

Psychology 329
Psychological Testing
Spring, 2022

Lecture: T/R, 1 – 2:15, Sewall Hall, 207

Professor: Margaret Beier
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Office: 429 E Sewall Hall
Zoom link: <https://tinyurl.com/mebzoom>
Office hour: via Zoom Thursdays, 5 - 6 or by appointment

Course Objectives

There are two course objectives:

(1) Understand the fundamentals of psychological testing including test construction and application. In particular, we will discuss reliability and validity theory, ethics, legal issues, and practical issues associated with psychological testing. Domains considered will include: cognitive (aptitude, achievement, intelligence), affective (normal personality, clinical/psychopathology), and interests and motivation. Particular applications include clinical, educational, organizational, self-assessment, and career counseling.

(2) Obtain practical experience developing and evaluating a psychological test.

At the end of the semester, you will have an understanding of theories of psychological testing, issues associated with testing (legal and ethical), and practical experience developing a test.

Required Reading and Course Material

Hogan, T. P. (2019). *Psychological testing: A practical introduction (4th ed.)*. Hoboken, NJ: Wiley. ISBN: 978-1-119-50690-4

Additional readings and course material (e.g., syllabus, assignments, handouts, information about grades, announcements, etc.) will be available on **Canvas**. I will hold you responsible for all announcements about the class, including changes to the syllabus that are posted there. You should check the site regularly.

Course format

Information will be presented in the course lectures and readings. You will be assigned to a small group that will propose, develop, and evaluate a psychological test. You should come to class prepared to participate in lectures and group work. You may need to meet with your group outside of class time.

Attendance Policy

Attendance policy follows that of Rice University: *Students are expected to attend all scheduled activities for all of the classes for which they are registered during the entire course of the academic semester for which they are enrolled.*

All lectures will be recorded via Zoom and will be available on the course Canvas site. If you are ill or need to quarantine, please stay home and engage with the course via zoom.

Group work can be negatively affected by absences, and we ask that all group members work with one another to manage workload and schedules. I will make every effort to allow as much time as possible for group assignments. Please let me know if any issues arise within your groups.

Course Requirements

Exams. There are two mid-term exams based on the lecture and readings. Exams are covered by the honor code and will be administered via Canvas. There is no final for this course.

Reliability Exercise. You will calculate internal consistency reliability estimates and inter-correlations for a vocational interest assessment. You will hand in independently generated R syntax, output, and tables in MSWord, which are covered under the honor code.

Group Project. The goal of the group project is to develop and test a new psychological assessment. This involves a series of steps including: 1) investigating the construct you choose to assess (e.g., through literature reviews), 2) deciding how to assess the construct (e.g., self-report, behavioral measures, etc.), 3) developing try-out items and getting feedback on them from your classmates, 4) designing a small study to evaluate the measure (e.g., through data collection and analysis), and 5) writing a report and presenting your results to the class.

You will be asked to choose a construct for assessment during the second week of class. I will survey your preferences and organize you into groups. I will make every effort to accommodate your first choice for a project, but in some cases it may not be possible.

All group members are expected to participate. You will have the opportunity to formally evaluate your group members and your team performance throughout the semester. This evaluation will figure into each person's project grade. If issues develop within teams, you should talk to Dr. Beier immediately.

Assignments related to the group research project:

Human Subjects Training (see Assignment in Canvas)

If you have not already, you will need to complete the CITI course for human subjects training. You can check the CITI website to see if you have already completed this task. If so, you will not need to do it again, simply upload your *grade report* onto Canvas.

Review of the required materials for IRB training, and completion of the quizzes will take about 30-35 minutes per module. **A minimum score of 80% on each training module is required to pass.** This is independent work covered by the honor code. ***You will FAIL this class if you do not complete human subjects training because you cannot do your project without it.***

Literature Review

After you are assigned a group project, you will conduct a literature review *with your group*. You will summarize five relevant articles that result from a literature review. The article summary for each article will include:

- The reference in APA format
- The main research question addressed in the article as you understand it
- A judgment of how the article informs your project

- A thorough description of the research including the design (experimental/correlational), the constructs of interest, and how they are operationally defined, identification of the IV/DV (or predictor/criterion)
 - If it is not an empirical study, you should define the construct or theory examined
- A description of the results and general conclusions
- A description of the limitations of the research

Article summaries should be no more than one page per article (you can use bullet points). As such, the literature search document your group turns in will be five pages long (one page per article). **Put the names of all group members on the document you turn in.**

Final Report

The final report includes: (1) a brief description of the construct assessed, (2) a summary of the process used to develop the measure, (3) a description of the process used to evaluate the measure (i.e., a method and result section for your study), and (4) your conclusions about the measure (its validity, usefulness, future research/directions). Your measure/test (items and response scale) will be attached as an Appendix. The report should be about 6 pages (including cover page with project title and group member names). Make it a professional report (**not APA format**); you can use bullet points. **Reports are due on the last day of class.**

Oral Presentation

Groups will give a 20 minute presentation about their project during the last weeks of class. The content will be information from the final report. Format of the presentation is up to you, but all group members must participate. **Each group will attach a copy of your slides in Canvas before your presentation.**

The literature search, report, and oral presentation are group work, not covered by the honor code. Everyone in a group will receive the same grade on group work. Group participation grades will vary.

