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**PSYC 430
Tests and
Measurements**

The University of Idaho in statewide cooperation with
Boise State University — Idaho State University — Lewis-Clark State College

Course Guide

Independent
Study | in Idaho

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Psychology 430 Tests and Measurements

University of Idaho
3 Semester-Hour Credits

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Welcome!

Whether you are a new or returning student, welcome to the Independent Study in Idaho (ISI) program. Below, you will find information pertinent to your course including the course description, course materials, course objectives, as well as information about assignments, exams, and grading. If you have any questions or concerns, please contact the ISI office for clarification before beginning your course.

Policies and Procedures

Refer to the ISI website at www.uidaho.edu/isi and select *Students* for the most current policies and procedures, including information on setting up accounts, student confidentiality, exams, proctors, transcripts, course exchanges, refunds, academic integrity, library resources, and disability support and other services.

Course Description

Review of the major principles of test development including test construction and methods for determining test validity and reliability, some of the currently used scales, and study of scaling methods such as Thurstone scales, Likert scales, and semantic differentials. Prerequisites: Psyc 101. Recommended preparation: Stat 251 [Statistical Methods]

Required: Internet access, computer with word-processing software

Recommended: Microsoft Excel or other spreadsheet software

9 graded lessons, 6 self-study lessons, 4 proctored exams

Course Materials

Required Course Materials

McIntire, Sandra A., and Leslie A. Miller. *Foundations of Psychological Testing: A Practical Approach*. 2nd ed. California: Sage Publications, Inc., 2007. ISBN 978-1-4129-2484-9

Recommended Course Materials

Microsoft Office Excel is recommended.

Course Delivery

This course is available online. An electronic course guide is accessible through BbLearn at no additional cost. Refer to your *Registration Confirmation Email* for instructions on how to access BbLearn.

Course Introduction

Psychological tests are used to help make decisions in a variety of settings. For example, they may help us diagnose a mental illness, hire an employee, or assess achievement in school. Knowledge of psychological testing is also important for research purposes. Measurement is an essential part of any science and this course will give you an understanding of how psychologists develop and evaluate scales and tests.

The focus of this course will be on how to construct and evaluate psychological tests. We will also discuss some types of psychological tests (e.g., intelligence tests, personality tests) to familiarize students with the different types of tests available.

Course Objectives

- The primary objective of this course is to provide students with an understanding of how to develop and evaluate psychological tests.
- Students will also learn about the ethics of testing and how testing can be used to help make decisions in educational, clinical/counseling, and organizational settings.

Lessons

Overview

Each lesson includes the following components:

- lesson objectives
- reading assignment
- important terms
- lecture
- written assignment

Study Hints

- Complete all assigned readings.
- Set a schedule allowing for completion of the course one month prior to your desired deadline. (An *Assignment Submission Log* is provided for this purpose.)
- Web pages and URL links in the World Wide Web are subject to change. If you cannot access a link that has been listed in this course guide, use your favorite search engine (such as Google) to locate the site. To seek assistance or provide any updated information, contact your instructor.

Exams

Overview

- You must wait for grades and comments on lessons prior to taking each subsequent exam.
- For your instructor's exam guidelines, refer to your *Registration Confirmation Email*, and the *Exam Information* sections in this course guide.

See *Grading* for specific information on exams, points, and percentages.

Proctor Selection/Scheduling Exams

All exams require a proctor.

Grading

Grades will be determined based on exam performance (300 points) and performance on course lessons (135 points) for a total of 435 points.

The point breakdown for the lessons and exams is presented below:

Lesson	Points	Percentage
Lesson 2	15	3.4% Lesson
3	15	3.4% Lesson
5	15	3.4% Lesson
6	15	3.4% Lesson
8	15	3.4% Lesson
10	15	3.4% Lesson
12	15	3.4% Lesson
13	15	3.4% Lesson
14	15	3.4% Lesson
Total	135	31.0%

Exam	Points	Percentage
Exam 1	75	17.2% Exam 2
	75	17.2% Exam 3
	75	17.2%
Exam 4	75	17.2%
Total	300	69.0%

Self-Study Lessons

There are six *self-study* lessons (lessons 1, 4, 7, 9, 11, and 15). These are to be completed, but are *not* to be

submitted for grading. Answers are provided in your textbook and toward the back of this course guide.

