SAM HOUSTON STATE UNIVERSITY
Psychology 594: Psychometrics I (Fall 2008)
Tuesdays & Thursdays 11:00-12:20, AB-IV 313

Instructor: Audrey K. Miller, Ph.D.
Phone: 936.294.4745
Email: audrey.k.miller@shsu.edu
Office: Academic Building IV, Room 312
Office Hours: Tuesdays 12:30-2:00, Thursdays 10:00-11:00, and by appointment (please note that faculty commitments may require unforeseeable absence during regular office hours, so it's best if possible to let me know in advance your plans to drop in

Required Texts:

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: Author.
- Murphy, K. R., & Davidshofer, C. O. (2005). *Psychological testing: Principles and applications* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Supplemental Text:

- DeVillis, R. F. (2003). *Scale development* (2nd ed.). Thousand Oaks, CA: Sage.

Course Description: This course is designed for clinical graduate students to learn and apply fundamental principles and methods of psychometrics, which is concerned with the measurement of psychological and social phenomena.

Course Objectives:

- **Phase I: Gain *factual knowledge* and learn *fundamental principles* of psychological testing and measurement**. Readings will include discussions of principles and methods as well as standards most applicable to the work of professional psychologists.
- **Phase II: Learning to *apply* course material, via *analysis* and *critical evaluation* of ideas, arguments, and points of view, by *working as a team*.** Toward this end, class members will research, develop, test, and report on their own scale, which may facilitate thinking about future research agenda. See Appendix A: Scale Development Assignment.
- **Phase III: Developing skills, competencies, and points of view needed by professional psychologists.** In preparation for future training in psychological assessment, class members will be introduced to hallmark clinical applications of testing.

TENTATIVE COURSE SCHEDULE

Dates	Topic/Reading
Aug. 26, 28	Syllabus; Introduction to Tests and Measurement: M&D 1, APA 12
Sept. 2, 4	Concepts in Measurement and Statistics: M&D 4
Sept. 9, 11	Scales and Norms: M&D 5, APA 4
Sept. 16, 18	Reliability: M&D 6 & 7, APA 2
Sept. 23, 25	Validity: M&D 8 & 9, APA 1
Sept.30, Oct. 2	Test Fairness: M&D 3, APA 7 Guest Lecture: *Item Response Theory*, Craig E. Henderson, Ph.D.
Oct. 7, 9	**In-Class Exam (10/7) & Take-Home Portion (to be returned by 10/9 at 12:00)**
Oct.14, 16	Test Development M&D 11, APA 3 Guest Lecture: *On Developing the* M-FAST, Holly A. Miller, Ph.D.
Oct.21, 23	**Scale Development: Group Activity** – Scale Review and Consultation
Oct. 28, 30	**Scale Development: Group Activity** – Scale Review and Consultation
Nov.4, 6	**Group Activity – Pilot Data** Professional Directions – Ability Testing: M&D 13 (and/or supplements)
Nov. 11, 13	Professional Directions – Personality Testing: M&D 17 (and/or supplements)
Nov. 18, 20	Professional Directions – Diagnostic Testing: M&D 20 (and/or supplements)
Nov. 25	Professional Directions – Multimethod Assessment: M&D 21 (and/or supplements)
Dec. 2, 4	**Scale Development Paper due at 11:00**; Paper Presentations
Dec. 9, 11	Paper Presentations

COURSE GRADES

Note: The grading rubric for all assignments, exams, and final course grades will be: A range=89.49-100%, B range=79.49-89.48%, C range=69.49-79.48%, D range=59.49-69.48%, F range=<59.49%

- In-class Exam = 100 points
- Take-home Exam = 100 points
- Group Activities/Class Participation = 100 points
- Scale Development Paper = 300 points
- Paper Presentation = 100 points
- TOTAL = 700 points

General Course Expectations:

- Read before class, attend class, and actively, eagerly participate in class discussions. University policy, which will be followed in this course, advises grade deduction for greater than 3 hours of missed class. In our case, each missed class period beyond two will result in one letter grade deduction for the course. If you have to miss class, please notify me ahead of time if at all possible, so I can plan the class meetings accordingly.
- Except under extreme circumstances and with the instructor's prior approval, students will receive no credit for late or missed assignments/examinations.
- Do not cheat. Course papers may be submitted to Turnitin.com, plagiarism detection software. Any form of academic dishonesty described by University policy will guarantee you a "0" and may result in formal disciplinary actions. Whew.
- Finally, PLEASE ENJOY!!!

Additional University Policies (see www.shsu.edu/syllabus for more information)**:**

- *Per University policy*, **students with a disability** that affects their academic performance are expected to arrange for a conference with the instructor in order that appropriate strategies can be considered to ensure that participation and achievement opportunities are not impaired.
- *Per Section 51.911 (b) of the Texas Education Code*, an institution of higher education excuses a student from attending classes or other required activities, including examinations, for the **observance of a religious holy day**, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. See *University policy 861001*.

Appendix A: Scale Development Assignment

- At the very outset of the course, you are encouraged to begin familiarizing yourself with the theoretical and research literatures about a psychological construct that interests you and about which you would like to create a measure in this course (note: avoid intelligence measures). Be creative, follow your muse, begin immersing yourself in a literature in which you might want to pursue a master's thesis for example!! Work to develop clarity about the construct you would like to measure and, importantly, a sense of boundaries around that construct; this is sometimes a difficult task, so start early! By **September 30th**, drop me a paragraph by email describing your construct of interest and its boundaries, to which I'll provide feedback. You're welcome to email me much earlier if you'd like; just make sure you've spent some time with the literature.
- Once you've formulated your construct of interest and had it approved by me, generate an item pool tapping that construct, a measurement format for these items, and possible validity items, consistent with guidelines prescribed by DeVillis (2003). Be prepared by **October 21st** to participate in an in-class group activity, scale review and consultation. Each class member will have one class period to explain your construct of interest and its boundaries to a small group and to receive group members' feedback about your proposed scale, measurement format, and validity items. Incorporate group feedback as you deem appropriate, and submit your revised scale to me by email on or before **October 31st.**
- On **November 4th**, you will collect pilot data on your measure, which may involve administering questionnaires and other activities (e.g., observing behavior) in class. Finally, you will compose a final research report, presenting and discussing the development and pilot validation process for your scale, the results of which will be presented to the class. The final written report will be due on **December 2nd at 11:00**, when in-class presentations will begin.