Independent Study in Idaho

PSYC 385
Research Methods

Providing independent study opportunities for more than 40 years.

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

Self-paced study. Anytime. Anywhere!

PSYC/SS 385
Research Methods

Lewis-Clark State College
3 Semester-Hour Credits

Prepared by:
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Professor
Lewis-Clark State College

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1 – PSYC/SS 385
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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](http://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
Develops students' ability to design an empirical study within the ethical constraints of human research and to understand the results of research in professional journals. Specific research designs covered include archival research, experimental designs, naturalistic observation, participant observation, quasi-experimental designs, single subject designs, and survey research. Integrates (1) analytical and evaluative thinking, (2) descriptive, explanatory, and critical writing, and (3) basic knowledge of the theory and application of qualitative and quantitative research design. Cross-listed with SS-385

Corequisite/Prerequisite: PSYC-101 or PSYC-205 or permission of instructor.
This description has been approved by the curriculum committee and may not be edited.

Required: Internet access

12 graded assignments, 5 self-study assignments, 4 proctored exams

Students are advised to wait for grades and feedback on assignments before taking exams.

ALL assignments and exams must be submitted to receive a final grade for the course.

Course Materials

Required Course Materials

Course Delivery
All ISI courses are delivered through BbLearn, an online management system that hosts the course lessons and assignments and other items that are essential to the course. Upon registration, the student will receive a Registration Confirmation Email with information on how to access ISI courses online.
Course Introduction
This course is designed to provide students with an introduction to the basics of research design. There will be an emphasis on quantitative research employing a variety of methods. The process will be examined from conceptualization, design, analysis, to generalization and the issues that arise at each step. There will be an emphasis on identifying and critiquing designs.

Course Objectives
Upon completion of the course, the student:
1. will demonstrate knowledge of ethical and legal considerations in research;
2. will be familiar with sources of reference materials (e.g., journals);
3. will understand threats to internal and external validity and reliability;
4. will distinguish between experimental and non-experimental research and the limitations of conclusions drawn from each;
5. will recognize a variety of experimental and non-experimental research designs and know the advantages and disadvantages or each;
6. will be able to identify and differentiate independent variables, dependent variables, and participant variables;
7. will demonstrate an understanding of important statistical terms, methods, and values commonly used in research design and analysis;
8. will be able to read and correctly analyze a variety of types of research;

Lessons
Overview
Each lesson includes lesson objectives, a reading assignment, key terms, a “lecture” to complement or clarify the text, which may be written information or videos. The lessons correspond to each chapter in the text. Some include recommended self-study, and some include an assignment.

There are 4 units in the course. Each unit has 3 assignments to be submitted for points, and self-test practice multiple-choice items for the unit. One assignment for each unit is a “frame game,” which is designed to help you see and learn the relationships among the concepts in the unit. In Unit 1 there will be a video explaining the assignment. There is only 1 “writing” assignment for the course.

Each lesson may include the following components:
• Lesson objectives
• Reading assignments
• Important terms
• Lecture
• Written assignment(s)
Study Hints:
- Keep a copy of every assignment submitted.
- Complete all reading assignments.
- Set a schedule allowing for course completion one month before your personal deadline. An Assignment Submission Log is provided for this purpose.
- Web pages and URL links in the World Wide Web are continuously changing. Contact your instructor if you find a broken Web page or URL.

Refer to the Course Rules in BbLearn for further details on assignment requirements and submission.

Exams
- You must wait for grades and comments on assignments before taking subsequent exams.
- Exams will be a combination of multiple-choice, short answer (similar to the worksheets completed in the different units), and perhaps matching.
- For your instructor’s exam guidelines, refer to the Course Rules in BbLearn.

Refer to Grading for specific information on assignment/exam points and percentages.

Proctor Selection/Scheduling Exams

All exams require a proctor.

To submit your Proctor Information Form online, visit the ISI website and select Forms, Proctor Information Form. Submit this form at least two weeks before your first exam. Refer to Students, Assignments and Exams on the ISI website for information on acceptable and unacceptable proctors.

Grading

The course grade will be based upon the following considerations:

The total weight of all exams exceeds the weight of all assignments combined. You must AVERAGE at least 70% on the assignments and at least 70% on the exams in order to pass. High scores in one area cannot compensate for less than 70% performance in the other.

All Assignments will be weighted in the final grade so that they equal 3.5 percent of the final grade. Please pay attention to this fact when looking at the point values for each assignment.

