PSYCHOLOGY 370 chological Testing and Measur

Psychological Testing and Measurement Spring 2008

Tuesday & Thursday, 11:00 AM - 12:15 PM Life Sciences 246

Professor: Dr. Mark Ehrhart Office: Life Sciences 285

Office hours: Thursday 2:00-3:00 PM, or by appointment

Phone: 619-594-4439

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Required text: Murphy, K. R., & Davidshofer, C. O. (2005). Psychological testing: Principles

and applications (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Course Description and Objectives

This class is designed to provide an introduction to concepts, theories, and methods regarding psychological testing and measurement. We will focus on areas such as psychometrics, test and item analysis, test construction, and applications of psychological testing in a variety of settings. The primary objective of this class is to provide you with a foundational understanding of the core issues in psychological testing and measurement. In addition, students will be required to apply the principles of test construction by designing and administering a psychological test and examining its psychometric properties.

Class Format

The course primarily consists of lecture, with application of the concepts through the course project. Active participation is encouraged and can provide a better learning environment. Please do not hesitate to ask questions when you need more information, a different explanation, another example, or clarification. You are expected to complete the assigned readings *before* each class and to come to class each time it meets. This is particularly important given the technical nature of the course material. You are encouraged to come to office hours or schedule an appointment to discuss any of the course material, exams, or the course project. Please don't wait until the end of the semester to come to me if you have any questions or are having trouble with the class. I am willing to talk to you at any time, and it is much easier to deal with any issues while there is still time to address them.

Website

The course website is part of the Blackboard system at SDSU, and it can be accessed at http://blackboard.sdsu.edu. You are not required to use the website; it is there for your convenience. The purpose of the website is to post course material such as the syllabus, assignments, review sheets for exams, and lecture outlines. Assignments and review sheets will be posted the day after they are handed out in class. Lecture outlines will be posted by 5 PM the day before class. Obtaining lecture outlines is not a substitute for coming to class. Rather, outlines are intended to be an aid in taking notes during lectures. If you have trouble with Blackboard, please refer to the "student help" section of the website.

Course Requirements

Exams. There will be **five multiple-choice exams** during the semester, which are designed to assess your knowledge of material from the lectures and the textbook. The first four exams are not intended to be cumulative, but they may incorporate some material from previous exams. The fifth and final exam will be cumulative. I will give you review sheets for each exam, so there should be no surprises. *I will drop the lowest grade of your five exams*. Therefore, if you take all the exams and do not want to take the final exam, then that can be the exam that you drop. Or, if you miss an exam during the semester, then you will receive a zero for that exam, and that will be the exam that you drop. Or, you can take all five exams and drop the lowest score. Note that because I drop the lowest exam score, **there are no make-up exams**. If you miss one exam, then that will be the exam that you drop. If you miss two exams, then I will drop one and you will get a zero for one of your exam grades. Absolutely no deviations from this policy will be tolerated. Although this policy may seem tough, I believe it is fair. Everybody will receive the same treatment, and there will be no exceptions.

There will be information in the book that I do not cover in lecture; there will be information in the lecture that is not in the book; and there will be information that is from the book that I will also cover in lecture – all of this is testable material. Please bring NCS Form No. 19641 [Blue] and two No. 2 pencils to each exam.

Assignments. The course project is designed to assess your ability to put the course material into practice. More specifically, you will be required to design and administer a psychological test and to report on the psychometric properties of the test. The course project will be broken into three separate assignments, and more information about each assignment will be provided in class throughout the semester. Note that the project assignments are individual assignments and should reflect your own independent work; see the section on academic integrity for more details.

The due dates for the assignments will be included in the assignment handouts. The assignments are due by the beginning of class on the day they are due. Five percent will be deducted if you turn them in after the beginning of class (11:00 am) on the due date, and ten percent (one letter grade) will be subtracted for every day (including weekend days) the assignment is late after that. The only valid excuse for a late assignment will be for a family or medical emergency, and you will need valid proof of the emergency. Note that computer problems are <u>not</u> valid excuses. This means that if an assignment is not completed because a "computer crashed" the night before it is due, it is still considered late. You must plan ahead to make sure the assignments will be completed on time.

