UNIT: PSYCHOLOGICAL RESEARCH

COLLECTION OF INSTRUCTIONS AND WORKSHEETS
INTRODUCTION TO PSYCHOLOGY

RESEARCH EXPERIMENT (400 points)

The goal of this project is to provide you with the experience of performing a psychological experiment applying skills and knowledge learned throughout this class. The entire project will be divided and handed in parts. Be aware there will be a 5-point deduction per day for any late background and final papers. Keep up with the work on time!

The research question for your experiment must pertain to a topic that has been included within the area of study for this year. Look in your book and listen to class discussion for ideas.

This final project will be a written paper describing the experiment and this must be typed and double-spaced, margins no larger than one-inch top, bottom or sides. Follow the APA style. All the areas described below are to be included. Parts of this project will be written at different times and then collected and handed in as a whole _______________________

You may work with one partner and share a topic, however, you will write separate background information papers. You and your partner will measure different variables.

Research topic area. Due: ______________________

Hand in the Experiment Brainstorming sheet.

(-2 points) 1. Title page: This is a separate page that includes research question, name(s) and class period.

(20 points) 2. Final experiment introduction: (½ page) Why did you pick this topic? What do you want to know? Why should anyone be interested in reading about your experiment? Intrigue the reader.

(30 points) 3. Outline Due:__________________________

You must attach your worksheets and notes. (-5 points if missing)

(200 points) 4. Background Information Paper Due:__________________________

(3 pages minimum – that means to the end of the page)

You will need to research the subject that you are planning to study to get background information. This will help you design an experiment. If possible find out what has been studied previously in this area. This is an important part of the whole project, so please do a good job. Information learned from your results should also be discussed later in the paper while discussing experiment.

An introduction and a conclusion for this paper are required. Connect the conclusion to your experiment.

A minimum of Three references, which includes the classroom text are required. A reference page following the A.P.A. style is required. When quoting or paraphrasing, using statistics or referring to other research, referencing will be required.

Write the information IN YOUR OWN WORDS! Sometimes this is hard to do. If too much of your paper appears to be taken from your references, you will need to rewrite or receive ZERO points on this portion of the paper. You must attach copies of the pages you printed from the Internet.
### Paper Grading Focus:

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>100</td>
</tr>
<tr>
<td>- The paper is written in student’s own words – very few quotes.</td>
<td></td>
</tr>
<tr>
<td>- The introduction and concluding paragraphs tie the information together</td>
<td></td>
</tr>
<tr>
<td>- The information is correct and provides a solid background of knowledge</td>
<td></td>
</tr>
<tr>
<td>- Evidence that the textbook was used as a reference</td>
<td></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>60</td>
</tr>
<tr>
<td>- The information discussed in the paper applies well to the topic for the experiment</td>
<td></td>
</tr>
<tr>
<td>- This paper will help the student design an experiment on this topic</td>
<td></td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>40</td>
</tr>
<tr>
<td>- Directions for the paper were followed</td>
<td></td>
</tr>
<tr>
<td>- The grammar and spelling are college quality</td>
<td></td>
</tr>
<tr>
<td>- APA style of referencing was followed</td>
<td></td>
</tr>
</tbody>
</table>

### Instructions:

1. **Research Design**: Fill in research design sheet. This part is hand-written.
   - I must approve the design before you can conduct the experiment!
   - Include the copy (even though it may be messy) with signature in final paper.

   **Due:** ________________

2. **CONDUCT YOUR EXPERIMENT!**
   - You cannot conduct your experiment unless you have final approval from me!

3. The following is to be written after your experiment is completed.

   **Final due date:** ________________

4. **Experiment Description (about 1 page)**
   - Exactly what happened during your experiment? Describe everything in detail.
   - Include dates, times and place of experiment. What materials did you use? What were your exact procedures? If you changed something from your design, describe what you did differently (don’t worry, things change).
   - Include a copy of your questions, directions, words memorized etc.
   - I do not need to receive the subject data sheets.

