

Measurement and Evaluation (EDP 380P)

Fall 2015 (Mon. 1-4)

INSTRUCTOR: Thomas Kubiszyn, PhD
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OFFICES: TBA

OFFICE HOURS: Monday, 11-1, by mutually agreeable appointment

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REQUIRED TEXT: Reynolds, C. R. & Livingston, R. B. (2012). *Mastering Modern Psychological Testing*. Upper Saddle River, NJ: Pearson.

OPTIONAL RESOURCES: American Educational Research Association, American Psychological Association, National Council on Measurement in Education. (2014). *Standards for Educational and Psychological Testing* (4th ed.). Washington, DC: Author.

Thorndike, R. M. & Thorndike-Christ, T. (2011). *Measurement and evaluation in psychology and education*. (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Note: Some of the writings, discussions, lectures, films, or presentations in this course may include material that may conflict with the beliefs of some students. Please review the syllabus carefully to see if the course is one that you are committed to taking. If you have a concern, please discuss it with me at your earliest convenience.

Course Description

This course is designed to introduce students to various topics and issues in educational and psychological testing, assessment and measurement. Within the educational and psychological health care arenas the utilization of testing and assessment results to facilitate decision-making, including "high-stakes" decisions, has been controversial.

Because tests and assessments are not perfect they can be used appropriately, or misused and abused. Understanding the measurement theory from which tests and assessments are derived and recognizing appropriate and inappropriate test practice can enhance appropriate use.

To enhance appropriate use and minimize misuse and abuse of tests and assessments various measurement topics and issues will be covered. These will include ethical, legal, sociocultural and political issues and recent developments; descriptive statistics; psychometric theory; and teacher-made and standardized test and scale construction, analysis and interpretation. The emphasis will be on the application of measurement data and principles in the "real world."

Class meetings will vary from lecture to discussion to "hands-on" application of skills and concepts. Because the content can be abstract and often is hierarchical, it is important that assigned readings be completed before each class. This will facilitate understanding and interest during lecture, discussion and application sessions.

Course Requirements/Assessments and Evaluation

1) Class attendance (5%) and participation & discussion (5%)

Students are encouraged to attend and be prepared for each class by reading the assigned readings prior to class. Maximum credit for this evaluation component cannot be obtained unless you actively participate in each class by (a) thoughtfully discussing topics, (b) asking pertinent questions, and (c) staying focused on the presentations, discussions, etc. in class. To do so, it is necessary that you *refrain from reading or sending texts or emails, or accessing the internet (except when directed to do so) and avoiding all forms of social media while the class is meeting.*

It is also expected that students will arrive on time and stay for the entire class. Please *keep a professional focus and avoid personal attacks* during class discussions.

Please turn off your cell phone or place it on silent mode/vibrate during class.

2) Homework Assignments (10%)

Homework assignments will primarily occur during the first 2/3 of the semester. They must be completed independently and are intended to help you to apply principles, procedures or concept covered in class and in the text. They will be distributed by the instructor and should be submitted by email no later than are due 48 hrs. after the end of class (Wed. at 4pm for spring 2015).

3) Examinations (70%)

Two interim examinations (worth 20% each) and one comprehensive, summative final exam worth 30% of your grade will be administered in class. The tests will cover assigned readings, information presented/discussed in class, and information distributed electronically by the instructor. The tests may contain multiple choice, true-false, matching, completion, or short answer essay questions. Make-up exams will only be given for serious, non-academic reasons, and written documentation of such an occurrence will be required.

4) Test Evaluation (5%) & Cooperative Learning Activity (5%)

Students will be assigned to teams by the instructor and will (a) independently evaluate a standardized test assigned to them and (b) collaborate to make an in-class, 20-30 min. presentation and demonstration about that test. Teams will consist of 2 or more students.

Thus, your task will be two-fold. The first task will be to obtain a copy of a reputable standardized test (the test must be approved by the instructor) from the UT Library, or other source. After doing so you will complete the Test Evaluation Form provided to you by the instructor and submit it to the instructor by the deadline.

Next, your team should meet to review your individual responses to the Test Evaluation Form, reconcile discrepancies, and develop a presentation based on the Test Evaluation Form. Then, the team will demonstrate some of the test stimuli to the rest of the class. Your team should meet as many times and as long as necessary BEFORE the class presentation to ensure a smooth flow for both the test evaluation summary and the demonstration.

