Dr. Melanie Page	Psychological Testing (PSYCH 4813)	Spring 2010

Class: TR 2:00 – 3:15   CLBN214
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"Forget not that the earth delights to feel your bare feet, and the wind longs to play with your hair"
Kahlil Gibran

What will I learn in the course?

Overall Goal: To understand the statistics behind what makes a test a good test in order to make informed test giving and taking decisions throughout your life. Testing is everywhere and this class will equip you with the information needed to make informed choices about testing in your personal and professional life.

Course Objectives: Upon completion of this course students will

1. be able to explain and use core methodological and theoretical concepts concerning psychological measurement (e.g., reliability and validity).
2. understand ethical and professional responsibilities in psychological test design and use (APA standards).
3. be able to evaluate professional and popular press articles concerning basic measurement issues

Other skills students will learn:

1. make effective judgments about testing situations in their own lives
2. increase your ability to interact with others and work on teams
3. increase your knowledge about yourself and how to contribute to academic and the broader communities.

Why is this material important?

Modern American society has developed hand in hand with psychological measurement. The average citizen is evaluated from birth through death by educators, employers, advertisers, pollsters, businesses, counselors, etc.

This course focuses on test construction and the psychometric properties of tests. Classical and modern methods of assessing psychometric properties are covered. You should gain enough understanding of these principles to be able to evaluate tests you encounter in the literature and in your lives. You will then use this knowledge to discuss and evaluate a variety of types of tests including IQ, personality, and personnel selection. Testing in educational and clinical settings is also covered.

After completing this course you will be a much better informed testing citizen as you go forward in your personal and professional lives.

Who is most likely to succeed in this course?

Persons who have completed the prerequisites of Introductory Psychology (Psyc 1113) and Quantitative Methods (Psyc 3214) will be the most prepared for the course. In addition, you should be familiar with or willing to learn APA writing style. If you have not completed 3214 or have not worked with APA style, please let me know so that I can provide you with supplementary material to help you succeed in this class.

What does this class look like?

This course is perhaps going to be unique in your undergraduate career in terms of the course format. The course is taught from a team-based learning perspective. No matter your plans after graduation – graduate school or starting a career, ability to work in teams and excellent writing skills are the two most sought after skills. You will have the opportunity to work on both in this course.

Team-Based Learning: Team-based learning was developed in business and is used by all other fields. The basic idea is that the students read and test on the basic facts of a unit before the start of the unit and then spend the time in class doing hands-on activities and projects putting the material into action. In addition to being able to learn and work on interpersonal interaction skills, you will spend most classes focused on doing activities and projects putting your knowledge gained into practice. The really exciting thing is that we will be working together to co-create a learning experience. While this format may be different for most students, research shows that you learn the better material and engage with that material on a deeper level.

Working in a team is different than group work. In a team, each member does their best work not only for their own good, but for the good of the team. All of the work you need to do for team projects will be done in class. Almost all classes will involve hands-on activities and putting what we read about from the textbook into practice. Please be aware of being a positive, productive team member. I will make materials available on D2L that will be helpful to you and your team in achieving this goal.

Some nuts and bolts

D2L: I use D2L extensively in this course. All of the necessary reading material for the course (with the exception of the textbook) is on D2L. I also post different opportunities for extra credit, scholarships, talks of interest, etc on the news section. If a course change deadline is necessary, I will post it as well as email it to you. D2L is a great resource to get you information in a timely manner.

Attendance: Because being in class it vital to yours and your teams' success, you will earn points for being in class

Classroom ethics:
> Academic honesty is expected. See the section on academic dishonesty at
> http://osu.okstate.edu/acadaffr/aa/syllabus.htm for OSU penalties.

> Appropriate behavior in class and in all interactions with me and classmates is expected.

Accommodations: Any student who needs special accommodations should see me to make proper arrangements. You must be present to take the in-class readiness tests as they are taken as a team.

Text: The book for the class is Psychological Testing and Assessment by Cohen and Swerdlik. If you are graduate school bound, now is a good time to buy the APA style manual (6th edition).