5. **Results (about 2 – 3 pages)**
   - What are the results of this experiment?
   - a. **Report the data.** (10 points)
      - What were the results? Include all the data: numbers and statistics.
      - What conclusions can you draw from your experiment?
      - Did you answer your research question?
      - Did you prove or disprove your hypothesis?

   - b. **Create a table, chart or graph** to demonstrate your results. (10 points)
      - Change the numbers into percentages if necessary.
      - This can be hand drawn or created on a computer.
c. Discuss your experiment. Write it like a reflection paper. (20 points)

What do you think about your whole experiment and results?

**Compare with the information from your background information.**

Were there any complications that might have interfered with your study? Were there any extraneous variables you didn’t plan for?

Did you do something that might have created a bias?

What new studies would you now recommend??

d. Final comments and research preparation. What did you learn from doing this experiment both about your subject matter or the process of conducting research?

(15 points) 7. APA Standards (about 1/2 page)

Did you follow standard ethical procedures?

-Were the subjects informed of all aspects of the research?

-Did you get parental permission if necessary?

-If it was necessary to deceive or conceal certain aspects about the experiment from the subjects, were the subjects then given an explanation about the experiment after it was done?

-Were subjects allowed to decline participation? How was this done?

-How did you protect subject identifying information?

---

### Final Rubric for experiment paper

<table>
<thead>
<tr>
<th></th>
<th>(A)</th>
<th>(C)</th>
<th>(Not passing)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary:</strong></td>
<td><strong>Idea Development</strong></td>
<td>Moderately clearly written paper. Includes most main points. Some knowledge of research displayed. Some reference to background paper. Expand data. Graph could have been improved.</td>
<td>Answers are too short. Too few ideas included. Poorly written. Inaccurate information.</td>
</tr>
<tr>
<td></td>
<td>Clearly written paper. Captures all the main points. Significant knowledge of research displayed in discussion of experiment. Refers to background paper Includes data. Graph reflects data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analysis:</strong></td>
<td><strong>Word Choice</strong></td>
<td>Accurate use of vocabulary from class as it relates to research. Strong connection of experiment to class.</td>
<td>Too few vocabulary used. Inaccurate use. Minimal connection to class.</td>
</tr>
<tr>
<td></td>
<td>Accurate use of some new vocabulary. Some connection of experiment to class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reflections:</strong></td>
<td><strong>Voice</strong></td>
<td>Some evidence of reflective thoughts about experiment.</td>
<td>Minimal evidence of reflective thought about experiment.</td>
</tr>
<tr>
<td></td>
<td>Significant evidence of reflective thoughts about experiment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>Spelling, grammar are all correct and college quality.</td>
<td>Almost all spelling and grammar are correct. Not quite college quality.</td>
<td>Significant concerns with spelling and grammar.</td>
</tr>
</tbody>
</table>

---

**Extra Credit:** Extra credit points stop at 12 extra points. Total experiment paper points do not exceed 400.

2 point per day for each day the background information paper is turned in early.

2 points per day for each day the final paper is turned in early.

4 points for assisting another researchers. Maximum of 8 points.

4 points for volunteering as a subject in an experiment outside of school. Maximum of 8 points. Volunteering as a subject in school is prohibited.
EXPERIMENT
Brainstorming

These ideas sound good to me:

I have narrowed the ideas down to:

My research topic is: ________________________________
Resources Worksheet for Research Paper

Referencing information: Write in APA style

Summarize in brief notes information that would relate to your paper:
INTRODUCTION TO PSYCHOLOGY

Outline Worksheet - example

A. Introduction
   a. Thesis statement: Your potential research question
      Is there a gender difference in the ability to identify a subject in a crime?
      Discuss potential brain differences that cause genders to perceive environment differently, hunting vs gathering

B. Topic: Physical differences
   a. Brain differences
      Size, structure, use, hypothalamus differences
   b. How these differences impact on each gender’s lives
      Aggression, verbal abilities, senses,
   c. Other physical differences
      Hormones, genetic traits

