Experimental Methodology by Christensen.

COURSE SCHEDULE:
- Nov. 18: Test on Chapters 1-9
- Nov. 20: Appraisals #1 & #2 due
- Nov. 25: Appraisals #3 & #4 due
- Dec. 2: Appraisals #5 & #6 due
- Dec. 9: Final Test, 8:00-9:15 am

EXAMINATIONS:
A 100 point test will be given covering lecture and textbook material.

RESEARCH APPRAISALS:
1. 6 journal articles will be assigned for you to evaluate and appraise. A study guide will be given to assist the evaluation.
2. Evaluation/appraising of journal articles may be done singly or in groups.
3. Three class sessions are designated for group discussion of articles and class evaluation.
4. The 6 appraisal assignments are for your learning. The study guides will not be handed in or graded.
5. At the time of the final exam scheduling, a 7th journal article will be given you to brief and appraise with test questions on that paper.
6. A 50 point test will be given in an appraisal of the 7th journal article.

RESEARCH PROJECT:
1. A 100 point research project will be required of each student. The project will be the training of laboratory animals in a discrimination maze task, followed by the introduction of an independent variable.
2. Each student will be issued 2 albino rats. It will be the student’s responsibility to care for the needs of these animals during week days (Mon. – Fri). Weekend care will be provided.
3. When the student feels their rats have acquired criterion learning in the discrimination, they will arrange with the instructor for a demonstration. Points will be awarded according to the following:
   a. 70 points. Both animals demonstrate criterion learning.
   b. 65 points. One of the 2 rats fails to show criterion learning.
   c. 60 points. One rat fails to run the maze while the other reaches criterion.
   d. 0 points. Neither rat shows evidence of running the maze.
4. 30 additional points can be acquired with the successful introduction of an independent variable (IV) and a typed research report write-up. The IV will be selected by the student. It will be the responsibility of the student to design or acquire any necessary equipment for this process. No IV will be allowed that is injurious or stress-inducing to the animal.
5. The IV will be selected by the student. It will be the responsibility of the student to design or acquire any necessary materials for this process. No IV will be allowed that is injurious or stress-inducing to the animal.
6. The research report must follow the APA guidelines outlined in chapter 15 of your textbook.
7. Points for the independent variable portion of the project will be allotted according to the following:
<table>
<thead>
<tr>
<th>Points Allotted</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Problem Statement</strong></td>
<td>Improperly stated</td>
<td>Partially correct</td>
<td>Properly stated</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Hypothesis Statement</strong></td>
<td>Improperly stated</td>
<td>Partially correct</td>
<td>Properly Stated</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Construct Validity</strong></td>
<td>The IV chosen shows no relationship between the operations performed and the stated research problem.</td>
<td>The IV as operationally shows a poor relationship with the construct stated in the research problem.</td>
<td>The IV as operationally defined is closely related to the construct stated in the research problem.</td>
<td>The IV is a good functioning operational definition of the construct stated in the research problem.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Internal Validity</strong></td>
<td>There are more than 2 confounding variables recognize in this project.</td>
<td>There are 2 recognized confounding variables in this project.</td>
<td>N/A</td>
<td>There is an alternative explanation to the relationship between DV and IV.</td>
<td>N/A</td>
<td>There is no evidence of a confounding variable.</td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>N/A</td>
<td>The IV chosen is a commonly used manipulation in animal research.</td>
<td>N/A</td>
<td>The IV chosen is used in animal research but not in the T-maze.</td>
<td>N/A</td>
<td>The IV chosen is novel to animal research.</td>
</tr>
<tr>
<td><strong>APA Style Title Abstract Introduction</strong></td>
<td>2 of 3 not included</td>
<td>1 of 3 not included</td>
<td>All 3 included introduction contains statement of research problem with no prior research included.</td>
<td>All 3 included intro contains statement of research problem with inclusion of 1 prior research.</td>
<td>All 3 included intro contains statement of research problem with inclusion of 1-3 prior research citations.</td>
<td>All 3 included intro contains statement of research problem with inclusion of more than 3 research citations.</td>
</tr>
<tr>
<td><strong>APA Style Methods</strong></td>
<td>Unclear description of: 1. How IV was manipulated. 2. How animals were treated with respect to IV manipulation. 3. How data was collected. 4. What equipment/materials were used.</td>
<td>Clarity was noted in only 1 of 4.</td>
<td>Clarity in only 2 of 4.</td>
<td>Clarity in 3 of 4.</td>
<td>Descriptive clarity was complete so that a reader could reproduce the experiment.</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>APA Style Results</strong></td>
<td>Graph hand drawn and sloppy.</td>
<td>Graph hand drawn but neat.</td>
<td>Graph computer drawn.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>APA Style Grammar</strong></td>
<td>3rd person, past tense not used.</td>
<td>3rd person, past tense occasionally used.</td>
<td>3rd person, past tense consistently used.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**ALTERNATIVE TO RESEARCH PROJECT**

An alternative to the research project will be provided for sociology students &/or those who find they have an aversive reaction to handling rats. This project is the mastering of APA style of writing.


The workbook will be completed under the self-direction of the student. Following completion, a 100 pt. test will be administered to the student.

**GRADING**

1. There are 250 points possible in this course.
   - 100 pts. – test on lecture/textbook material
   - 100 pts – research project or alternative research project
   - 50 pts – test on journal article appraisal

2. The highest number of points achieved by a student will be treated as 100. All other scores will be compared as a % of it.

3. Grades will be given as to the following per-centages:
   - 90 – 100 = A
   - 80 – 90 = B
   - 60 - 80 = C
   - 50 – 60 = D
   - below 50 = F

**ATTENDANCE POLICY:**

Attendance will be taken each class period. Each student will be allowed 3 absences. 5 points will be deducted for each absence after 3.

**CLASS BEHAVIOR:**

A) All cell phones are to be turned off before entering class. If you leave class to answer your cell phone, you are to take your books with you and not return to class. You will be credited with an absence for that day.

B) No text messaging will be allowed during class. All blackberries and texting C-phones are to be placed on the table in front of you. Anyone caught texting during class period will be asked to leave with a credited absence for the day.

C) No lap tops will be permitted without special approval from the professor.

**SPECIAL NEEDS/DISABILITY ACCOMMODATIONS:**

If there are special disability needs by any class member, this should be made known to the professor within the first week of class.

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**Alignment of Mission, Objectives, and Outcomes**

**University Mission Statement:**

The University provides a wide variety of intellectual, social, and religious activities that serve a developmental function in students. The ultimate goal is to develop broadly educated individuals with specific skill and career knowledge related to a potential field of work.

**Related Division Mission:**

The Division of Behavioral Sciences educates and develops students to be competent in academic disciplines focused on understanding human behavior, mental processes, social functioning and the institutional structures of society.
Course Objectives:
Students will have a firm grasp of the knowledge base, methods of inquiry, and scientific developments within the academic discipline of psychology.

Intended Educational (Student) Outcome or State Standards:
Students will grasp the importance of research to the field of psychology and demonstrated an applied understanding of basic research methods, including experimental design, data analysis and interpretation

Means of Assessment:
Research Design & Lab Methodology and Results and APA Writeup