

Psychology 506, Psychological Measurements (3 hrs)

Fall 2016 Syllabus

Dr. Leigh Armistead Class Meets: TTh, 2-3:15 pm in 119 Kinard
Office: 110-C Kinard Office Hours: MW 12:00-2:00; T 11-1 or by appt
Office Phone: 803-323-2631 Email: armisteadl@winthrop.edu

Required Textbook:

Neukrug, E. S. & Fawcett, R. C. (2015). *The essentials of testing and assessment: A practical guide for counselors, social workers and psychologists*. Stamford, CT: Cengage.

Supplemental publisher materials: <http://tinyurl.com/q745v6r>

Course Webpage: link to be provided in class

Learning Outcomes: Students in PSYC 506 should:

1. Develop knowledge of and demonstrate deep understanding of, psychological measurement including standardization, reliability, validity, scoring and statistics, interpretation, uses, theories, historical perspectives and controversies.
2. Understand psychologists' ethical and professional responsibilities in psychological test design and use and be able to identify inappropriate assessment practices.
3. Develop a pre-professional level of skill in development, administration, scoring, and evaluation of assessment instruments.
4. Learn to make effective judgments about testing situations in their own lives.
5. Use critical thinking and scientific methods to evaluate measurement claims from a variety of sources.
6. Employ a variety of strategies as they search for relevant scholarly publications and appropriately integrate findings into their own work.
7. Respect human diversity and become capable of articulating (in written and oral formats) the potential effects of psychological measurement on individuals, groups and organizations, and society.

University-Level Competencies: PSYC 506 is also intended to help students further develop these university level competencies:

1. To think critically and solve problems.
2. To be personally and socially responsible.
3. To communicate effectively.

Class Format:

The class will be taught in such a way as to increase the likelihood that each student will understand and retain the course content and be able to apply it in the "real world". Methods of instruction may include the following:

1. Lecture with videos and slides
2. Discussion groups
3. Group problem solving with sample situations
4. Outside experiences
6. Student presentations

It is very important that each student be an active member of the class by volunteering in discussions and problem-solving strategies. The instructor will not force participation by focusing on individuals. Rather, it will be the responsibility of each student to take the appropriate initiative.

Course Requirements:

1. Class participation and attendance are important. To successfully complete the course, no more than 3 classes can be missed. Attendance will be checked. It is important to be on time because of planned activities. If you arrive after attendance is taken, you could receive an absence. Participation and attendance will be considered in grading.
2. *Readings & Quizzes.* I have chosen a very readable text for this course and want you to read and understand it. I believe I can be more valuable to you if I don't tell you what's in the text in weekly lectures. Instead, I'll devote much of our time together supplementing the text with activities, demonstrations, and illustrative case examples from my practice as a school psychologist. To encourage you to study the text assignment each week, we'll have ten brief 10-point content quizzes (15 minutes max) as shown in the tentative course schedule. Quizzes will be *open notes/closed book* and may feature any type of test item. You may utilize as many hand-written or typed notes as you like but no text or copies of the text. Some quiz items will require you to *apply* text concepts not just report on what you've read. *No make-ups will be available for missed quizzes.*
2. *Exams.* The weekly quizzes are equivalent to a 100-point exam. A midterm and a comprehensive final exam will be given. Examinations may include questions on reading assignments as well as class discussions and activities.
3. *Electives.* Students will complete three elective projects outside of class. Please see the Elective Activities section of this syllabus and the course webpage for options and requirements. These projects will be due as specified in the course schedule below.
4. *Graduate Student Project.* Graduate students will also complete a test review, prepare a summary of that review, and conduct an activity related to their tests for the class. That activity should include a very brief oral summary of the review but should mostly consist of demonstrations of test administration, completion of portions of the test by the class, or other activities as appropriate. See the Graduate Student Project section and the course web page for test choices and additional information. Please discuss your planned activities with me several days prior to class.
5. *Extra Credit.* Extra credit may be available for participating in research. There will be non-participation options for any experiment participation opportunities. All extra credit opportunities will be announced in class. You must be present to earn any extra credit points. Additional information about this option will be placed on the course web page.

Expectations:

1. Please purchase the required textbook and read it. If you must delay purchasing the text, please discuss the situation with me.
2. All written assignments must be submitted on paper in person rather than by email. Please use a standard 12-point font, and **staple the pages**. You may print double sided if you have that capability. APA style is required for citations and references. Please don't use plastic covers or folders. There will be a 5-point per day penalty for late assignments up to a maximum of half the total credit.
3. Make-up exams will be given only in cases of serious illness or family emergency and when the instructor is notified *before the exam*. If your instructor determines that a make-up exam is appropriate, it must be completed within a week of the test date and the score will be lowered by one full letter grade.
4. Incomplete course grades will be given only in very unusual circumstances.
5. Collaboration among students is encouraged, but all written work must be solely that of the student whose name appears on the paper. Students should know about the other topics being pursued and can freely share research articles and books that might be helpful to others.
6. Cheating or plagiarism will result in a grade of zero on the assignment or test that is affected and could result in a grade of F in the course. Please review Winthrop University's Student Conduct Code at <http://www2.winthrop.edu/studentaffairs/Judicial/judcode.htm>

