Psychology 329  
Psychological Testing  
Spring, 2015

Lecture: MWF, 9 – 9:50, Sewall Hall, 303

Professor: Margaret Beier  
email: beier@rice.edu  
office: 429 E Sewall hall  
phone: 713-348-3920

Office hrs: Mondays, 10 – 11 or by appointment

Course objectives:
There are two course objectives:

(1) Provide an overview of 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, and 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:

Owlspace:
Course material (e.g., syllabus, assignments, handouts, information about grades, announcements, etc.) will be available on Owlspace. 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 also need to meet with your group outside of class time, if necessary.
Use of electronics:
Research shows that use of electronics for non-course related purposes not only interferes with your learning, but the learning of those around you. Please be courteous and refrain from cellphone use during class (includes texting). Laptops may be essential for group work and can be used during lecture for note taking purposes. If you cannot resist the temptation to check email and surf the Internet during class, then I suggest you leave your laptop at home. You will be asked to shut down your laptop if you are surfing the Internet for purposes not related to the course.

Attendance Policy:
Attendance policy for this class 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.

A portion of your grade is dependent on a group activity and class participation (lecture/discussions, etc.), so it is essential that you come to class (you can’t make up these activities if you miss them). Please contact me if you have any concerns about attendance.

Course requirements:
Exam. There is one mid-term exam in this class on 2/20, which will be based on the lecture and readings. The exam is covered by the honor code.

Term paper: You are required to write a term paper for this course, which is due on the last day of finals (5/6/2015) at 5:00 p.m. Papers must be written in APA format (using the sixth edition of the APA publication manual). The only exception to APA format is that you will NOT include an abstract. Papers should be between 6 – 8 pages long (including title page and references). You must cite at least five references in your paper.

You will submit your term paper topic for feedback to me by Friday, 3/11 through the assignments tab on Owlspace.

You must choose one of the following topics for your term paper. Your topic can be a review of an area (e.g., The History of Intelligence Testing in Modern Psychology), or it can be focused on one specific test (e.g., The Reliability and Validity of the SAT). You may also choose the same topic as your group project, and some of the references you use in your paper may overlap with those in your group literature review (see below).

- Intelligence testing
- Achievement testing (e.g., SAT, ACT, GRE, etc.)
- Clinical testing
- Personality testing (MBTI, self-report, etc.)
- Practical issues in testing (organizational assessment)
- Ethical issues in testing

You must put a hard (i.e., paper) copy in my mailbox in the Psychology Main Office (Sewall Hall 468).

Write the time and date you hand in your paper on the title page and attach an electronic copy of your paper in the assignments tab in Owlspace, which will serve as a backup.
Writing papers is an independent endeavor, covered by the honor code. Nonetheless, you are encouraged to discuss paper topics with your classmates. One exception is related to APA format. You are welcome to ask other students formatting questions. Please note, however, that the definitive APA format resource is the 6th edition of the APA publication manual. Go to www.plagiarism.org to find out more about the definition of plagiarism and what to avoid while writing your paper.

Group project. The goal of the group project is to generate a new psychological test. 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) presenting your results to the class.

You will be asked about constructs for assessment (e.g., personality, intelligence, etc.) during the first week of class and asked to indicate your preferences on a survey during the second week. From that survey, you will be organized into groups. I will make every effort to accommodate your first choice for a project but in some cases, this may not be possible. Each group will be responsible for designing a measure, evaluating it, and presenting your research project to the class.

After you have been assigned to a research group, your group will meet with me to formulate a project plan and develop an application for the IRB. All group members are expected to participate equally in all aspects of the project. You will have the opportunity to formally evaluate your group members and your performance throughout the semester. This evaluation will figure into each person’s project grade.

