

## Psyc 329 – Psychological Testing

*Instructor: Daniel J. Beal  
Phone: (713) 348-3917  
Office: 429E Sewall Hall*

*Class Meets: TR 1 – 2:20 PM  
Location: 460 Sewall Hall  
Office Hours: W 10:00 AM – 12:00 PM*

### Teaching Assistant

*Bobby Naemi  
Phone: (713) 348-3902*

*Office: 429 Sewall Hall  
Office Hours: T 12:15-1:00; 2:20-4:30 PM*

### Course Overview

*This course is designed to provide you with exposure to the process of test development and analysis. Because psychological testing is used in virtually all aspects of psychological research and practice, the scope and workload of the course is substantial. Requirements include performing and interpreting statistical analyses related to four projects and completing four written examinations. For those of you planning to attend graduate school in psychology, this course provides a solid foundation in the basic principles of measurement. In addition, and particularly for those of you not entertaining graduate education in psychology, this course will provide you with the tools to understand the innumerable tests that populate our modern world and the ability to evaluate their legitimacy.*

### Goals

*As the course instructor, I have several goals for each student to accomplish this term:*

- 1. Understand what psychological tests are and the differences between various types of tests*
- 2. Grasp the fundamental concepts of psychological constructs, validity, and reliability*
- 3. Be able to analyze and interpret data collected as part of a test administration*
- 4. Be able to communicate results of your analyses to a wide audience*
- 5. Have an appreciation for the many different settings in which psychological tests are used*

### Class Meetings

*Classes will be held on Tuesdays and Thursdays from 1:00 PM to 2:20 PM in 460 Sewall Hall. We will occasionally use a computer lab for some class meetings as indicated on the syllabus. Because class discussion and assigned readings will overlap only partially (particularly the hands-on class meetings in the computer lab), class attendance is essential for acquiring the content of this course and will be used in determination of final grades. If you cannot attend class, I would highly recommend dropping the course.*

## Assigned Readings and Materials Needed for the Course

Kaplan, R. M. & Saccuzzo, D. P. (2005). *Psychological Testing* (6th ed). Belmont, CA: Thomson Wadsworth.

*In order to complete the class projects, you will need to become familiar with two computer applications: Microsoft Excel and SPSS (Statistical Package for the Social Sciences), which is available through many of the computer labs on campus.*

## Exams

*There will be three exams during the semester and one final cumulative exam. The lowest grade of these four exams will be dropped. So, if you do well on the first 3 exams, then you do not need to take the final. Also, if you cannot be present for an exam, then you do not need to provide me with an excuse... you simply drop that exam. Note that this policy eliminates difficulties associated with whether an excuse is good enough to warrant making up an exam. All excuses are good enough to drop one exam, but **NO** excuse is good enough to drop a second exam. So, if you are concerned about the possibility of an emergency absence, then my advice is to do well on the other three exams just in case. If, for some reason, you will not be able to take the exam on the scheduled day, that's fine... the exam can be administered up to a few days early if one of us (the TA or myself) is available to administer it. These rules apply only for the first 3 exams, however, as the final cumulative exam can be self-scheduled.*

*The three retained exams will constitute 60% of your grade in the class (20% each), will be based on lectures and readings, and will likely vary in format (i.e., mostly multiple choice, some short answer, maybe an essay question or two, etc.). Although the first three exams are not meant to be cumulative, they may require that you know material from earlier topics. So, please do not learn for the exam and subsequently flush all learned information.*

## Group Projects

*In the first week or two of the class, I will assign you into small groups (3 to 5 people). Over the course of the semester, your group will develop a test for some psychological construct of interest, administer the test, and complete a series of projects (9% each) that will evaluate the test. The particular details of the tests and projects will be given as we approach the particular dates on the syllabus, but generally, the projects will involve an examination of basic test statistics, reliability, validity, and bias of your test. Each group will complete a single project report and grades for all members of the group will be based on the single report.*

## Participation in Psychological Research

*This course, as with all psychology courses, encourages students to gain experience with the methods and ideas underlying modern psychological research. These experiences include such things as learning about research through lectures and colloquia, serving as a participant in psychology experiments, and reading research articles. Although such participation is not required for this course, it is encouraged in the form of extra credit. For each hour of research participation, attendance at a psychology departmental colloquium, or 2-page article summary, you will receive an extra half point (.5) on your final grade up to a maximum of 2 points (i.e., 4 "participations").*

## Honor Code

*All aspects of this course are bound by the honor principle. All exam work should be your own, independent work. Also, please refrain from looking at past students' exams. Any student who engages in scholastic dishonesty, inadvertently or not, will be reported directly to the honor council. The Rice University Honor Code prevents any exceptions to this rule.*

