

**PSYC 3450: Psychological Tests and Measurement**

**#26998**

**3 Credit Hours**

**Instructor:** Dr. Kate Rogers

**Phone & Email:** 423-425-4276; [kate-rogers@utc.edu](mailto:kate-rogers@utc.edu) *\*please check the syllabus before sending an email*

**Office Hours & Location:** T: 3-5, R: 10:45-12, or by appointment; CSOB 370

**Course Meeting Days, Time, and Location:** Tuesday & Thursday, 1:40-2:55pm, Holt Hall 307

**About the Course**

The broad objective for this course is for you to become a **sophisticated consumer of psychological test information**. You have likely already been impacted by decisions based on psychological testing and will likely be impacted further in the future. Given the ubiquitous nature of testing, the goal of the course is provide you with the necessary information and experience to allow you to be more than a passive recipient of test score information. Further, you will have the opportunity to create and then use a measure examining an aspect of human nature that you find fascinating.

**Course Catalog Description:** Principles of psychological measurements including reliability, validity, errors of measurement, techniques of test construction, and problems in assessment and prediction.

**Course Student Learning Outcomes:**

Upon successful completion of this course, you will be able to:

1. explain & apply core methodological & theoretical concepts concerning psychological testing & measurement
2. discuss societal, legal, & professional issues surrounding psychological assessment
3. evaluate professional & popular press articles concerning basic measurement issues & psychological testing
4. examine utility & limitations of psychological assessment across domains
5. apply understanding of psychometrics & measurement to test creation
6. make effective judgments about testing situations in your own life

**Course Prerequisites:** PSY 1010, PSY 2010, PSY 2020, and PSY 2040 or department head approval.

**Course Materials/Resources**

**Textbook & Website:** Miller, L.A. & Lovler, R. L. (2016). Foundations of Psychological Testing: A Practical Approach (5<sup>th</sup> ed.). SAGE. ISBN-13: 978-1483369259. *Note: It is not recommended that you use older editions.*

**Course Website:** Access course materials at <http://www.utc.edu/learn/>. Log in using your utcID and password. If you need help with UTC Learn, see <http://www.utc.edu/learn/student-resources/index.php>.

**Other:** You will need a **calculator** (not a graphing calculator) and access to a computer that has **SPSS**.

**Course Evaluation**

<b>Component</b>		<b>% of Grade</b>	<b>Due Date(s)</b>
Application Assignments (30%)	1) Comparing Psychological Tests	6%	1/24
	2) Interpreting Test Scores	6%	1/31
	3) Reliability	6%	2/9
	4) Selecting a Psychological Test	6%	3/7
	5) Miscellaneous in-class assignments	6%	
Exams (33%)	Midterm	14%	2/21
	Cumulative Final	19%	4/27
Projects & Papers (37%)	Test Construction Group Presentation	14%	4/4 (2/28, 3/2, 3/3)
	Test Construction Individual Paper	9%	4/4
	Testing in the Real World Paper	14%	4/20 (Draft: 4/13)
Extra Credit	Research Experience	3%	

**Application Assignments:** You learn and retain material better when you actively engage with it (e.g., Cherney, 2008; Yoder & Hochevar, 2005). As such, these low-stakes assignments will give you the opportunity to engage with the material by applying abstract concepts from class to concrete examples.

**(#1 - #4):** The specific details for each assignment are posted on the course website. 10% will be deducted from the assignment for every day it is late. Assignments more than 1 week late will not be accepted.

**(#5):** We will occasionally spend time in class working on brief assignments individually, with partners, or small groups. These assignments will always be completed during class and will not require work outside of class time. Each assignment will be graded, but your lowest grade will be dropped. The average of these assignments will be worth 6% of your overall grade. **There will be no make-up assignments.**

**Exams (2):** There will be a midterm and a cumulative final. Any material covered in class (verbally or on slides), the textbook, and assigned readings may appear on the exam. The final exam is scheduled for **May 1<sup>st</sup>, 1-3pm** and will be cumulative. Your presence at the midterm is required and it will only be given on the published date. **There will be no makeup midterm.** If you miss the midterm due to illness or another legitimate, unavoidable reason, and provide appropriate documentation for your absence (e.g., a doctor's note), your final exam will count for 33% of your grade.

**Test Construction Project:** To learn more about psychological testing, you will get hand-on experience creating a new measure. In small groups you will design and collect data on your own measure. As a group, you will create a short measure, collect data on the measure, and analyze the psychometric properties of your scale. Each group will give a brief 10-minute presentation on their measure and its psychometric properties on **March 28<sup>th</sup>**. Additionally, each individual will write a short (2 page) individual paper. On the day of the presentation, your group will also need to **turn in a digital copy of your slides**. Your individual paper assignment is also due on the day of the presentations and **10% will be deducted from your grade for each day it is late**. More details on the project can be found on the course website.

