PSYC421-001: Psychological Tests and Measurements

Founders Hall 0116 T & Th 9:30-10:45am

Instructor Information

Professor: Eunyoe Ro, Ph.D. Office: Alumni Hall Room 0125

Email: ero@siue.edu

Office Hours: Monday 2-3pm, Tuesday 3-4pm; Please use this link to book an appointment.

Book time with Ro, Eunyoe: Fall 2025 Office Hours • This link will expire on: November 13,

2025 I can also meet outside of these times so please email me if you would like to meet

Required Text

separately.

Cohen, R. J., Schneider, W. J., & Tobin, R. M. (2022). *Psychological testing and assessment: An introduction to tests & measurement (10*th ed.). New York: McGraw Hill.

Course Information

Welcome! This course, titled "Psychological Tests and Measurements," is a 3-credit hour course designed to provide students with an introduction to the field of psychological testing and assessment. The course will cover topics such as:

- The history of psychological testing (and compare with current psychological tests)
- Basic psychometric concepts (e.g., reliability, validity)
- Develop skills to evaluate psychological tests and instruments.
- Various psychological tests used in the field

Also, I hope the process of planning and writing the course paper will help students develop their professional writing skills.

Course Goals and Objectives:

| Learning Goals | Objectives | Learning Activities |
|--|--|------------------------------|
| Goal 1: Learn the basic characteristics and the history of psychological testing. | Objective 1.1: Describe the basic characteristics of psychological testing and their meanings as it applies to the real world. | Content + class activities |
| | Objective 1.2: Understand how psychological tests have developed over time and describe tests with historical meaning. | Content + class activities |
| Goal 2: Understand basic psychometric concepts, such as reliability and validity. | Objective 2.1 : Understand and explain the basic psychometric concepts. | Content + quiz + homework |

| | Objective 2.2: Explain how the psychometric concepts are applied to psychological tests' development. | Content + quiz + homework | |
|--|---|--------------------------------|--|
| Goal 3: Learn how to evaluate the psychometric properties of psychological tests and assessments. | Objective 3.1: Learn to discriminate between psychometrically strong vs. weak tests. | Class activities | |
| | Objective 3.2: Explain the rationale behind why a psychological test may be strong vs. weak. | Class activities | |
| Goal 4: Design a test and evaluate | Objective 4.1 : Experience the process of designing a psychological measure and evaluating its psychometric properties | Class activities + homework | |
| | | | |
| Goal 5: Gain knowledge of common psychological tests used in the field. | Objective 5.1 : Describe tests that are used in various psychology fields. | Content + discussion+ quiz | |
| | Objective 5.2 : Understand empirical bases for development of such tests. | Content + discussion+ quiz | |

Exams, Paper, and Grading Criteria

There will be three exams during the semester and a final term paper. Points will be assigned as below. Your grade will be assigned based upon a 90% (A), 80% (B), etc., grading system. I do NOT round or curve your scores.

Quiz 1 50 points Quiz 2 50 points

Homework 1, 2 100 points (each 50 points)

Presentation 50 points Random in-class activities for attendance TBD points

Total 250 + TBD points

Quiz (100 points = 50 points * 2)

Two "closed book" exams will be given throughout the semester. Each exam will cover both lecture topics and information from the assigned readings, and will include any combination of multiple choice, fill-in-the-blank, or short-answer questions. All information presented in both the assigned readings and class lectures may appear on exams.

If due to unforeseen circumstances, you were unable to take the exam before or on exam day, you will be **permitted to take a make-up exam only on the final exam date and time**

Homework 1 and 2 (100 points): Two group homework that you've collaborated on, which will be in two separate parts (and two separate submission due dates). This group homework will

be weighted by your contribution to the work, rated by your peers. The homework should contain below information.

Homework 1 (50 pts)

- 1. Name and define the construct of your measure (10 pts).
- 2. Describe the measure's format (self-report, interview, etc.) and the number of items (10 pts)
- 3. Similar measures? (15 pts)
- 4. Submit finalized items (15 pts)

Homework 2 (50 pts)

- 1. Provide statistics on your measure's reliability (i.e., internal consistency) and critically evaluate your reliability coefficient (20 pts).
- 2. Provide statistics on your measure's validity and critically evaluate your validity coefficients (i.e., convergent and divergent correlations) (20 pts).
- 3. Submit a correlation table of #2 (10 pts)

Presentation (50 points)

Based on presentation quality (25 pts) and how well discussions were lead (25pts).