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics Module</td>
<td>21</td>
<td>3.5</td>
</tr>
<tr>
<td>Experiment v. Non</td>
<td>22</td>
<td>3.5</td>
</tr>
<tr>
<td>Frame Game 1</td>
<td>34</td>
<td>3.5</td>
</tr>
<tr>
<td>Unit 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td>30</td>
<td>3.5</td>
</tr>
<tr>
<td>Confound Assign.</td>
<td>30</td>
<td>3.5</td>
</tr>
<tr>
<td>Frame Game 2</td>
<td>58</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Unit 3
Factorial Design ID  28  3.5
Interp. Factorial 44  3.5
Frame Game 3  51  3.5

Unit 4
Assign. Ch. 12-13  19  3.5
Research Critique  45  3.5
Frame Game 4  30  3.5
Total  42%

Exams

<table>
<thead>
<tr>
<th>Exams</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
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<td>14.5</td>
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<tr>
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<td>Unit 3</td>
<td>75</td>
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</tr>
<tr>
<td>Unit 4</td>
<td>75</td>
<td>14.5</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>58%</td>
</tr>
</tbody>
</table>

A = 90% to 100%
B = 80% to 89%
C = 70% to 79%
D = 60% to 69%
F = 59% or less

+/- grades will be apply to totals within 2% of points of the cutoffs.

Self-study assignments
Some lessons contain self-study assignments in Blackboard, and answers are provided.

Practice exams
Each unit has self-study practice multiple-choice questions. Answers are provided in Blackboard.

The final course grade is issued after all assignments 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
Your course developer is Teri Rust, a Professor of Psychology at Lewis-Clark State College. I received my Ph.D. in Educational Psychology from the University of Iowa in 1991. My areas of emphasis included Statistics, Research, Cognition, and Motivation. In 2005 I also received a M.Ed. in Counseling from the University of Idaho. I have taught research courses periodically. For over 15 years I have served on, or chaired, the Institutional Review Board at Lewis-Clark State College, reviewing hundreds of research projects.
Contacting Your Instructor

Instructor contact information is posted on your BbLearn site under Course Rules.
# Assignment Submission Log Template

Send the completed *Proctor Information Form* to the ISI office at least two weeks before taking your first exam.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Projected Date for Completion</th>
<th>Date Submitted</th>
<th>Grade Received</th>
<th>Cumulative Point Totals</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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It is time to make arrangements with your proctor to take Exam 1.

<table>
<thead>
<tr>
<th>Exam 1</th>
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</thead>
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It is time to make arrangements with your proctor to take Exam 2.

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<th>Exam 2</th>
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<td>9</td>
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It is time to make arrangements with your proctor to take Exam 3.

<table>
<thead>
<tr>
<th>Exam 3</th>
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<td>11</td>
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<tr>
<td>12</td>
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</tbody>
</table>

It is time to make arrangements with your proctor to take Exam 4.

<table>
<thead>
<tr>
<th>Exam 4</th>
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</thead>
</table>
Lesson 1
Scientific Understanding of Behavior

Lesson Objectives

a. Discuss the different sources of knowledge: intuition, personal experience, authority, versus skepticism and empiricism.
b. Name, discuss, and give examples of the 4 goals of science.
c. Name and discuss the 3 elements for inferring causation.
d. Distinguish between basic and applied research.

Reading Assignment


Important Terms

<table>
<thead>
<tr>
<th>Intuition</th>
<th>Peer Review</th>
<th>Temporal Precedence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>Pseudoscience</td>
<td>Covariation of Cause and Effect</td>
</tr>
<tr>
<td>Illusory correlation</td>
<td>Describe</td>
<td>Alternative Explanations</td>
</tr>
<tr>
<td>Skepticism</td>
<td>Predict</td>
<td>Basic Research</td>
</tr>
<tr>
<td>Empiricism</td>
<td>Causation</td>
<td>Applied Research</td>
</tr>
<tr>
<td>Falsifiability</td>
<td>Explanation</td>
<td></td>
</tr>
</tbody>
</table>

Lecture

One of the most important objectives in research is to learn the vocabulary. Using flashcards is effective. I know there are some flashcard apps, but the old-fashioned method of writing them is valuable. Writing them provides review. Going through the physical cards allows you to make 2 piles, those you know well, and those you need to review more. It is more efficient to focus your time on the terms you don't know well, than to go through ALL of the terms each time.

Be sure to use the Learning Objectives at the beginning of the chapters in the text and these Lessons to prime yourself for the material that will be presented. Take advantage of Check Your Learning in the chapters. These require you to interact with the material beyond just passively reading about it. The same is true for the Review Questions at the end of the chapters.

Learning new information involves being able to retrieve it from memory, which is different from reading it. To remember information, rereading material is generally an ineffective use of time. If you want to determine if you HAVE learned, self-testing is the way to go. To determine if you know the material well enough to retrieve it to use it or to demonstrate your knowledge on a test, practice retrieving it. These opportunities are provided by Check Your Learning, the Review Questions, reviewing the Learning Objectives again after reading a chapter, and by completing the assignments in the course. I have also provided a Self-Test for each unit.
Graded Assignment

There is no graded assignment specifically for Chapter 1. Each unit will have an assignment called a Frame Game. There is a video introducing the way the assignment works. I have placed the frame game assignment at the end of each unit, because you need concepts from all of the chapters before you can complete the frame game. But you may want to work on it as you go through the chapters, if so you can go to the last chapter in the unit and print out the Frame Game after you have watched the instructional video.