Assignments related to the group research project:

Human Subjects Training (see Appendix)

If you haven’t already completed it, you will need to complete the CITI course for IRB training. 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.** See the instructions in Appendix A for what to do if you do not pass each module. YOU WILL PRINT OUT YOUR CERTIFICATE OF COMPLETION AND BRING IT TO CLASS ON THE DUE DATE (1/23). 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. (See me with questions.)**

IRB Application

Your group must also obtain IRB approval for your group project. IRBNet is the new electronic process for IRB approval. We will discuss your group’s IRB application during our group meeting.

Literature search

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 research 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).
  o If it is not an empirical study, 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 (use bullet points if preferred). As such, the literature search document your group turns in on 2/6 will be five pages long (one page per article).

**Put the names of all group members on the document you turn in on the assignments tab on Owlspace.**

**Final Report**

On the last day of class, 4/24, your group will turn in final report that includes: (1) your measure/test (items and response scale), (2) a brief description of the construct assessed, (3) a summary of the process used to develop the measure, (4) a description of the process used to evaluate the measure (i.e., a method and result section for your small study), and (5) your conclusions about the measure (its validity, usefulness, future research/directions). It should be no more than 6 pages total (including cover page with project title and group member names). You can use bullet points. Please hand in a paper copy and attach it to the assignments tab in Owlspace.

**Oral presentation**

Each group will give a 25 minute presentation about their project during the last week 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. The audience will be provided a rubric for grading each project and presentation. Your presentation grade will be a function of ratings by me and your classmates.

*The IRB application, 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 the group work.*

*Late work.* Assignments can be handed in late with a deduction of 5% of total points available for each 24 hour period they are late. You do not need to contact me to hand something in late. Exceptions to this are (1) the exam, which is given to the whole class simultaneously, and (2) group work and presentations, where others are counting on you.

**Evaluation:**

- **20%** Exam (2/20)
- **50%** Total group project; broken down as follows:
  - Literature search (10%, due 2/6)
  - Report (20%, due 4/24)
  - Presentation (15%; week of 4/20)
  - Group participation (5%)
- **25%** Paper (due 5/6, 5 p.m.)
- **5%** Class participation
Grades will be determined on the following scale:

- 100 – 98 % = A+
- 97 - 98% = A
- 92 - 90 % = A-
- 89 - 88% = B+
- 87 - 83 % = B
- 82 - 80 % = B-
- 79 - 78% = C+
- 77 - 73 % = C
- 72 - 70 % = C-
- 69 - 68% = D+
- 67 - 63 % = D
- 62 – 60 % = D-
- 59 - 0% = F

*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 which assignments are covered under the honor code and which are not. 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 to my attention.

