COURSE: Psych. 335L Psychological Testing Lab

CRN 10917 <u>1 cr</u> Fall '13

TIME/PLACE: Wed Hour 12:00-12:50 Room AMH 214

INSTRUCTOR: Dr. Tom Hogan, Professor of Psychology

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Office hours: Tu, Th 2:30-3:30 PM, Wed 10-11 AM

Other times by arrangement.

REQUIRED MATERIALS:

Text: Hogan, T. P. (2007). *Psychological testing: A practical introduction* (2nd Ed.) New York: Wiley. (Chapter 6 and Appendix B, parts of Chs 9 and 15)

COURSE OBJECTIVES

This lab provides hands-on experience in the development of tests. Students will develop, try out, conduct standard statistical analysis of, and revise two tests: one a measure of cognitive ability, the other a measure of attitude. Procedures for development of the two measures follow principles described in Chapter 6 and Appendix B of the textbook, as well as parts of Chapters 9 and 15. Students will work in teams of 3-5 when developing the tests.

Tryout of the tests, followed by item analysis and creation of final forms of the tests, will employ students in the Psychology department subject pool as well as students in the lecture section of Psyc 335.

Students must have completed the CITI (Collaborative IRB Training Initiative) Program. Students in the lab must be concurrently registered in (or have already completed) Psyc 335: Psychological Testing.

The class meets for one hour per week. Most of the lab work is completed <u>outside</u> of these meetings.

Specific skills to be developed include the following:

- Conceptualizing a measurement target
- Selecting appropriate measurement format
- > Creation of test items in cognitive and affective domains
- > Critiquing and revision of test items
- > Appropriate formatting of test materials
- ➤ Use of standard (classical test theory) item analysis procedures
- > Application of reliability and validity analyses
- > Communication of final results (test manual)
- ➤ Working cooperatively in a team effort

The test to be developed in the cognitive domain will be either a verbal or quantitative measure (team choice) of approximately 30 items and intended to correlate highly with SAT Verbal or Math scores, which will be used as the criterion measures for validity. The instructor is the only one who will see SAT scores associated with student names.

The test in the affective domain, if developed, will measure attitude toward some educational practice, policy or procedure (team choice). The measure will not target any personnel. The measure will use a Likert format, broadly defined, including 15-30 items.

GRADING:

- 1. 20% Quiz on Ch 6 and App B *
- 2. 20% Test manual *
- 3. 20% Ratings of team contributions *
- 4. 20% Ratings of test quality by tryout examinees **
- 5. 20% Quality points for reliability and validity **
- * Individual grade. ** Same grade for all team members.
 - 1. The quiz on Ch 6 and Appendix B consists of 20 multiple-choice items.
 - 2. Each participating student prepares a brief test manual to be graded by the instructor.
 - 3. Each student rates the quality of contributions made by each team member. (intermediate and final)
 - 4. Students completing the tryout forms of tests rate the appropriateness of the tests.
 - 5. A rubric for levels of reliability and validity is applied to the results on these features.

ACADEMIC HONESTY:

See the University's policy on academic honesty. A student found cheating or engaging in another form of academic dishonesty will receive an <u>F for the course</u>.

ADA Statement: In order to receive appropriate accommodations, students with disabilities must register with the Center for Teaching and Learning Excellence (CTLE) and provide relevant and current medical documentation. Students should contact CTLE, 5th floor, St. Thomas Hall, for an appointment. For more information, see http://www.scranton.edu/disabilities.

REVISIONS AND ANNOUNCEMENTS:

The syllabus is subject to revision. Any revisions will be announced in class. Note also that you will sometimes receive e-mail announcements through Angel. Make sure you check your University e-mail account.

COURSE SCHEDULE Psych 335L

Date	Class	Task
28-Aug	1	Introduction. Review of syllabus. Formulation of goals. Creation of teams.
4-Sep	2	Review of steps [Chapter 6, Appendix B].
11	3	Test on Ch 6, Ap B. Background research on areas to be measured. Review parts of Chs 9, 15.
18	4	Decisions on test structures and item formats.
25	5	Prepare items.
2-Oct	6	Informal tryouts.
9	7	Critique items, formats. Revise as needed.
16	8	Prepare tryout materials.
23	9	Tryout.
30	10	Item analysis. Reliability analysis. Validity analysis.
6-Nov	11	Reliability and validity analysis continued.
13	12	Prepare final instruments.
20	13	Prepare manuals
27	14	Prepare manuals.
4-Dec	15	Critique of all procedures.

Assessment/evaluation based course improvement mechanisms

At the conclusion of the lab part of the course, students complete two Likert-based assessments. In the first, students rate their <u>degree of learning</u> of each of the objectives listed in the syllabus. In the second, students rate the appropriateness of <u>amount of time</u> devoted to each topic. (The lecture portion of the course features parallel student ratings for topics covered in the lecture.) The formal ratings are also reviewed with students in connection with the critique conducted in week 14.

Students' success in reaching targets specified in the <u>rubrics for reliability and validity</u> of the tests constructed also provides an important feedback loop for evaluating the course and designing improvements to the learning experience.