# PSYCHOLOGY 316: Tests and Measurements 

Spring 1999

MF 1:50-3:05 in Psychology 303

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Office hours: Mon. \& Wed. 9:30-11:30
Thursday 1:30-3:00
and by appointment

## 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). Psychological testing: Principles, applications, and issues (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.

## Your final grade will be computed as follows:

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

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

| A | 93-100\% 6 | 651-700 points |
| :---: | :---: | :---: |
| A- | 90-92.9\% 6 | 630-650 points |
| B+ | 87-89.9\% 6 | 609-629 points |
| B | 83-86.9\% | 581-608 points |
| B- | 80-82.9\% 5 | 560-580 points |
| C+ | 77-79.9\% 5 | 539-559 points |
| C | 73-76.9\% | \% 511-538 points |
| C- | 70-72.9\% | 490-510 points |
| D+ | 67-69.9\% 4 | 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 | Introduction to the course and testing |  |
|  | F 1/22 | History and current status of psychological testing | ch 1 |
| 2 | M 1/25 | Statistics Refresher | ch 2 pp. 29-45 |
|  | F 1/29 | Standardized scores | ch 2 pp. 45-56 |
| 3 | M $2 / 1$ | Norms; Criterion- vs. norm-referenced tests | ch 2 pp. 56-63 |
|  | F 2/5 | Correlation and regression | ch 3 pp. 64-85 |
| 4 | M $2 / 8$ | Multiple regression and factor analysis | ch 3 pp. 85-93 |
|  | F 2/12 | EXAM 1 |  |
| 5 | M 2/15 | Reliability | ch 4 pp. 98-113 |
|  | F 2/19 | Reliability | ch 4 pp. 113-128 |
| 6 | M 2/22 | Validity | ch 5 |
|  | F 2/26 | Validity |  |
| 7 | M 3/1 | Test construction: Writing items | ch 6 pp. 152-160 |
|  | F 3/5 | Test construction: Item analysis | ch 6 pp. 160-172 |
| 8 | M 3/8 | SPRING BREAK |  |
|  | F 3/12 | SPRING BREAK |  |
| 9 | M 3/15 | Appropriate use and selection of tests | ch 7 |
|  | F 3/19 | EXAM 2 |  |
| 10 | M 3/22 | Test administration | ch 8 |
|  | F 3/26 | Test manual play-day |  |
| 11 | M 3/29 | Tests of intelligence: Binet scales | ch 10 |
|  | F $4 / 2$ | Tests of intelligence: Wechsler scales | ch 11 |
| 12 | M 4/5 | Issues in intelligence testing | ch 13 |
|  |  | TAKE EXAM 3 between Monday and Friday |  |
|  | F 4/9 | Structured personality tests | ch 15 |
| 13 | M 4/12 | Structured \& Projective personality tests | ch 16 |
|  | F 4/16 | No class: Virginia Psychological Association Meetin |  |
| 14 | M 4/19 | Projective personality tests |  |
|  | F 4/23 | Legal and ethical issues in testing | ch 20 |
| 15 | M 4/26 | Legal and ethical issues in testing | ch 22 |
|  | F 4/30 | Student presentations of assessment projects; Course wrap-up |  |

Self-scheduled final exam

## HOMEWORK/EXAM/ASSIGNMENT SCHEDULE

(hwp = homework points; total=150)
WEEK DATE DUE

2 F 1/29

F 2/5

T 2/9
F $2 / 12$

F 2/26

F $3 / 19$

F 3/26
F $4 / 2$

F $4 / 9$
F $4 / 16$
T 4/20

F $4 / 30$

No assignment due. See me if unfamiliar with SPSS.
Identify group members and attribute for assessment project (10 hwp)
List of 10 references for assessment project (10 hwp)
SPSS: Correlation and Regression HW due (20 hwp)
Exam 1

No assignment due; work on introduction for project
Draft of Introduction for assessment project (25 hwp)
SPSS: Reliability and validity analyses (20 hwp)
Spring Break
Exam 2
Draft of scale, method, and validation proposal due (25 hwp)
Turn in Human Research Review Form (10 hwp)
Take EXAM 3 between Monday and Friday
No assignment; work on collecting data
Deadline to collect and enter data for assessment project (10 hwp)
Compute reliability, validity, item analyses for project (10 hwp)
Assessment project due

## IMPORTANT DATES AT A GLANCE

EXAMS

| 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 $5 \quad$ 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
April 20
April 30
Collect and enter data for assessment project
Compute reliability, validity, and item analyses
Assessment Project Report Due