Evaluation

40%	Exams (20% each)
30%	Total group project; broken down as follows: Literature review (5%) Report (10%) Presentation (10%) Group participation (5%)
20%	Reliability exercise
10%	Class participation

Late Work

All assignments are due at 11:59 p.m. via Canvas on their due dates listed on the course schedule below. Assignments can be handed in late with a deduction of 10% of total points available for each 24-hour period they are late. You do not need to contact me to hand something in late. Work that can't be late: (1) the exams and (2) presentations. If group work is late everyone in the group will receive the same deduction. If you are ill or have extenuating circumstances, please contact me.

Grades

Grades will be determined on the following scale:

100 - 93 % = A	89 - 88% = B+	79 - 78% = C+	69 - 68% = D+	59 - 0% = F
92 - 90 % = A-	87 - 83 % = B	77 - 73 % = C	67 - 63 % = D	
	82 - 80 % = B-	72 - 70 % = C-	62 - 60 % = D-	

Rice Honor Code

All students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <http://honor.rice.edu/honor-system-handbook/>. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

I have tried to be explicit about whether assignments are independent or group-based. If you have any questions during the course of the semester, do not hesitate to ask. Students are encouraged to bring any concerns involving academic integrity involving themselves or others to my attention.

Important Notes and Resources

Disabilities

If a student has a documented disability and needs academic assistance in this or any other course, they should so inform me within the first two weeks of classes. All discussions will remain as confidential as possible. Students should contact me by e-mail. Students with disabilities requesting accommodation will also need to contact Disability Resource Center (adarice@rice.edu).

Title IX Responsible Employee Notification

Rice University cares about your wellbeing and safety. Rice encourages any student who has experienced an incident of harassment, pregnancy discrimination or gender discrimination or relationship, sexual, or other forms interpersonal violence to seek support through The SAFE Office. Students should be aware when seeking support on campus that most employees, including myself are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. For more information, please visit safe.rice.edu or email titleixsupport@rice.edu.

Inclusivity Statement

I want my classroom to be a place where everyone feels welcome, can express themselves and sees a path to their success. I study lifelong learning, and believe that learning is facilitated by listening to and learning from people who are different from us. I will strive to make this an equitable learning environment and consistently look for ways to improve. I am open to your feedback. I expect all students to respect one another and our differences and to be open to growth and feedback.

I have tried to focus on building classroom community and to anticipate student needs for synchronous and asynchronous learning. Nonetheless, we know we may have missed some things. I'd love for you to learn a ton and have fun in this class. If there is anything I can do to help in this regard, please let me know.

Course Schedule (Subject to Change)

Date	Topic	Reading
T, 1/11	Course introduction; Overview of Psych Testing	Ch 1
R, 1/13	History and sources of information about tests CITI certificate due	Ch 2
T, 1/18	Test norms Project options presented & Interest Inventory	Ch 3 <i>Survey</i>
R, 1/20	Intro to R and literature reviews Groups assigned	
T, 1/25	Reliability	Ch 4
R, 1/27	Reliability continued <i>Group Work</i>	
T, 2/1	Validity	Ch 5
R, 2/3	Validity continued <i>Group Work</i> Literature Review Due	
T, 2/8	<i>Reliability exercise</i>	Canvas
R, 2/10	No Class, Spring Recess	
T, 2/15	Test development	Ch 6 (155-169)
R, 2/17	Item Analysis Reliability Exercise Due	Ch 6 (169-186)
T, 2/22	<i>Group Work – Item construction</i>	Appendix B
R, 2/24	<i>Group Work – Item tryout</i>	
T, 3/1	Fairness and Bias	Ch 7
R, 3/3	Exam 1 – Canvas	
T, 3/8	Cognitive Ability Tests	Ch 8
R, 3/10	Group Ability Tests <i>Group Work – Data collection starts</i>	Ch 9
3/12 – 3/20	Spring Break – No Class	
T, 3/22	Neuropsychological assessments	Ch 10
R, 3/24	Achievement Tests	Ch 11
T, 3/29	Personality Part 1	Ch 12
R, 3/31	Personality Part 2 <i>Group work</i>	
T, 4/5	Clinical Tests	Ch 13
R, 4/7	Projective Tests	Ch 14
T, 4/12	Interests and Attitudes	Ch 15
R, 4/14	Ethical Issues	Ch 16
T, 4/19	<i>Group Work – Presentation preparation</i>	
R, 4/21	Presentations	
F, 4/22	Final Report Due 5 p.m.; Exam 2 – Canvas	

Extra Credit

You have the opportunity to receive a maximum of 2 points of extra credit added to your final grade. There are two options for extra credit.

Option 1: You may participate in a maximum of 4 hours of psychology experiments. If you participate in psychological experiments, you must assign the hours through SONA to this class (PSYC 329) to receive credit. You will receive ½ a point added toward your final grade for each hour of research. Note that you must be at least 18 years old to participate in psychological research.

Option 2: You may complete a one-page (single spaced) report on an empirical research article (not a review article) for extra credit. These CANNOT be articles that you have read/cited for your project. Note that the article MUST be related to course content. I strongly suggest you ask me if you have any questions about relatedness to course content before you start this exercise.

You will receive ½ a point of extra credit for each report (0 if the report is sub-par). Reports should be single spaced, typewritten (12 pt font). They should cover the following things:

- 1) complete reference in APA style
- 2) brief description of the research question
- 3) explanation of how the research article relates to course content
- 4) description of the research design and analysis if appropriate (e.g., measures used, correlational or experimental research, etc.)
- 5) brief description of conclusions
- 6) your interpretation of whether or not the conclusions are warranted

You must include a copy of the original research article in PDF form (or receive a zero). **These article summaries are due on the last day of classes at 5:00 p.m. and can be handed in via CANVAS.**