In-class activities (TBD points)

You will submit in-class activity work and accrue up to TBD points. You have to be in attendance to earn these points.

University Policies

Academic integrity/plagiarism

Students are reminded that the expectations and academic standards outlined in the <u>Student Academic Code (3C2)</u> apply to all courses, field experiences and educational experiences at the University, regardless of modality or location.

Plagiarism is the use of another person's words or ideas without crediting that person. Plagiarism and cheating will not be tolerated and may lead to failure on an assignment, in the class, or dismissal from the University, per the <u>SIUE academic dishonesty policy</u>. Students are responsible for complying with University policies about academic honesty as stated in the <u>University's Student Academic Conduct Code</u>.

<u>Statement regarding AI use</u>. Unless expressly allowed by the instructor, the use of artificial intelligence (AI) tools and applications (including ChatGPT, DALL-E, and others) to produce content for course assignments and assessments is a violation of SIUE's academic policy and is prohibited.

This class's policy regarding GenAI use is Level 2, which means that students can use to generate ideas but should create their own, original work without the use of GenAI (e.g., ChatGPT, DALL-E, Gemini, etc.) for any manner. For the explanation on different levels, please visit: https://prodev.illinoisstate.edu/ai/usage/

For example, the following actions are prohibited in this course:

- Submitting all or any part of an assignment statement to an online learning support platform;
- Incorporating any part of an AI generated response in an assignment;
- Submitting your own work for this class to an online learning support platform for iteration or improvement.

If you are in doubt as to whether you are using an online learning support platform appropriately in this course, I encourage you to discuss your situation with me. Unauthorized and unattributed use of online learning support platforms and unauthorized sharing of instructional property are forms of academic dishonesty and will be treated as such.

If I suspect AI use in completion of any course work, I will email you asking for drafts before grading your work. Therefore, please save your work (i.e., drafts into different versions). For example, save your first initial writing as Draft 1, any further edits into Drafts 2, 3, etc., and then final submitted version as FINAL version.

Department of Psychology Statement on Plagiarism

Plagiarism includes presenting someone else's words without quotation marks (even if you cite the source), presenting someone else's ideas without citing that source, or presenting one's own previous work as though it were new. When paraphrasing from another source or your own work, at the very least, the student should change the wording, sentence syntax, and order of ideas presented in the paper. Additionally, you should not submit a paper, or parts of a paper, written to fulfill the requirements of one class for the requirements in another class without prior approval of the current instructor and appropriate citation. Ideally, the student will integrate ideas from multiple sources while providing critical commentary on the topic in a way that clearly identifies whether words and ideas are those of the student or are from another source. Plagiarism is one type of academic misconduct described in SIUE's Student Academic Code (http://www.siue.edu/policies/3c2.shtml). University policy states that "Normally a student who plagiarizes shall receive a grade of F in the course in which the act occurs. The offense shall also be reported to the Provost."

(http://www.siue.edu/policies/1i6.shtml). The University policy discusses additional academic sanctions including suspension and expulsion from the University. To insure that you understand how to avoid plagiarism, we encourage you to review the information on plagiarism provided on the Department of Psychology web page at http://www.siue.edu/education/psychology/plagiarism.shtml

Regular and Substantive Interaction

Regular and substantive interaction (RSI) is required as part of new U.S. Department of Education regulations for distance (online) education and it supports student learning in all learning environments (online, face-to-face, hybrid, hyflex, etc.). SIUE faculty participate in RSI by initiating frequent and timely opportunities to engage with students. Because there are several ways to implement RSI, such as facilitating online discussions, scheduling a Zoom conference with a student, or holding regularly scheduled review sessions before tests, RSI may look different in every class. To learn more about RSI, use the Online Tips links for Faculty and Students in your Blackboard course websites or visit the Faculty Resources for Regular and Substantive Interaction webpage.