Assignments and points they are worth

Written Individual Assignment: You will write an APA style paper on a test you are going to develop as a team. While the test development is done as a team (in class), the writing it all up is done by each individual person. See writing assignment handout. This is worth 130 points. (INDV)

Good Citizen Points: College is about more than just learning the course material – it is about learning who you are and what type of person you want to be. It is about learning to be a member of the academic community and the broader community, as well as how to value yourself as you move forward in your professional careers. A good citizen of the world can be so in several realms: being a good academic citizen, being good to others, and being good to self. To keep life simple, I am going to award 15 points in this category, but since the whole category is worth 30, I will multiply your points by 2 to get your final total for citizen points. Academic: You can get up to 6 of your points from either participating in research through SONA or by attending research based colloquiums announced in class (1 point per talk); Others: up to 6 points for being good to others, this can involve community service projects, making a donation, attending fund-raising dinners, events at which you become a better global citizen (cultural events), etc; Self: up to 6 points being good to yourself such as attending yoga class, trying a meditation practice, doing a sport, eating nutritiously for a week, starting or maintaining a workout program, going to the theater or to a movie or out with friends (doing healthy things with them), learning something for fun, reading a book for fun (it is not for any class), etc. This is a very broad category – one point for each of the types of things you do. For example, let's say you go to yoga twice a week for 3 weeks – this counts as one point because it is yoga. You will be keeping a journal as part of class and will document your good citizen points here. (INDV)

Attendance: Attendance is worth 30 points. You will earn one point per class, so there are two freebies thrown in. If you attend all the classes, you can use the extra two points for extra credit. (TEAM)

Journal: You will record your citizen points in the journal. Your journal has 3 main purposes. The first is for you to have a place to record your good citizen points. The second is as a place to record your thoughts, reactions, etc to the class, to things you see in the media about testing, things you encounter in other classes or research articles about testing. Finally, in an effort to continually improve the course, you will be asked to rate each class activity as we complete it. You will receive participation points for turning in a complete journal (10), but the journals themselves will not be seen by the instructor during the semester. They will be collected by the teaching assistant who will hold them until after final grades are turned in, thus the instructor will not see any comments until after final grades are turned in. (INDV)

RATs: There will be 3 T/F, multiple choice Readiness Assessment Tests (RATs) given at the beginning of the 3 early units. The same RATs will be given to individuals and teams. If you are not present to take a RAT you will get a 0 on the individual test. Please note the test dates on the course outline. On team exams, all team members will receive the same score. INDV RATs are each worth 40 points, TEAM are worth 37.5.

Final RAT: The questions will all focus on how the knowledge we gained in the first half of the class is applied. Format is TF and MC and will be the same as the first 3 RATs. Although it may seem like a lot of time will pass between RAT3 and the Final, all we are doing in the second half is applying all of our knowledge gained in the first half. There is a practice final posted on D2L to help you organize your learning in the second half of the semester. I will also include all technical information (e.g., the value of the reliability coefficient) you need to get the answer correct within the actual test question, so you do not need to read every article (see discussion question section). INDV is worth 70 points and TEAM 67.5

Here is how the RATs will work. You will have the entire class to complete both tests if you need it. No team can start working until all team members have turned in their individual tests, thus it will greatly benefit obviously yourself, but your team as well if you come well-prepared. On the team test, if you get the answer right on your first try, you get 4 points; if you get it right on the second try, you get 2 points; if you get it right on the third try, you get 1 point. For each team test, there will be 4 scratch off boxes and there is a * under the correct box; thus if no other boxes are scratched off and you get the *, you get 4 points. If one other box and the * box are scratched off, then you get 2 points; if two other boxes and the *, then 1 point. Once your team has turned their test in, you may write an appeal for any item you disagreed with (see directions on appeals for how that works). Obviously any TF question is all or nothing. The team points are then converted to the actual points based on the scale being used. For example, the first 3 TEAM RATs are worth 37.5 points, but if it had 10 questions, to get partial credit on the team exam, each Q must be worth 4 points, thus a total of 40 points. You simply convert the 40 point scale back to 37.5 points by multiplying the points correct by 37.5 and dividing by 40. This is a ratio problem from algebra, your percent score is the same on either scale; e.g., if you got 36 out of 40, this is a 90%, and to convert to how many points you record for yourself, take 36*37.5 and divide that by 40. You will get 33.75 and 33.75/37.5 is 90%. This may seem unnecessarily complex, but is based on the idea that we want each item to have a certain weight towards your final grade, thus in determining how many points each thing you do in class is worth, I went backgrounds from what percentage of your grade that item should reflect to the points.