*Disabilities.* If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.
## Course Schedule (Subject to Change)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
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</thead>
<tbody>
<tr>
<td>1/12</td>
<td>Course overview</td>
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<tr>
<td>1/14 &amp; 1/16</td>
<td>Overview &amp; history of psychological testing&lt;br&gt;&lt;br&gt;<em>Construct ideas collected</em></td>
<td>Chapter 1</td>
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<tr>
<td>1/19</td>
<td><strong>MLK day – no class</strong></td>
<td></td>
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<tr>
<td>1/21 &amp; 1/23</td>
<td>Scales, and statistics&lt;br&gt;&lt;br&gt;<em>Human subjects training done, CITI certificate Due 1/23&lt;br&gt;</em>&lt;br&gt;<em>Construct survey due 1/23</em></td>
<td>Chapter 2</td>
</tr>
<tr>
<td>1/26 &amp; 1/28</td>
<td>Norms and the meaning of test scores&lt;br&gt;&lt;br&gt;<em>Group assignments, 1/26</em></td>
<td>Chapter 3</td>
</tr>
<tr>
<td>1/30</td>
<td>Literature searches and library use&lt;br&gt;&lt;br&gt;<em>Group work</em></td>
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<tr>
<td>2/2 &amp; 2/4</td>
<td>Reliability</td>
<td>Chapter 4</td>
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<tr>
<td>2/6</td>
<td>*Group meetings w MEB&lt;br&gt;<em>Literature search due 2/6</em></td>
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<tr>
<td>2/9 - 2/13</td>
<td>Validity</td>
<td>Chapter 5</td>
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<tr>
<td>2/16 &amp; 2/18</td>
<td>Item development &amp; analysis</td>
<td>Chapter 6</td>
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<tr>
<td><strong>2/20</strong></td>
<td><strong>Exam</strong></td>
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<tr>
<td>2/23 &amp; 2/25</td>
<td>Ethical &amp; legal issues</td>
<td>Chapter 7</td>
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<tr>
<td>2/27</td>
<td><em>Group work; Begin IRB application</em></td>
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<tr>
<td><strong>3/2 – 3/6</strong></td>
<td><strong>Spring Break – No classes</strong></td>
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<tr>
<td>3/9 &amp; 3/11</td>
<td>Intelligence and its assessment&lt;br&gt;&lt;br&gt;<em>Paper topic due, 3/11</em></td>
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<td>3/13</td>
<td><em>Group work</em></td>
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<tr>
<td>3/16 &amp; 3/18</td>
<td>Achievement tests and group differences</td>
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<tr>
<td>3/20</td>
<td>*Group work&lt;br&gt;<em>IRB Application done</em></td>
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<tr>
<td>3/27</td>
<td>*Group work&lt;br&gt;<em>Data collection starts</em></td>
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<td>3/30 &amp; 4/1</td>
<td>Clinical approaches</td>
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<tr>
<td><strong>4/3</strong></td>
<td><strong>Mid-term recess – no class</strong></td>
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<tr>
<td>4/6 &amp; 4/8</td>
<td>Interests and their assessment</td>
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<td>4/10</td>
<td><em>Group work</em></td>
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<tr>
<td>4/13 – 4/17</td>
<td><em>Data analysis &amp; group work</em></td>
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<tr>
<td>4/20 – 4/24</td>
<td>Group presentations&lt;br&gt;&lt;br&gt;<em>Final report due, 4/24</em></td>
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<tr>
<td>5/6</td>
<td>Final paper due – 5 p.m.</td>
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Appendix A

CITI Human Subjects Training Instructions; Registration and Course Completion

You should take the “STUDENTS CONDUCTING NO MORE THAN MINIMAL RISK RESEARCH” CITI course that includes the following required modules:

- Belmont Report and CITI Course Introduction
- Students in Research - SBR

1) Go to the CITI login page (https://www.citiprogram.org/Default.asp?)
2) Register as a "new user"
3) In the "Participating Institutions" drop down box, select Rice University as your institution. (you do not need to respond to the other drop down boxes for other categories of institutions.)
4) Create a username and password.
5) Create a Security Question and Answer.
6) Enter your name (as you provided it to Rice University).
7) Enter your preferred e-mail address.
8) Enter your Rice student/employee ID.
9) Complete the "Member Information" page including your department and your role in research, i.e., undergraduate, graduate, postdoc, etc.
10) You will then select a curriculum. You will be given a choice between the following: (a) Social and Behavioral; (b) Biomedical; (c) Student Researchers; (d) Data and Specimens Only Research; and (e) IRB Members. Choose the most appropriate course and click "submit." (STUDENTS CONDUCTING NO MORE THAN MINIMAL RISK RESEARCH)
11) On the next page you will be able to begin the training. Select "Enter" under "My Courses" to start the IRB training.
12) Complete the Integrity Assurance Module prior to initiating the learning modules.

Complete the required IRB modules and associated quizzes, achieving a minimum passing score of 80% on each module. A running tally is compiled in a grade book. **If you want to improve a score on a quiz or have not achieved the minimum-required score of 80%, you may repeat it. Do so before you exit the program however; the process of repeating a module after you have exited the program is more complicated.**

When you complete all of the required modules successfully, you will print your completion report through the "Print" link on the learner’s menu. **You are required to bring a copy of this completion report to class on the due date.** A copy of the report will be automatically sent to Rice's Office of Sponsored Research (OSR), which will maintain a record of your completion.