## Learning Disabilities

*Some students with disabilities (physical, learning, or psychiatric) fail to identify themselves to the professor UNTIL a problem arises. I encourage students with such disabilities, including "invisible" disabilities like chronic diseases, learning disabilities, and psychiatric disabilities to discuss with me at the beginning of the course, after class or during my office hours, appropriate accommodation that might be helpful to you. All discussions will remain confidential. Additionally, students should consider contacting appropriate resources such as the Disabled Student Services in the Ley Student Center.*

## Grading Policy

*Final grades in this course will be calculated based on the following components (note that only three of the four exams will be included in your grade):*

*20 pts Exam 1  
20 pts Exam 2  
20 pts Exam 3  
20 pts Final Exam  
9 pts Project 1  
9 pts Project 2  
9 pts Project 3  
9 pts Project 4  
4 pts Class Attendance and Participation*

*100 Possible Total Points*

*Final Letter Grades will be distributed as follows:*

<i>100 – 98 % = A+</i>	<i>97% – 93% = A</i>	<i>92% – 90% = A-</i>
<i>89 – 87 % = B+</i>	<i>86% – 83% = B</i>	<i>82% – 80% = B-</i>
<i>79 – 77 % = C+</i>	<i>76% – 73% = C</i>	<i>72% – 70% = C-</i>
<i>69 – 67 % = D+</i>	<i>66% – 63% = D</i>	<i>62% – 60% = D-</i>
<i>59 – 0% = F</i>		

## Final Disclaimer

*For unforeseen reasons, it sometimes becomes necessary to adjust the syllabus and/or schedule. Although we will try to follow the format and schedule presented within this syllabus as closely as possible, I may find it necessary to make alterations throughout the semester.*

## Course Outline

<u>DATE</u>	<u>TOPIC</u>	<u>ASSIGNMENT</u>
Thurs 1/12	Syllabus, Introduction, Basic Terms and Ideas	K&S – Ch. 1
Tues 1/17	History of Testing	
Thurs 1/19	Fundamentals of tests	K&S – Ch. 2
Tues 1/24	Fundamentals continued	
Thurs 1/26	Statistics used in testing	K&S – Ch. 3
Tues 1/31	Advanced statistics used in testing	
Thurs 2/2	Classical Test Theory (reliability)	K&S – Ch. 4
Tues 2/7	CTT continued	
Thurs 2/9	<b>Exam 1</b>	
Tues 2/14	Validity	K&S – Ch. 5
Thurs 2/16	Validity continued	
Tues 2/21	Lab Day! (basic stats and reliability)	Hand out Project 1
Thurs 2/23	<b>Mardi Gras!</b> (or just any other day outside NOLA) Oh yeah... and Item Writing	K&S – Ch. 6
Tues 2/28	Item analysis (IRT)	
Thurs 3/2	Lab Day! (factor analysis)	<b>Project 1 due, Hand out Project 2</b>
Tues 3/7	Test administration	K&S – Ch. 7
Thurs 3/9	Test bias	K&S – Ch. 19
3/13 – 3/17	<b>Spring Break!</b>	
Tues 3/21	Lab Day! (ICCs and validity)	<b>Project 2 due, Hand out Project 3</b>
Thurs 3/23	Test bias continued	
Tues 3/28	<b>Exam 2</b>	
Thurs 3/30	Lab Day! (test and item bias)	Hand out Project 4
Tues 4/4	Interviews	<b>Project 3 due, K&amp;S – Ch. 8</b>

<u>DATE</u>	<u>TOPIC</u>	<u>ASSIGNMENT</u>
<i>Thurs</i> <i>4/6</i>	<b><i>Spring recess!</i></b>	
<i>Tues</i> <i>4/11</i>	<i>Ability testing</i>	<i>K&amp;S – Ch. 9 &amp; Ch. 10</i>
<i>Thurs</i> <i>4/13</i>	<i>Ability testing continued</i>	<b><i>Project 4 due, K&amp;S – Ch. 11 &amp; Ch. 12</i></b>
<i>Tues</i> <i>4/18</i>	<i>Personality and Attitude testing</i>	<i>K&amp;S – Ch. 13</i>
<i>Thurs</i> <i>4/20</i>	<i>Clinical personality testing</i>	<i>K&amp;S – Ch. 14</i>
<i>Tues</i> <i>4/25</i>	<i>Testing in organizational settings</i>	<i>K&amp;S – Ch. 18</i>
<i>Thurs</i> <i>4/27</i>	<b><i>Exam 3</i></b>	