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| EVALUATION: | Grades will be based on an average of the four requirements above, as follows: |
| GRADES: | 93% or more A |
| | 90% to 92% A- |
| | 87% to 89% B+ |
| | 83% to 86% B |
| | 80% to 82% B- |
| | etc. |

Some Final Notes: Students will not be allowed to take an Incomplete in this course due to

poor planning on their part. If you find you do have a legitimate reason for an Incomplete, please talk with me as soon as possible to discuss the situation and to identify the documentation that will be required to support your request. Please review the UT Austin catalog to review conditions under which an incomplete may be granted.

Absences – A student who is absent from a class or examination for reasons other than religious holidays must submit appropriate written documentation (e.g., signed by licensed health care professional for a health-related absence, appropriate objective documentation for a personal or family emergency, travel receipt for a professional obligation, etc.) to be eligible to complete make-up work.

Students are expected to abide by the university's academic honesty policy in all matters concerning this course (see http://deanofstudents.utexas.edu/sjs/acadint_conseq.php). With our reliance on electronic resources increasing daily, plagiarism, which has been defined as "Representing as one's own work the work of another without acknowledging the source," whether intentional or unintentional, has become more common. Yet, it is not tolerated. For clarification please review the resources available on this web page from the Office of the Dean of Students (http://deanofstudents.utexas.edu/sjs/acadint_avoid.php).

ADA ACCOMMODATIONS The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY

TENTATIVE OUTLINE OF TOPICS

| TOPICS | READINGS |
|---|---------------------------------|
| I. Recent Developments & Controversies | |
| A. Is testing necessary? | |
| B. Developments & Controversies | |
| C. Testing, Assessment and the Assessment Process | |
| II. Psychometric Principles and Procedures | (remaining readings from R & L) |
| A. General principles and basic concepts | Ch. 1 |
| B. Test administration and scoring | Ch. 1 |
| C. Social and ethical implications of testing | Ch. 17 |
| D. Descriptive statistics | Ch. 2, pp. 37-54 |
| E. Scores and norms | Ch. 3 |
| III. Psychometric Theory: Types of Reliability and Validity | |
| A. Correlation methods | Ch. 2, pp. 55-70 |
| B. Reliability estimation and interpretation | Ch. 4 |
| C. Validity estimation and interpretation | Ch. 5 |
| IV. Designing Tests | |
| A. Behavioral objectives | |
| B. Item writing | Ch. 6 |
| C. Item analysis | Ch. 7, pp. 222-235 |
| D. Attitude scales | Ch. 6, pp. 214-220 |
| V. Standardized Tests: Applications/Examples | |
| A. Achievement (summative, interim & formative) | Ch. 8 |
| B. Cognitive Ability | Ch. 9 |
| C. Personality, Behavior Rating Scales | Ch. 8, 10 |

D. Interest Inventories
E. Measuring Special Learners, IDEIA

Ch. 12, pp. 408-412
Ch. 16

TENTATIVE SCHEDULE:

| DATES | TOPICS & READINGS |
|-----------------------|--|
| 8/31 | Introduction, Developments & Controversies, General Principles & Concepts, Ethical, Legal and Other Considerations - R & L, Ch. 1, Ch. 17 |
| 9/7 | Labor Day (no class) |
| 9/14 | Test Administration & Scoring, Descriptive Statistics, Scores and Norms - R & L, Ch. 1, 2 (pp/ 37-54), 3. |
| 9/21 | Correlation and Regression, Validity Evidence, Score Reliability - R & L Ch. 2, (pp. 55-70), Ch.4, Ch. 5 |
| 9/28 | Exam 1 (students assigned to test evaluation & cooperative learning activity) |
| 10/5 | Exam Review, Developing Measures, Behavioral Objectives, Item Writing - R & L Ch. 6 (except pp. 214-220) |
| 10/12 | Item Writing & Item Analysis – achievement tests - R & L, Ch. 6 (except pp. 214-220), Ch. 7 (pp. 222-235) |
| 10/19 | Item Writing & Item Analysis - attitude scales - R & L, Ch. 6 (pp. 214-220) |
| 10/26 | Exam 2 (Independent Test Evaluation Forms are due on 10/28 at 4pm) |
| 11/2 | Standardized Tests: Development, Administration & Interpretation - R & L, Ch. 8 |
| 11/9 | Standardized Test Examples: Achievement (1 st student presentations) - R & L, Ch. 8 |
| 11/16 | Cognitive Ability (2 nd student presentations) - R & L, Ch. 9 |
| 11/23 | Personality & Behavior Rating Scales (3 rd student presentations) - R & L, Ch. 10, Ch. 12 (pp. 408-412) |
| 11/30 | Special Populations - R & L, Ch. 16 |
| TBA – (8/2015) | Comprehensive Final Exam |