7. Phones: please turn off and put away cell phones. If you need to be on call during class, please discuss this with your instructor. (No texting, please. If I can't, you can't!)
8. Laptops: although laptops and tablets may be used for note taking, this use will be monitored. Please have nothing on your screen but a word processing document. Surfing could result in loss of the privilege of bringing your laptop to class.
9. Winthrop University is committed to providing access to education. If you have a recognized health condition which may adversely impact your ability to access academics and/or campus life, and you require specific accommodations to complete this course, contact the Office of Accessibility at 803-323-3290, or, accessibility@winthrop.edu. Please inform me as early as possible, once you have your official notice of accommodations.
10. This syllabus reflects a tentative schedule but any significant changes will be discussed with the class and ample notice provided regarding assignment due dates.
11. Winthrop Student Code of Conduct: As noted in the Code: "Responsibility for good conduct rests with students as adult individuals." The policy on student academic misconduct is outlined in the *Student Conduct Code Academic Misconduct Policy* in the online Student Handbook (<http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf>).
12. Grading for PSYC 506 will be as shown in this table:

Grading		Undergraduates		Grad Students	
		391-420	A	484-520	A
Midterm Exam	100 pts	378-390	A ⁻	468-483	A ⁻
Final Exam	100 pts	365-377	B ⁺	452-467	B ⁺
Quizzes	100 pts	349-364	B	432-451	B
Elective Assignments	120 pts	336-348	B ⁻	416-431	B ⁻
Undergrad Total	420 pts	323-335	C ⁺	<416	F
		307-322	C		
Grad student project	100 pts	294-306	C ⁻		
Graduate Student Total	520 pts	281-293	D ⁺		
		265-280	D		
		252-264	D ⁻		
		<252	F		

Tentative Course Schedule: PSYC 506, Tests and Measurement

Unit	Dates	Topics	Events, Reading, Assignments
1	8/23 8/25	Introductions, course overview, intuitive knowledge base discussion History of testing and assessment	Read ch 1
2	8/30 9/1	Ethical, legal & professional issues	Read ch 2; quiz on 8/30
3	9/6 9/8	Diagnosis & classification in assessment: DSM and IDEA systems	Read ch 3; quiz on 9/6
4	9/13 9/15 9/20 9/22	Test reliability, validity, practicality & fairness	Read ch 5; quiz on 9/13 <i>Elective #1 due 9/13</i>
5	9/27 9/29	Making meaning out of raw scores	Read ch 6; quiz on 9/27
6	10/4 10/6	Creating new scores to interpret data	Read ch 7; quiz on 10/4
	10/11	Midterm Exam Units 1–6	
7	10/13 10/18 10/20	Intelligence testing	Read ch 9; quiz on 10/13 <i>Elective #2 due 10/15</i>
8	10/25 10/27	Neuropsychological assessment	Read ch 9 & handout; quiz on 10/25
9	11/1 11/3	Achievement testing	Read ch 8; quiz on 11/1
10	11/10 11/15	Career & occupational assessment	Read ch 10; quiz on 11/10
11	11/17 11/22	Clinical & personality assessment	Read ch 11; quiz on 11/17
12	11/29 12/1	Informal assessment: observation, rating scales, environmental & performance-based assessment	Read ch12; no quiz <i>Elective #3 due 11/29</i>
	12/9	Final Exam, 3–5:30 p.m.	

Elective Activities (Choose three)

Note: papers discussing your work on the three electives should not need to be more than 2000 words each and could be less. (Please don't add unnecessary text to reach 2000 words!) I know some of the information is technical, but you should not use any full or partial quotes from your sources; all information should be entirely in your own words. The course web page provides links to resources and references that supplement these directions.

All written assignments must be submitted on paper in person rather than by email. Please use a standard 12-point font, and **staple the pages**. You may print double sided if you have that capability. APA style is required for citations and references. Please don't use plastic covers or folders. There will be a 5-point per day penalty for late assignments up to a maximum of half the total credit.

1. Research and Review the SAT or ACT. Be sure to include:

Test's publisher, cost, purpose, etc.

Test mean, median, mode, standard deviation, range, etc.

Discuss the test's reliability

Discuss the test's validity, especially predictive validity

Discuss the relationship of your own SAT scores to grades in college thus far.

Discuss the apparent usefulness and any limitations of SAT scores.

2. Test-retest Experiment

Go to <http://www.authentic happiness.sas.upenn.edu/seligman.aspx> and register as a user.

Be sure to read the information about Dr. Martin Seligman and his work on the first page.

Look through the available online tests. Choose one that interests you and be sure it has at least 12 items. Take the test and print your score report.

Wait at least 7 days. Take the test again. Try not to remember your first answers. Be honest.

