

PSYCHOLOGY 316: Tests and Measurements

Spring 1999 MF 1:50-3:05 in Psychology 303

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Course Description:

This course explores the theory and practice of psychological assessment. Major topics include test construction and validation, with attention to statistical techniques; appropriate test use, including legal and ethical issues; and major tests for measuring mental abilities, achievement, personality, and psychopathology. Throughout the semester, students will develop and validate an original measurement tool and will report on their research in an APA-style paper.

Course goals:

• to become proficient in the basic terminology and concepts involved in psychological assessment, including basic statistics for describing scores, norms for interpreting scores, and psychometric properties of scales such as reliability and validity

- to develop an understanding of the variety of testing instruments and methods in current use
- to learn to use the Statistical Package for the Social Sciences (SPSS) to conduct relevant statistical analyses
- to gain hands-on experience constructing and validating a new assessment scale and writing an APA-style report of this project
- to understand the role of psychological testing in both basic and applied psychology as well as in the "real world"

• to understand the uses and misuses of psychological testing, both historically and presently, especially for minority populations and disadvantaged groups

• to add sophistication to your understanding of and participation in the research process generally

Required Text:

Kaplan, R. M., & Saccuzzo, D. P. (1997). <u>Psychological testing: Principles,</u> <u>applications, and issues</u> (4th ed.). Pacific Grove, CA: Brooks/Cole.

ATTENDANCE

Attendance in this class is very important. Much of the course will be run as a seminar with emphasis on individual participation, hands-on experiential exercises, and collaborative learning. Additionally, material on exams will come from class meetings as well as from the textbook. For these reasons, attendance at all class sessions is expected. If a students misses more than an occasional class period, I will schedule a conference with her to determine the reason why. Frequent absences are likely to adversely affect your grade in this course, and will definitely affect your *learning* of the course material.

EVALUATION

Exams: There will be three non-cumulative exams during the term and a self-scheduled semi-cumulative final exam. The exams may consist of multiple choice, short answer, identification, and essay questions, and will cover material from the readings as well as from class lectures and discussions. The final exam will be comprised of questions about course material covered since the previous exam as well as questions from material covered earlier in the course.

Homework Assignments: There will be weekly homework assignments throughout the semester. Generally, these will focus on the preparation of the Assessment Project: choosing the topic area, writing the Introduction, learning to perform statistical analyses of psychological data relevant to psychological testing, constructing the scale and devising a plan for assessing its reliability and validity, and collecting and analyzing the data for your Assessment Project. These assignments will be graded on a varying point scale, depending on the difficulty of the assignment.

Assessment project: Throughout the semester, each student will construct and validate a new scale assessing a psychological attribute. Working in groups of two or three, students will first choose a psychological characteristic on which people differ. Students will then conduct a literature review on that characteristic, learning more about it and how it has been measured in the past. Each group will then devise a new assessment device (probably a scale/questionnaire) which they will administer to a group of people. Using the resulting data, students will assess the reliability and validity of their scale. Each student will write an APA-style report describing the characteristic, previous work on that characteristic, and the construction and validation of their scale. Late Assignment/Missed Exam Policy: Please note that except for health or family emergencies, all exams must be taken and all work (including homework, journal critique, and assessment project) must be turned in on the due date. Except for genuine and documented emergencies, make-up tests will not be given and late assignments will receive serious grade penalties. This requirement is central to maintaining fairness for each student in the course.

Please note that all exams and written assignments in this course are pledged work under the R-MWC honor code. I encourage you to study with other students in the class for the exams and to discuss with them course material and assignments; however, your exams, homeworks, and written assessment project report should be your work alone. If you need clarification about how the honor code applies in this course, I will be happy to meet with you to discuss it. Please note that it is a violation of the honor code in this course to look at exams from previous offerings of this course.