You will be given class time to work on your group projects and the specific dates when extra materials are expected are listed in the course schedule (group work days are explicitly denoted in the course calendar). You may complete an assigned make-up assignment if you miss one group work day. If you miss more than one or do not complete the make-up assignment, **3% will be deducted from your project grade for every absence**. Further, if your group does not have the necessary materials as noted in the course schedule, **3% will be deducted from your project grade for each time materials are not present**. To encourage group participation, the final group project grades will be weighted according to group reports of member effort. These forms can be found on the class website and will be submitted on the day of your presentation. *If you find you are having difficulties with your group, please come speak to me before the presentation.*

**Testing in the Real World Paper:** You will be required to write a short paper (750-1000 words) advising the public on psychological testing and assessment. The goal of this paper is for you to develop a short "how-to" guide with recommendations for how testing should be used in a domain of interest to you (e.g., neurological testing, hiring selections) and specific concerns that people should be aware of when using psychological tests. **A first draft of your paper will be due in class on April 13<sup>th</sup> for peer review**. Failing to attend class or bring a hardcopy of your paper will result in a 0 for that portion of your grade. The final version of your paper will be **due in class on April 20<sup>th</sup>** and you must also **submit your paper on UTCLearn** for plagiarism check. **10% will be deducted from your grade for each day it is late**. More details about the paper will be posted on the course website.

**Extra Credit:** You can earn up to 3% extra credit toward your final overall grade by participating in research studies via SONA or by completing a library writing project. If you decide to participate in SONA, the following conversion is used: 1 SONA credit = .5% therefore, 6 SONA credits = 3%. If you decide to complete the library project, you will write a 1 page (double spaced) summary of a recent article relevant to the course your summary should include appropriate APA citations. Specifically, you will find an article that discusses the creation of a new measure in psychology. The article must be at least 10 pages in length, include collected data, and published between 2014 – 2017. Each appropriately completed summary is worth 1%.

**Grading Scale:** A = 100-90%; B = 89-80%; C = 79-70%; D = 69-60%; F = below 60%

### Course Expectations & Policies

**Attendance & Participation Policy:** Your participation is a valuable part of the classroom experience and I will make every effort to create a classroom environment in which you feel comfortable discussing your ideas and questions. I will also do my best to include a variety in class activities to allow you opportunities to participate in different ways. When you miss class, you miss important course content and we miss your unique contributions to the class session. If you miss a class, I strongly suggest that you obtain notes on the material from a classmate.

**Office Hours:** You are encouraged to stop by office hours if and when you have any questions or concerns regarding the class, psychology, graduate school, etc. If you cannot make office hours then you can make an appointment by emailing me with a selection of times that work for you.

**Email:** Emails should be written in a professional manner and include your first and last name. I will strive to respond to emails within **48 hours during normal business hours** (Monday – Friday, 9-5). Note that this means emails received less than 48 hours prior to an exam or assignment may not receive a response, please plan accordingly. Emails regarding course content should include no more than one question and should also clearly state your current understanding of the topic, which I will then confirm or correct. If you have multiple questions or a question that requires a lengthy response, these are best answered during office hours. **To ensure your email will be answered please follow these steps: (1) include an appropriate greeting, (2) a sign off that includes your name, (3) course number in the subject line (emails without the course number often end up in my junk mail folder), and (4) ask a question that cannot be answered by reading the syllabus.**

If you are unsure about the proper format of your email, you are encouraged to use the following template:

**Subject Line:** PSY 3450 Reliability & Validity Question

Dr. Rogers,

I'm a little confused about reliability and validity – am I correct that you cannot have a valid measure if it is not reliable?

Thank you for your time,  
Jane Doe

**Academic Honesty:** Do not engage in cheating or plagiarism when completing your work for this class. If you do, you will fail the assignment, potentially fail this course, and be subject to university sanctions. Please note that during exams you may be asked to move without explanation due to the possible misconduct of a classmate in an adjacent seat.

**Policy for Late/Missing Work:** see details for specific assignments listed above

**Syllabus changes:** There may be minor changes to the syllabus during the term based on student interests and class discussions. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to properly prepare for an assignment. Any changes to the syllabus schedule will be announced in class and will be noted on the course website.