Report both sets of scores and describe and discuss any similarities.

Write an evaluation of the test and why you think your scores were similar or dissimilar the second time you took the test.

3. Self-administer the Stroop Test

Research and discuss the purpose, procedure, instructions, norms, reliability, validity, etc. of the Stroop Test.

Go to the following link and take the test following the page's instructions:

<http://www.thepersonalbest.com/SelfTests/StroopEffectsMainFrame.html>

Report and interpret your personal results.

4. Test Purchase Decision Making

Use the *Mental Measurements Yearbook* or other resources to review two instruments: the *Adult Attention Deficit Disorders Evaluation Scale* (McCarney, Anderson, & Jackson) and the *Attention Deficit Scales for Adults* (Triolo & Murphy). Pretend you are the director of a college counseling center, and you want to purchase a test of this type, but can only afford to buy one instrument. Read the test reviews and briefly describe in your own words: a) the test itself and what it is designed to measure, b) the norm group used for each test, c) a specific piece of evidence in support of each test's reliability, and d) a specific piece of evidence in support of each test's validity.

Based on this information (and other pertinent details from the test reviews), indicate what test you would purchase for your counseling center and why (make sure to support your answer). Then, discuss what you learned from this exercise and explain why understanding measurement concepts is important for counselors and other mental health professionals. No citations are necessary because I know your source for this essay.

5. Research and Critique Mensa

Mensa is an organization in which the key requirement for membership is being in the top 2% of the population regarding intelligence test scores. The notion of such a club seems elitist to some but is appealing to others.

Read the webpage article about Mensa and sample test items (mensa.pdf). Using the article and other resources that you locate, write an essay expressing well supported opinions about the organization *and* the test procedures used to screen for membership. Remember: you should be discussing testing and assessment and not just stating your opinion about whether such a club is desirable or not.

6. Administer a Neuropsychological Examination

You are a neuropsychologist performing routine neuropsychological screenings on children who come to the pediatric clinic where you work. Read the neuropsych1.pdf file available on the webpage. Then select any 3 of the 4 tests in Table 15-1 and administer them to a fellow student in the class. Then select any 3 of the 4 tests in Table 15-2 and do the same.

Write a brief report about your findings. Include a description of what other tests or test batteries you'd want to administer and explain why.

Then, trade places--you become the "patient" and your partner gets to be the neuropsychologist.

7. Parent Interview

Conduct an in-person, live, face-to-face (not Facetime) interview with the parent of a child with a disability about their experiences with testing. Try to find out what types of tests their child was given. Find out how what they liked or disliked about the process. Determine if they thought the testing was helpful and in what way.

Write a summary that includes the name of the person you interviewed, their phone number or email, and the date of the interview.

8. Take a Personality Test

Go to <http://www.personal.psu.edu/j5j/IPIP/ipipneo120.htm> and take the 120 item IPIP-NEO which is similar to the NEO PI-R. Write a brief report about your experience with this personality measure. Discuss your opinion of the accuracy of your results.

Graduate Student Assignment: Standardized Test Review & Presentation

Pairs of students will complete a review of a standardized test assigned from the following list. These tests may be checked out from the School Psychology Program graduate assistant. We will meet as a group and decide who will review each test.

1. Developmental/academic screening: *Battelle Developmental Inventory*
2. Academic achievement: *Key Math*
3. Language: *Comprehensive Test of Phonological Processing (CTOPP)*
4. Academic Aptitude: *Naglieri Nonverbal Ability Test (NNAT)*
5. Neuropsychological: *Quick Neurological Screening Test (QNST)*
6. Social/emotional: *Manifest Anxiety Scale for Children (MASC)*

Each review should be 2-3 pages in length (single-spaced), and provide the following information:

1. Name of test
2. Author(s) names
3. Publisher
4. Costs of purchasing, administering, and scoring the test
5. Age range/grade level(s)/appropriate groups
6. Purpose of the test
7. Description of the test
8. Administration of the test
9. Other useful information (special features, validity/reliability data, etc)
10. Your critical review/opinion (*this should be the meat of your review*)

Classroom Activity (Please discuss plans with your instructor)

1. Provide copies of your review for your classmates and other handouts or samples as appropriate.
2. Present a brief summary of your test. Powerpoint slides should *not* consist of the text you plan to say. Instead illustrate with pictures, videos, etc.
3. Conduct an activity that will help your classmates become knowledgeable about your test as an example of the type of test we're studying that week. As appropriate for your test, you might:
 - Demonstrate how to administer the test with a classmate as a subject. Score and discuss your results.
 - Have each member of the class complete a portion of the test. Then score the test and discuss the meaning of the results.
 - Have class members administer part of the test to each other. Score and discuss the results.
 - Remember: your goal is to *help classmates learn* about the test not just to demonstrate how much *you've* learned about it.
 - Discuss the date for your activity with your instructor. Generally, it will be one of the class sessions during the week we are studying your type of test.