C. Topic: Cognitive differences
   a. Similarities – differences are diminishing

   b. Visual spatial differences, math differences

   c. Memory – recent experiments

D. Topic: Social difference
   a. Conformity – public vs private, myths

   b. Cultural influences – roles, connection to sense of identity, coping behavior

   c. Roles in emergency situations

E. Conclusion:
   a. Restate thesis statement:
      Is there a gender difference in the ability to identify a subject in a crime?

   b. Summarize main ideas
      Discuss research experiment similar to the one planning to run.

   c. Concluding statement – connect to experiment – how new knowledge will influence experiment
      Males will probably be better able to identify suspect because ....brain differences, socialization differences, role in emergency situation
INTRODUCTION TO PSYCHOLOGY

Research Design

Name (s) ___________________________________________

1. Research question: _________________________________________________________
   _______________________________________________________________________

2. Hypothesis: (If…then) _____________________________________________________
   _______________________________________________________________________

3. Dependent Variable(s) _____________________________________________________
   How will you measure it? _________________________________________________
   _______________________________________________________________________

4. Independent Variable(s) ____________________________________________________
   How will you manipulate it? _______________________________________________
   _______________________________________________________________________

5. _____ This is an experiment with separate control and experimental groups.
   Describe the control group: _______________________________________________
   _______________________________________________________________________
   Describe the experimental group ___________________________________________
   _______________________________________________________________________
   _____ This is an experiment, which is also, a correlation study. Describe the two variables that
   will be compared _________________________________________________________
   _______________________________________________________________________

6. What materials will you need for your experiment?
   ___ typed instructions for subjects ___ typed answer sheets
   ___ activity/worksheets ___ other
   ___ typed data collection sheet _____________________________________________
   _______________________________________________________________________

7. Do you need help recruiting subjects? ___ yes ___ no If yes, how many? _____

8. Describe on the back, exactly how you plan to run this experiment. Use bullet sentences.

Teacher signature: necessary to begin experiment___________________________
INTRODUCTION TO PSYCHOLOGY

Name________________________________________________________________________

Experiment – Formal Presentation

The goal of this project is to provide you with the experience of performing a psychological experiment applying skills and knowledge learned throughout this class. This experiment will meet one of the class objectives:

Students will use the basic skills in psychological research to design an experiment, interpret the results and present their findings in both a research paper and to a jury of their peers.

The presentations are due on the scheduled day for your presentation. It is the responsibility of the student to sign up for a presentation date. Absences may cause you to miss the opportunity to present. Students who worked together may present together, but each person will be responsible to present their own background information.

Presentation:
Grading will be based on the following:

(10 points) Summarize background information. Students who present later, must have new information. Repeating previous information from other presentations won’t be informative.

(10 points) Experiment description.
- Clearly stating the research question.
- Describe how you conducted your experiment. Be very detailed here so the class can understand exactly what you did.
- State hypothesis.
- Name the dependent and independent variables.
- Describe the control and experimental groups or if it is a correlation study, describe the groups you are comparing.

(10 points) Describe in detail the conclusions you can draw from this study.
- Show a graph of the data.
- Describe any extraneous variables or problems that might have interfered with your experiment. What would you suggestion next year’s class do differently?

(5 points) Did you learn anything from doing this?
- Final comments?

(10 points) Include a visual presentation.
Full points includes: a videotape of a re-enactment of the experiment, video presentation of parts of the actual experiment, power point presentation, and other very creative ideas.
Partial credit includes: overhead transparencies or basic class demonstration.

(5 points) One feedback form

Teams present together. If one person does all the talking, one person gains all the points.

DO NOT READ YOUR REPORT! Just talk, tell people about your experiment. You all worked hard!
Introduction to Psychology

Feedback on Presentations

Name__________________________________________________________

Presenters name(s)_________________________________

_________________________________________________

USE FULL SENTENCES.

1. Basically summarize their experiment.

2. What did YOU learn from their experiment?

3. Name something they did well in their experiment.

4. Name something they could have done differently to improve this experiment.