Team projects: The first two projects will involve your team acting as a consulting firm or a company. You will be given a specific issue being faced by your company relative to testing and be asked to solve that issue. See the actual team project handouts for more details. You will then present your solution to the class. You must be present at your team's presentation in order to receive the points for the project The first project is worth 40 points, the second is worth 40 points, and the final project is worth 55, thus 135 total points. The last project will be your team's presenting the results of your test development project. I expect presenters to dress nicely and use good presentation skills – you do not need to wear business or business causal, but should look nice. I will give you a grading rubric well before the presentations so that you know what the criteria are (TEAM).

Discussion questions: Part of this class is going to be team discussion of articles relevant to testing. For each article, you will write up a short summary paragraph to be turned in. Each article will have discussion questions associated with it – you should be able to answer the questions but your summary can and should go beyond simply listing the answers to the questions. These questions are a guide as you are studying for the final exam. You need to turn in your summary during class to get credit. You need to turn in 10 summaries; each one is worth 9 points, so 90 total points. Your undergraduate TA will grade these on a scale of 9 being excellent: in addition to answering all of the discussion questions, summary went beyond, student used critical thinking; 6 is very good, the student answered all of the questions and went a little beyond those in their summary, but did not put a lot of critical thought into their summary; 3 points is either just did a summary and did not answer the questions or just did the questions and no summary; and a 0 would be either no work or partial work of poor quality. You need to do a total of 10 summaries – you can choose which 10 to turn in and if you do not like a grade on an earlier assignment, you can replace it with a later grade, but cannot get extra points. You should choose articles based on your own interests, the final exam questions are based on your understanding how to apply concepts to a particular testing problem – you do not need to read every article, only practice pulling relevant information to be able to answer questions. These points are under team performance (TEAM).

Team maintenance: Each individual will rate the helpfulness of all the other members of their team during the final exam period. Individual team maintenance scores will be the average of the points they receive from the members of their team. Team maintenance will be scored to 10 points and then multiplied by 15 to get the possible 150 points (PEER).

Each person on the team will have so many points to give away. As an example, assume that there are six members in a team, an example of this procedure would be as follows:

Each individual must assign a total of 50 points to the other five members in their team (10 possible points per person, 5 other people on the team). Raters must differentiate some in their ratings. This means that each rater would have to give at least one score of 11 or higher with a maximum of 15 – and at least one score of 9 or lower. In a 5-member team, members would assign 40 points, in a 7-member team; members would assign 60 points, etc. As a result, team Maintenance scores will produce differences in grades only within teams. Consequently, team members can't help everyone in their team get an A by giving them a high peer evaluation score. The only way for everyone in a team to earn an A is by doing an outstanding job on the individual and team exams and projects. I will then take your score from the 10 point scale and multiply by 15 to get your total points. Note that if you were an outstanding team member and several people give you more than 10 points, your score here can actually exceed the 150. If all team members contribute equally (as does happen), you can set it up so that everyone gets the 10 points).

Extra Credit: You can get up to 10 points in EC by attending all classes, doing extra academic good citizen points, or writing a one page reaction paper using material from the course to testing in the media (either print or online; up to 5 points, one point each paper).

Putting the points together: Grades

The grades will be determined by scores in three major performance areas: Individual Performance (INDV), Team Performance (TEAM), and Team Maintenance (PEER). Each of these categories is worth a certain percentage of your grade (see below). There are a total of 1000 points available. Your INDV grade will make up 37% of your grade, your TEAM grade will be 47%, and your PEER grade will be 16%.

