

Educational Psychology 723
Human Measurement (Psychometric Literacy)
Fall

Instructor:
Office:
Office Phone:
Office Hours:
e-mail:

Text

Modern Measurement: Theory, Principles, and Applications of Mental Appraisal (2nd Ed.). Steven Osterlind. Pearson (2010). ISBN: 0-13-701025-7.

Course Description

The purpose of this course is to provide basic knowledge of contemporary measurement theory and practice. This class will focus on the distinction between classical and modern test theory, test validity and reliability, and practical issues surrounding large scale assessment. This is NOT a course in test construction or administration, although we address these topics. We focus primarily on the systemic validity of testing programs and basic psychometric literacy.

Please note that we will not have time in one semester to cover everything. We will focus as much time as possible on the most important material (see the chapter-by-chapter list of important concepts below).

Class Format

The general format for each week will be:

1. Read chapter and submit 1-page summary in advance of meeting class using Webcampus.
2. Discuss material (lecture based).

This class will be a “hybrid” in that assignments are submitted thru the Webcampus portal, quizzes are administered thru Webcampus, and one or more classes will consist of postings and discussion using the Webcampus discussion board. To log into Webcampus, access the Webcampus portal via the UNLV main page and login using your student “L” number

Evaluation Criteria

Course grades will be as follows:

1. Quiz 1: **25 points**
2. Quiz 2: **25 points**
3. Summary papers: 8 one-page summary papers @ 2 points each: **16 points**
4. Summary of “evaluating a test” and “competency” documents: **6 points**
5. MMY or TIP review: **5 points**
6. Final evaluation of a test/assessment instrument: **20 points**
7. In class participation: **3 points**

Quizzes

There will be two 25-item multiple choice quizzes. Quiz 1 is scheduled for the 4-hour period beginning Monday October 18 at 4 pm and ending at 8 pm. You must take the web based exam during that time. Please let me know ASAP if this presents a problem. Quiz 2 will span the 4-hour period from Monday November 29 from 4 pm to 8 pm.

Summary Papers

16 points will be assigned to 1-page single-spaced summary papers devoted to 8 different weekly readings. *The assignment must be submitted by the beginning of the class period to receive credit.* Papers can be no longer than 1.5 pages. If two chapters are assigned for the week, you may pick one of them, or you may summarize main topics across the two chapters.

Assignments will be scored using a 3-point rubric based on:

1. A concise summary of the chapter/reading.
2. Integrating or relating the topics to concepts in other chapters.
3. Stating the significance of the information and key concepts in the chapter.

Scoring is as follows: *2 points = fully met; 1 point = partially met; 0 points = not met.*

Summary of ‘Evaluating a test’ and ‘Competency standards’ Documents on Buros Website

There are two short documents in the “Buros” file in the assignment folder. These documents are available thru the Buros Institute of Mental Measurement (BIMM) at the University of Nebraska-Lincoln thru the “instructional material” link (www.unl.edu/buros). I want you to read these documents and provide a one-page single spaced summary of each. These documents also will provide criteria for the Final Evaluation assignment described below. The purpose of this assignment is to make you aware of test evaluation guidelines developed by major testing organizations.

MMY or TIP Review

The *Mental Measurement Yearbook* (MMY) is published by the Buros Institute and provides brief reviews of tests published in English. *Tests in Print* (TIP) is published by the Buros Institute and provides a catalogue of tests published in English. I want you to do a two-page single spaced review of one of these reference books. If you select MMY, find a test of interest to you, read the independent review, and summarize the reviewers’ comments about the test. If you select TIP, summarize the purpose of the book, its organization, what material it provides about a test, and how it might be useful to educators. The purpose of this assignment is to make you aware of two extremely valuable resource materials on “off the shelf” assessments.