Evaluation

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Your grade will be based on a
                                           The final grading scale will be as follows:
maximum possible of 700 points:
Exam:
                      100 points
                                           651-700 = A (93.0\% +)
                                                                         511-538 = C (73.0-76.9\%)
Exam:
                      100 points
                                           630-650 = A-(90.0-92.9\%)
                                                                         490-510 = C - (70.0-72.9\%)
Exam:
                      100 points
                                           609-629 = B + (87.0-89.9\%)
                                                                         469-489 = D+ (67.0-69.9\%)
                      100 points
                                           581-608 = B (83.0-86.9\%)
                                                                         441-468 = D (63.0-66.9\%)
Exam:
Assignment 1:
                      100 points
                                           560-580 = B - (80.0-82.9\%)
                                                                         420-440 = D-(60.0-62.9\%)
Assignment 2:
                      100 points
                                           539-559 = C + (77.0-79.9\%)
                                                                         0-419 = F (Below 60\%)
Assignment 3:
                      100 points
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Note: There are four exams throughout the semester plus a cumulative final. The lowest of those exam grades is dropped, and the remaining four are used to calculate the final grade.

General Policies

Class attendance. Regular attendance is necessary to get a good grade in this class. Given the content for the exams that will come from lectures and the technical nature of the topic, I <u>highly</u> recommend that you make every effort to make it to class. If you miss a class, you are responsible for the material covered during that class, including any handouts, changes to the class schedule, or other information given out. Please make sure that you have e-mails/phone numbers of your fellow classmates so that you can obtain any notes or information if needed.

Students with special needs. Any student with a disability or any other special circumstances should contact me as soon as possible (and certainly before the first exam) so that we can discuss appropriate accommodations to facilitate your full participation in the class.

Plagiarism and academic integrity. It is not expected that plagiarism or other forms of academic dishonesty will be encountered in the class. Under RARE circumstances it is possible for someone to unknowingly plagiarize due to ignorance of what actually constitutes plagiarism. To minimize this possibility, it is worth clarifying the nature of plagiarism.

Stealing others' work (for example, copying others' test answers or assignments) and passing it off as your own is an example of plagiarism. It is also plagiarism in academic writing to present others' ideas as if they were your own. To avoid the appearance of plagiarism in written work, it is important to reference the sources of your ideas so as to keep clear the difference between others' ideas or arguments and the ideas or arguments that are uniquely yours. Submitting work for a grade that has already been submitted for a grade in another course is not allowed, and is considered cheating.

The assignments in this class are individual assignments. Therefore, collaboration with others on these assignments will be considered an act of academic dishonesty and will be dealt with through the proper university channels. At a minimum, such actions will result in a zero on the assignment, and possibly more serious consequences (e.g., an F in the class, probation or expulsion from the university). You should ensure that the assignments reflect your own, independent work. You can request help from the instructor or the teaching assistant if you have questions, but you should avoid asking your fellow classmates to avoid any possible problems.

Plagiarism and cheating in any form will not be tolerated, and will be dealt with through the appropriate channels. See me if you have any questions about what constitutes plagiarism or other violations of academic integrity policy.

Office hours. I encourage you to stop by my office hours if you have any questions, problems, or suggestions about the course, or if you want to discuss your career interests or graduate school. If my office hours are not convenient, feel free to contact me to make an appointment.

Class Schedule and Readings

Date		Topic	Textbook Chapter(s)
Jan.	22	Course overview	
	24	Introduction to tests and measurements	1
	29	Item and test development	DeVellis article, 11 (pp. 226-231)
	31	In-class exercise	
Feb.	5	Scales of measurement and variability	4 (pp. 72-78, 80-83)
	7	Scales, transformations, and norms	5
	12	Catch-up and review	
	14	Exam 1	
	19	Correlation and regression	4 (pp. 83-86)
	21	Reliability	6 (pp. 116-128), 7 (pp. 134-143,
	26	Reliability	149-150)
	28	Reliability	
Mar.	4	Item analysis	10 (pp. 202-213)
	6	Catch-up and review	
	11	Exam 2	
	13	Validity: Content validity	8 (pp. 153-162)
	18	Validity: Construct validity	8 (pp. 162-174)
	20	Validity: Criterion-related validity	9
	25	Computerized testing	12
	27	Catch-up and review	
	1	NO CLASS – SPRING BREAK	
Apr.	3	NO CLASS – SPRING BREAK	
	8	Exam 3	
	10	NO CLASS – SIOP CONFERENCE	
	15	Ability testing	2 (pp. 20-38), 13 & 14
	17	Issues in ability testing	3, 15
	22	Issues in ability testing	
	24	Interest testing	2 (pp. 38-42), 16
	29	Personality testing	2 (pp. 42-49), 17
May	1	Testing in context	18-20
	6	Catch-up and review	
	8	Exam 4	
	<i>15</i>	FINAL EXAM: 10:30 AM – 12:30 PM	

Note: Dates and topics on this class schedule are tentative and subject to change. Students are responsible for any additional reading/material announced in class or indicated on a review sheet.