynolds, C. R., Livingston, R., & Willson, V. (2006). *Measurement and assessment in education*. New York: Pearson.

### **Major Objectives:**

The participants will demonstrate an understanding of:

1. The difference between measurement and assessment and the role of each in the educational process,
2. Reliability, validity, and bias, and how these factors can influence the design of measurement instruments, as well as the quality of information generated by these instruments
3. Item analysis and how this analysis can help determine the adequacy of items in measurement instrument.
4. The research-based principles and practices for developing a test, preparing students for the test, and ways for administering the test.
5. Assessment based on measurements involving selected response items, constructed response items, performance measures, and portfolios.
6. Ways of assigning grades on the basis of classroom assessments,
7. The benefits and limitations of standardized achievement and aptitude tests, and ways of interpreting data from these measurement instruments.
8. Assessment accommodations for students with special needs.

**Major Activities:**

The participants will:

1. Explain in typewritten form the difference between measurement and assessment, the role of each in the educational process, and specific examples to support their response.  
Percentage Point Value: 10%
2. Explain in typewritten form: 1) the meaning of reliability, validity, bias, and item analysis after examining a measurement instrument of their choice and its accompanying technical manual; 2) how these factors were addressed in the development of this instrument; and 3) how the influence of these components could impact the quality of information generated by the instrument.  
Percentage Point Value: 10%

3. Utilize research-based principles and practices, while working in teams, to:

Develop a research-based foundation for a measurement instrument of their choice. (Instrument could be one involving selected response items, constructed response items, or performance measures)

State the specific objectives that the instrument is intended to measure. (Objectives must be consistent with the foundation of the instrument.)

Prepare the instrument in a manner consistent with the foundation and desired objectives.

Administer the instrument to a group of individuals.

Report and interpret the results

Prepare and present an oral and visual presentation of this project to the other members of the class. Each team member must have a significant role in the preparation of the presentation and orally explain a meaningful portion of it to the class.

Percentage Point Value: 15%

4. Prepare a sample portfolio (could be an electronic portfolio) that contains at least the following:

A typewritten statement of its major purpose(s)

A list of the components included.

Sample items that reflect each of the components

A research-based, typewritten explanation of the benefits of using portfolios. Incorporate into your response why you think it could be wise to use the portfolio you have prepared and instances in which it could be appropriate to do so.

Percentage Point Value: 10%

5. Prepare a typewritten critique of a portion of a manual of a measurement instrument of their choice by focusing on the following:

Describing any assessment accommodations suggested that could be made for students with special needs, e.g., those with learning disabilities, English Language Learners

Using research-based evidence to explain whether the accommodations seem reasonable. Cite specific examples to support your response.

Percentage Point Value: 10%

6. Develop a research-based plan for assigning grades on the basis of classroom assessments that includes ways of meaningfully communicating this information to students and to parents, as appropriate.

Percentage Point Value: 10%

7. Complete a mid-term examination

Percentage Point Value: 15%

8. Complete a final examination

(Will include components that require students to demonstrate their understanding of standardized achievement and aptitude tests, their ability to interpret sample data from these instruments, and the capability to explain the benefits and limitations associated with the use of data from these measurement instruments.)

Percentage Point Value: 20%

All tasks will be due on the dates specified by the instructor. Any exception to this schedule must be cleared with the instructor beforehand in order for the work to receive consideration for credit.

Final course grade will be based on the following scale:

A = 90-100

B = 80-89

C = 70-79

Below C = Repeat Course

Please feel free contact me, if I can be of any assistance in helping you to successfully complete the activities of the course.

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