The following grading scale will be used:

90% and above	390–435 = A
80% to 89%	346–389 = B
70% to 79%	303–345 = C
60% to 69%	259–302 = D
59% and below	0–258 = F

The final course grade is issued after **all** lessons and exams have been graded.

Acts of academic dishonesty, including cheating or plagiarism are considered a very serious transgression and may result in a grade of F for the course.

About the Course Developer

Welcome to Tests and Measurements! My name is Todd Thorsteinson and I am an Associate Professor of Psychology at the University of Idaho. I received my Ph.D. in psychology from Bowling Green State University in 1998, specializing in industrial/organizational psychology. I am interested in psychological testing as it is applied in organizations (e.g., employee selection, performance appraisal).

Contacting Your Instructor

Instructor contact information is available in BbLearn.

Assignment Submission Log

Readings:

McIntire, Sandra A., and Leslie A. Miller. *Foundations of Psychological Testing:*

A Practical Approach. 2nd ed. California: Sage Publications, Inc., 2007. ISBN 978-1-4129-2484-9

Lesson	Chapter	Reading	Written Assignment	Date Submitted
1	1	pages 3–42	<i>Self-Study:</i> Introduction to Psychological Testing	Do not submit.
2	2	pages 43–73	Importance of Psychological Testing	
3	3	pages 75–105	Ethics and Psychological Testing	
4	4	pages 107–128	<i>Self-Study:</i> Computerized Testing	Do not submit.
<p>(You should choose a proctor and send the completed <i>Proctor Information Form</i> to the ISI office at least two weeks prior to taking your first exam.)</p> <p>It is time to make arrangements with your proctor to take Exam 1.</p>				
5	5	pages 133–178	Interpreting Test Scores	
6	6	pages 179–219	Reliability	
7	7	pages 221–249	<i>Self-Study:</i> Content Validity	Do not submit.
8	8	pages 251–281	Criterion-Related Validity	
9	9	pages 283–308	<i>Self-Study:</i> Construct Validity	Do not submit.
<p>It is time to make arrangements with your proctor to take Exam 2.</p>				
10	10	pages 311–355	Survey Construction	
11	11	pages 357–388	<i>Self-Study:</i> Test Development	Do not submit.
12	12	pages 389–430	Test Evaluation	
<p>It is time to make arrangements with your proctor to take Exam 3.</p>				

Lesson	Chapter	Reading	Written Assignment	Date Submitted
13	13	pages 433–472	Using Tests in Educational Settings	_____
14	14	pages 473–513	Using Tests in Clinical and Counseling Settings	_____
15	15	pages 515–549	<i>Self-Study:</i> Using Tests in Business	Do not submit.
It is time to make arrangements with your proctor to take Exam 4, the Final Exam.				

Lesson 1

Self-Study: Introduction to Psychological Testing

Lesson Objectives

This lesson provides an introduction to psychological testing. After successfully completing this lesson, you will understand/be able to:

- 1-1 define a psychological test;
- 1-2 differentiate between psychological tests and describe how tests are classified;
- 1-3 describe how psychological testing has developed over time;
- 1-4 identify and locate information about psychological tests.

Reading Assignment

Foundations of Psychological Testing: A Practical Approach, Chapter 1, pages 3–42

Important Terms

achievement tests	norms	psychometrics
aptitude tests	objective tests	self-report tests
behavior observation tests	personality tests	standardized tests
intelligence tests	projective tests	surveys
interest inventories	psychological assessment	tests of maximal performance
measurement	psychological tests	

Lecture

Measurement

is an essential part of science. In order to explain and predict phenomena, we need to be able to accurately measure phenomena. This is relatively easy for physical attributes (e.g., height, weight), but becomes more difficult for abstract concepts, such as depression, anxiety, and intelligence. However, we need to be able to measure these concepts if we hope to better understand them.

Psychological tests are used to measure these concepts. All psychological tests can be characterized as focusing on a sample of behavior, under standardized conditions, and utilizing rules for scoring. Psychological tests are used for a variety of purposes, such as diagnosing a mental illness, providing feedback on one's interests, or evaluating the characteristics of a potential employee.

Written Assignment

Please read Chapter 1 carefully before starting the assignment. This assignment is a *self-study* exercise, so you will not turn this in. On pages 41 and 42 of your textbook, you will find some practice questions. Please answer all 15 of the multiple-choice questions and then check your answers with the answer key provided on the bottom of page 42 of your text. I would also like you to answer the first and third short essay questions. Answers to these questions are listed in the back of this course guide.