Final Test Evaluation Paper

20 points will be assigned to an evaluation of a test or attitude instrument of your choice (excluding the WAIS) related to human measurement and assessment. This paper should be approximately 8-10 double spaced pages long, using APA style. This assignment is due Wednesday December 8.

Your review paper should include the following criteria described in more detail in the Buros document entitled “Evaluating a Test.” The point allocation system shown below provides a guideline for what kind of information to provide.

1. Summary of test you selected (4 points)
 - a. Purpose
 - b. Structure of test
 - c. Quality of support documentation
2. Coverage and usage (3 points)
 - a. Quality of test planning and item development
3. Appropriateness of sample (2 points)

4. Validity (4 points)
 - a. Content
 - b. Relationship to other tests (criterion, convergent, discriminant validity)
5. Reliability (3 points)
6. Test score reporting (2 points)
7. Evidence of fairness and lack of item/test bias (2 points)

Grading

Course grades will be based on the following cutoffs: 100-95 = A; 94-90 = A-; 89-85 = B; 84-80 = B-; 79-75 = C; 74-70 = C-.

LiveText

As of the Fall 2009 Semester, all students enrolled in the College of Education are required to obtain a LiveText account. This is a one-time purchase that will be used for assessments throughout your program within the College of Education. LiveText includes a student file manager that allows you to store documents, files, videos, etc. and access them from any computer in the world.

The current cost of purchasing LiveText is \$98. Your subscription will provide you with LiveText access throughout your program at UNLV plus one year after graduation, for a maximum of 5 years. LiveText accounts can be purchased at the UNLV bookstore as well as on line at:

https://college.livetext.com/purchasing/membership_student.html

UNLV Policies

Academic Misconduct—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

Copyright—The University requires all members of the University Community to familiarize themselves **with** and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could

subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Religious Holidays Policy—**Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only.** It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, **of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess.** For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Transparency in Learning and Teaching—**The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:**

<https://www.unlv.edu/provost/teachingandlearning>

<https://www.unlv.edu/provost/transparency>

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Students may consult with a librarian on research needs. For this class, the Subject Librarian is ([https://www.library.unlv.edu/contact/librarians by subject](https://www.library.unlv.edu/contact/librarians%20by%20subject)). UNLV Libraries provides resources to support students’ access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.

Tutoring and Coaching—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call [702-895-3177](tel:702-895-3177). The ASC building is located across from the Student Services Complex (SSC). Academic

success coaching is located on the second floor of the SSC (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TEB second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

Students may consult with a librarian on research needs. For this class, the Subject Librarian is (https://www.library.unlv.edu/contact/librarians_by_subject). UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.

Rebelmail—By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Final Examinations—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.

**EPY 723
HUMAN MEASUREMENT**

Week	Topic [Assignments in bold]	Readings
August 23	Introduction ; Test development cycle	
August 30	Review of statistical concepts; WAIS preview	Chapters 1-2
September 6	NO CLASS [Labor Day]	
September 13	Reliability 1 [Classical test theory]	Chapter 3
September 20	Validity [WAIS factor structure]	Chapter 4
September 27	E-CLASS [Summarize two Buros documents]	
October 4	Reliability 2 [Measuring reliability and practical implications]	Chapter 5
October 11	Constructing Tests; Quiz 1 preview Summary of “evaluating a test” and “Competency standards” due.	Chapters 8-9
October 18	QUIZ 1 Monday October 18	Webcampus 4-8 pm
October 25	Item response theory (IRT) 1 (3 models & assumptions)	Chapter 10
November 1	Item response theory 2 (examples and practical implications)	Chapter 10
November 8	E-CLASS: MMY or TIP review	
November 15	Standards and standard setting ; [MMY or TIP review due November 18]	Chapter 14
November 22	Scaling (Chapter 6: 153-159, 173-186); Quiz 2 preview	Chapters 6
November 29	QUIZ 2 Monday November 29	Webcampus 4-8 pm
December 6	Final Evaluation Paper due Wednesday December 8	