Recordings of Class Content

Faculty recordings of lectures and/or other course materials are meant to facilitate student learning and to help facilitate a student catching up who has missed class due to illness or quarantine. As such, students are reminded that the recording, as well as replicating or sharing of any course content and/or course materials without the express permission of the instructor of record, is not permitted, and may be considered a violation of the University's Student Conduct Code (3C1), linked here: https://www.siue.edu/policies/3c1.shtml.

Diversity and Inclusion

SIUE is committed to respecting everyone's dignity at all times. In order to learn, exchange ideas, and support one another, our virtual and physical classrooms must be places where students and teachers feel safe and supported. Systems of oppression permeate our institutions and our classrooms. All students and faculty have the responsibility to co-create a classroom that affirms inclusion, equity, and social justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other social pathologies are not tolerated.

The Inclusive Excellence, Education, and Development Hub is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact the Office of EOA/Title IX Coordination (618) 650-2333 or eoa-titleix@siue.edu.

Pregnancy and Newly Parenting Policy

This policy and procedure are established to ensure the protection and equal treatment of pregnant students, students with pregnancy-related medical conditions including as a result of the termination of pregnancy, and students who become new parents including parents adopting or fostering to adopt for the first 12 weeks a child is in the home, in accordance with Federal and State guidelines and regulations. "New Parents" refers to a parent who has recently welcomed a newborn or adopted a child or is fostering to adopt a child and needs support to mitigate the disruption in academic progress within the first 12 weeks of parenting or a parent that needs support due to medical necessity attributed to pregnancy or delivery of a child; care of newborn; or lactation within the first year of child's life or legal adoption/fostering. Visit Policies & Procedures - Student Rights and Conduct - Newly Parenting Policy - 3C15 to view the full policy and learn how to request accommodations through the Office of Equal Opportunity, Access, and Title IX Coordination (EOA).

Technology Privacy Information

We will be using Blackboard in this course. View the <u>Anthology Blackboard Privacy Statement</u> to review how your data is being used and stored.

Additional Support

Services for Students Needing Accommodations

Students needing accommodations because of medical diagnosis or major life impairment will need to register with Accessible Campus Community & Equitable Student Support (ACCESS) and complete an intake process before accommodations will be given. Students who believe they have a diagnosis, but do not have documentation, should contact ACCESS for assistance and/or

appropriate referral. The ACCESS office is located in the Student Success Center, Room 1203. You can also reach the office by emailing us at myaccess@siue.edu or by calling 618-650-3726. If you feel you would need additional help in the event of an emergency situation, please notify your instructor to be shown the evacuation route and discuss specific needs for assistance.

Academic and Other Student Services

As an enrolled SIUE student, you have a variety of support available to you, including:

- Lovejoy Library Resources
- Academic Success Sessions
- Tutoring Resource Center
- The Writing Center
- Academic Advising
- Financial Aid
- Campus Events
- Counseling Services

If you find that you need additional support, please reach out to me and let me know.

Cougar Care

Dealing with the fast-paced life of a college student can be challenging, and I always support a student's decisions to prioritize mental health. Students have access to counseling services on campus (Student Success Center, 0222). Make an appointment by visiting cougarcare.siue.edu or by calling 618-650-2842.

Student Success Coaches

<u>Student success coaches</u> work across campus to serve the SIUE student population with the tools and resources to adjust to and meet the demands of the college experience. Success coaches provide direct services such as time management support and referrals to campus resources. If you find yourself in need of academic or personal support, or in a situation that is preventing you from being successful in the classroom, please utilize <u>Starfish</u> to connect with a coach as soon as possible. The sooner you engage, the sooner you can access the information or tools you need that may help you get back on track.

Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, or communicate with other students, to adjust as needed if assignments or due dates change.

Additional Information

General Expectations of Students

You are expected to behave respectfully and appropriately at all times during class. Examples of disruptive inappropriate behaviors include texting, using cell phones, conversing with fellow students, web-surfing, and online chatting. When necessary,

disruptive students may be asked to leave the classroom. Cell phones, pagers, and other portable devices are to be turned off or placed in silent mode for the duration of the class.