**Grade changes:** In line with university policy, grades are based upon student performance and grade appeals are not based upon “a student’s individual needs or circumstances; students do not have the right to appeal a grade because of their health, anxiety, family circumstances or other such circumstances” (p. 10, UTC Student Handbook 2015-16). Emails requesting grade changes or “bumps” are inappropriate and will not be answered.

### Useful Resources

**Communication:** To enhance student services, the University uses your UTC email address for all communications. Please check your UTC email on a regular basis (daily). If you have problems with accessing your account, contact the Help Desk at (423) 425-4000.

**Accommodation Statement:** If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or special accommodations in this class or any other class, call the Disability Resource Center (DRC) at 425-4006 or come by the office, 108 University Center.

**Counseling Statement:** If you find that you are struggling with stress, feeling depressed or anxious, having difficulty choosing a major or career, or have time management difficulties which are adversely impacting your successful progress at UTC, please contact the Counseling and Personal Development Center at 425-4438 or go to [utc.edu/counseling](http://utc.edu/counseling) for more information.

**Veterans Services Statement:** The office of Veteran Student Services is committed to serving all the needs of our veterans and assisting them during their transition from military life to that of a student. If you are a student veteran or veteran dependent and need any assistance with your transition, please refer to <http://www.utc.edu/greenzone/> or <http://www.utc.edu/records/veteran-affairs/>. These sites can direct you the necessary resources for academics, educational benefits, adjustment issues, veteran allies, veteran organizations, and all other campus resources serving our veterans. You may also contact the coordinator of Veteran Student Programs and Services directly at 423.425.2277. THANK YOU FOR YOUR SERVICE.

### Helpful Student Information

Time Management Tips	<a href="http://www.arc.sbc.edu/time.html">http://www.arc.sbc.edu/time.html</a>
Procrastination Tips (podcast)	<a href="http://iprocrastinate.libsyn.com/">http://iprocrastinate.libsyn.com/</a>
Tips for learning & studying	<a href="http://www.learningscientists.org/blog?category=For+Students">http://www.learningscientists.org/blog?category=For+Students</a>
Tips to help overcome test anxiety	<a href="http://www.swccd.edu/~asc/lrnglinks/test_anxiety.html">http://www.swccd.edu/~asc/lrnglinks/test_anxiety.html</a>
Psi Chi (International Honors Society)	<a href="http://www.utc.edu/psychology/psichi/index.php">http://www.utc.edu/psychology/psichi/index.php</a>
Undergraduate Research Journal	<a href="http://www.utc.edu/psychology/mps/index.php">http://www.utc.edu/psychology/mps/index.php</a>
General Psychology Topics (podcast)	<a href="http://www.thepsychfiles.com/">http://www.thepsychfiles.com/</a>

### Examples of Psychological Tests

<a href="http://www.utpsyc.org/">http://www.utpsyc.org/</a>	<a href="http://www.outofservice.com/">http://www.outofservice.com/</a>	<a href="https://sapa-project.org/">https://sapa-project.org/</a>
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<b>(Tentative) Course Calendar/Schedule</b>				
<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Assignments</b>	
1/10				
1/12	Introduction & Overview	Psychological Tests: What are they? Why are they important? How should they be used?	Syllabus, Ch. 1 & 3	1/17: Bring Textbook
1/17				
1/19				
1/24		Interpreting test scores	Ch. 5	1/24: Comparing Tests
1/26				
1/31	Psychometrics	Reliability	Ch. 6 (p.149-176, 178-181)	1/31: Interpreting test scores
2/2				
2/7				
2/9				
2/14		Validity	Ch. 7 – 9	2/9: Reliability
2/16		Catch up/review		
2/21	<b>MIDTERM: Ch. 1, 3, 5-9</b>			
2/23				2/28: IRB
2/28	Creation & Application	Creating Surveys & Tests **Group Work**	Ch. 11	3/2: Initial items
3/2				3/3: Final items
3/7				3/7: Selecting Tests
3/9		Quality of test	Ch. 12	
3/21		**Group Work**		*computer lab TBD
3/23				
3/28		<b>Presentations</b>		<b>Presentations &amp; Papers</b>
3/30		Education	Ch. 13	
4/4				
4/6	Real World Applications	Clinical & Counseling	Ch. 14	
4/11				
4/13				4/13: TRW draft due
4/18		Organizations	Ch. 15	
4/20		Wrap Up & Review		4/20: TRW Due
4/27	<b>Cumulative Final Exam 1-3pm</b>			

Aspects of this syllabus were inspired by Drs. Michael Furr (WFU), Catherine Rawn (UBC), and Michael Souza (UT).