Grade Weights

Individual performance (apprx: 37%)		Max Points Possible
INDV RATs	(34%)	120
Citizen points	(9%)	30
Final RAT	(20%)	70
Written Paper	(37%)	130

Team Performance (apprx: 47%)		
TEAM RATs	(25%)	112.5
Projects	(30%)	135
Final RAT	(15%)	67.5
Discussion questions (20%)		90
Participation	(10%)	45 (15 for the journal; 30 for attendance)

Team maintenance (apprx: 16%)		
Ratings	(100%)	150

<u>Determination of final grades:</u> To calculate your final grade, you take all the points you earned and divide by 1000. I will keep your grades up to date on D2L, but if you have any questions along the way, please ask as it is important that you understand what is expected of you in the course so you can be optimally successful.

If you get 90-100% you get an A; B, 80-89; C, 70-79: D, 60-69: F, 59 or less. I follow rules of rounding for determining grades – if you get a .5 or above I round up to the next whole number.

The syllabus is my best guess at what we will cover and what our pace will be. As such, it is subject to revision. Any changes in due dates or test dates announced in class supersede those in the syllabus.

Class Outline

Day:	Topic	Readings	Doing in class	DUE
1/12 and 1/14	Intro to course			
1/19	**RAT #1**			
	Intro to testing	D2L lecture notes	After exam, brainstorm	Email topic to MP
	Ethics, legality of testing	Chapters 1 and 2	final project topic, teams choose ethics case	Case # to MP
1/21	Overview and ethics		Bring the assigned ethics cases	
1/26	Brief overview of reliability and validity	BRING LAPTOP	Find an online test	Send link to TA
1/28	**RAT #2**			
	Reliability and Validity	D2L lecture notes Ch. 4, 5, 6	Bring case studies (on D2L)	
2/2	R&V continued	Case Studies		
2/4		BRING LAPTOP	Start Validity assignment (VA)	
2/9		BRING LAPTOP	Finish VA 1-4	
2/11	**RAT #3**			
	Test development/pilot testing	D2L lecture notes	start creativity test assignment	
	Applications and Test Evaluation	Harris, Herzberg articles Ch. 8		
2/16	Developing tests		Finish Creativity test	
2/18	Bringing it all together	BRING LAPTOP	Write questions for your measure	Email Q's to TA REFS to TA
2/23	Generalizability Theory/ Multitrait-Multimethod	Shavelson, article		Answers to Questions
2/25	Factor Analysis	Primavera, Forester, Greenblatt		Answers to Questions
3/2	Finish topics	SPSS output	Bring output	
3/4	SPSS overview	Ch. 3, 3214 notes	Meet in 015 North Murray	Email draft of INTRO to Writing Fellow

3/9	IQ	D2L notes Ch. 9 & 10 BRING LAPTOP	Finish VA 5-6	Email TA final Q's & validity plan at end of class
3/11	IQ Guest Lecturer: Stephanie Backof	pick two/three articles Ch. 11		Summaries

3/16 and 3/18 SPRING BREAK

3/23	Personality Guest Lecturer: Stefanie Badzinski	D2L notes, Ch. 12 & 13 pick two/three articles		Summaries Meet with Writing Fellow this week
3/25	Work on Project 1	LAPTOP		Data should be collected
3/30	Continue work on Project 1/Start Project 2	LAPTOP		Revised draft of Intro to TA
4/1	Present team project – 10 minutes per team max			
4/6	Work on Project 2	LAPTOP		
4/8	Using SPSS for rel and val	**Data must already be entered** Class in 015 NM		
4/13	Work on Project 2/3	LAPTOP		
4/15	Finish analyses	Class in 015 NM		
4/20	Present project 2 - 10 min max	Present Project 2	Play Project 2	Draft of whole paper to TA
4/22	Testing in I/O and clinical	Pick 2/3 articles Ch. 14, 15, 16		Summaries
4/27	Work on final project presentation. Review for final	LAPTOP		
4/29	**Final RAT**	Comments on draft due back to you		

5/4   Present final team project – 15 minutes per team during final exam time which is 10-11:50 am. Turn in paper electronically to MP by midnight 5/6.