	Points
Exam 1	100
Exam 2	100
Exam 3	100
Homework Assignments	150
Assessment Project	100
Final Exam (cumulative)	150
· · · · · ·	700 points total

Your final grade will be computed as follows:

Final grades will be computed as a percentage of the possible points you earned:

Α	93-100%	651-700 points
A-	90-92.9%	630-650 points
B+	87-89.9 %	609-629 points
В	83-86.9%	581-608 points
B-	80-82.9%	560-580 points
C+	77-79.9%	539-559 points
С	73-76	5.9% 511-538 points
C-	70-72.9%	490-510 points
D+	67-69.9%	469-489 points
D	60-66.9%	420-468 points
F	0-59.9%	419 points or less

EXPECTED CLASS SCHEDULE

Week	Dates	Topic/Assignment	Readings
1	M 1/18 F 1/22	Introduction to the course and testing History and current status of psychological testing	ch 1
2	M 1/25 F 1/29	Statistics Refresher Standardized scores	ch 2 pp. 29-45 ch 2 pp. 45-56
3	M 2/1 F 2/5	Norms; Criterion- vs. norm-referenced tests Correlation and regression	ch 2 pp. 56-63 ch 3 pp. 64-85
4	M 2/8 F 2/12	Multiple regression and factor analysis EXAM 1	ch 3 pp. 85-93
5	M 2/15 F 2/19	Reliability Reliability	ch 4 pp. 98-113 ch 4 pp. 113-128
6	M 2/22 F 2/26	Validity Validity	ch 5
7	M 3/1 F 3/5	Test construction: Writing items Test construction: Item analysis	ch 6 pp. 152-160 ch 6 pp. 160-172
8	M 3/8 F 3/12	SPRING BREAK SPRING BREAK	
9	M 3/15 F 3/19	Appropriate use and selection of tests EXAM 2	ch 7
10	M 3/22 F 3/26	Test administration Test manual play-day	ch 8
11	M 3/29 F 4/2	Tests of intelligence: Binet scales Tests of intelligence: Wechsler scales	ch 10 ch 11
12	M 4/5	Issues in intelligence testing TAKE EXAM 3 between Monday and Friday	ch 13
	F 4/9	Structured personality tests	ch 15
13	M 4/12 F 4/16	Structured & Projective personality tests No class: Virginia Psychological Association Meetir	ch 16 ng
14	M 4/19 F 4/23	Projective personality tests Legal and ethical issues in testing	ch 20
15	M 4/26 F 4/30	Legal and ethical issues in testing Student presentations of assessment projects; Course wrap-up	ch 22

Self-scheduled final exam

WEEK	DATE DUE	ASSIGNMENT
1		No assignment due. See me if unfamiliar with SPSS.
2	F 1/29	Identify group members and attribute for assessment project (10 hwp)
3	F 2/5	List of 10 references for assessment project (10 hwp)
4	T 2/9 F 2/12	SPSS: Correlation and Regression HW due (20 hwp) Exam 1
5		No assignment due; work on introduction for project
6	F 2/26	Draft of Introduction for assessment project (25 hwp)
7	F 3/5	SPSS: Reliability and validity analyses (20 hwp)
8		Spring Break
9	F 3/19	Exam 2
10	F 3/26	Draft of scale, method, and validation proposal due (25 hwp)
11	F 4/2	Turn in Human Research Review Form (10 hwp) Take EXAM 3 between Monday and Friday
12	F 4/9	No assignment; work on collecting data
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12	F 4/16	Deadline to collect and enter data for assessment project (10 hwp)
13	F 4/16	Deadline to collect and enter data for assessment project (10 hwp)

HOMEWORK/EXAM/ASSIGNMENT SCHEDULE (hwp = homework points; total=150)

IMPORTANT DATES AT A GLANCE

EXAMS	<u>S</u>
February 12	Exam 1
March 19	Exam 2
April 5-9	Exam 3

ASSESSMENT PROJECT DEADLINES

January 29	Identification of group members and topic	
February 5	List of 10 APA-style references for project	
February 26	Draft of Introduction for assessment project	
March 26	Draft of assessment device, method, and	
	proposal for reliability/validity/item analyses	
April 2	Proposal for Human Research Review Committee	
April 16	Collect and enter data for assessment project	
April 20	Compute reliability, validity, and item analyses	
April 30	Assessment Project Report Due	