You are responsible for obtaining notes, handouts, and announcements from classmates if you are absent from class or not paying attention during class.

Please be aware that professor will not drop a student from this course for non-attendance. It is completely your responsibility to adhere to all relevant university guidelines related to officially withdrawing from this course.

Course Schedule

(*Schedule subject to change at the discretion of the professor)

| Week | Date | Topic | Assignments |
|-------|------|---|--------------------------------|
| VVCCK | Date | The History of Psychological Testing | Assignments |
| 1 | 8/19 | Introduction (e.g., syllabus review, group | |
| _ | 0,13 | formation) | |
| | 8/21 | Introduction to Psychological Testing | Chapter 1 |
| | _, | In Class Video | |
| 2 | 8/26 | History and Overview | Chapter 2 |
| | | | (DUE: Watch posted |
| | | | lecture) |
| | 8/28 | Statistics Refresher & Testing Assumptions | Chapter 3 |
| | | Reliability and Validity | |
| 3 | 9/2 | Reliability (1) | Chapter 5 |
| | | | No class |
| | | | (DUE: Watch posted |
| | | | Lecture video on |
| | | | reliability) |
| | 9/4 | Reliability (2) | |
| 4 | 9/9 | Reliability (3) | |
| | 9/11 | Validity (1) | Chapter 6 |
| | | | No class |
| | | | (DUE: Watch posted |
| | | | lecture video on validity) |
| 5 | 9/16 | Validity (2) | |
| | 9/18 | Validity (3) | |
| 6 | 9/23 | Test Development | Chapter 8 |
| | 9/25 | Quiz 1 in class | |
| | | Creating Measure + Evaluation Existing Measure | sures |
| 7 | 9/30 | In class group work | Start Homework 1 in |
| | | Group construct name and definition – | <u>class</u> : Group construct |
| | | get instructor approval | name and definition |
| | | Search existing measures (similar | |
| | | construct) | |
| | 10/2 | In class group work | |
| | | Research existing measure's | |
| | | psychometric properties (reliability, | |
| | | validity) | |
| | | Find a measure that should be | |
| | 46/= | different construct | |
| 8 | 10/7 | In class group work | |
| | | Justify why you need to develop a new | |

| | | measure | |
|-----|-------|--|--|
| | 10/9 | In class group work | |
| | | Write items: your own measure | |
| | | Find items for convergent, discriminant | |
| | | validity | |
| 9 | 10/14 | In class discussion & critique of items | |
| | 10/16 | Finalize survey (Qualtrics) | Submit Homework 1 in |
| 10 | 10/21 | Data Callastias | <u>Class</u> (printed please) |
| 10 | 10/21 | Data Collection | No class |
| | 10/23 | Data Analysis | LAB |
| 11 | 10/28 | Data Analysis | LAB |
| | 10/30 | Data Analysis | LAB |
| 12 | 11/4 | Data Analysis | LAB |
| | 11/6 | Data Analysis | LAB |
| 13 | 11/11 | Interpretation of results | Group meeting with |
| | | _ | Instructor – in office |
| | 11/13 | Interpretation of results + presentation prep | Group meeting with |
| 14 | 11/10 | In class presentation and discussion of | Instructor – in office |
| 14 | 11/18 | In class presentation and discussion of findings -Validity | Bring a handout or ppt slides for presentation |
| | | intuings validity | shaes for presentation |
| | | | Submit Homework 2 in |
| | | | Class (printed please) |
| | | Existing Psychological Tests | |
| 14 | 11/20 | Intelligence/ Education Assessment | Chapters 9 & 10 |
| | | | Watch lecture videos, |
| 4- | 44/05 | | no class |
| 15 | 11/25 | Thanksgiving | |
| | 11/27 | Thanksgiving | |
| 4.5 | 12/2 | Personality Assessment - | Chapters 11, 12, 13 & 14 |
| 16 | | Clinical/Neuropsychological Assessment - lecture video | Watch lecture videos, |
| | 12/4 | In class discussion about existing measures | no class |
| | | _ | |
| | FINAL | Quiz 2 (coverage TBD: everything covered in | |
| | Exam | class or partial) | |