

**Laboratory in Memory and Cognition  
Psychology 313  
Haverford College  
Spring 2021**

**Marilyn Boltz**

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**Office Hours:** M: 8:30 – 9:30 am, and by appointment

**Scheduled Class Time:** Mondays from 9:40 – 11:00 am

**Course Zoom Link:**

<https://haverford.zoom.us/j/98782367947?pwd=NW91SmIhSlJyVWVvO1Z2xKeWZxTW5tdz09>

(One can also join by going to the Moodle course site, Zoom Link for all Classes, and clicking on “Start Meeting” for that particular class day.)

***Course Description:***

This laboratory course will be taught remotely and focus on the methods used to investigate the nature of perception, memory, and other cognitive behaviors. These various methodologies will be employed within a set of empirical studies designed to investigate particular topic areas within the field of cognition. Pre-requisites: Psychology 100 and 200.

***Activities and Grading:***

The purpose of this course is to not only familiarize you with some different methodological techniques used in the study of memory and cognition but, more generally, the various phases involved in conducting a psychological research project. Accordingly, each of you will first be asked to develop an idea for a laboratory study that you will orally present to the rest of us. This idea should, in some way, be related to the processing of visual or auditory information. This is a very broad topic that can include the perception or memory of faces and/or voices; advertising; cognitive maps; the cognitive processing of film or other forms of art; music cognition; environmental sounds (and there are probably other relevant topics as well).

There are four constraints on the research idea you develop: first, your research idea must rely on the experimental method (vs. surveys, questionnaires, correlation, or multiple regression) that represents a factorial design (i.e., more than one independent variable); third, it must be a project that can actually be done at Haverford given our equipment and subject population; and fourth, to the best of your knowledge, your proposed study has not previously been conducted within the past literature. From these, the class will select a subset of projects that we will actually do together, in small groups, over the course of the semester. In addition to data collection and statistical analyses of the results, you will be required to write a final research paper that describes all aspects of the study. This includes an: Abstract, Introduction, Methods, Results, Discussion, and Reference sections as well as any accompanying tables or figures, and appendices. This paper should be written in a format that conforms to APA style and is due on **May 10**.

The second activity is one that will not require any actual data collection or statistical analyses. Instead, you will be asked to develop an original research project that addresses some aspect of cognition. The topic can be anything you desire and, again, the proposal is subject to same constraints as your first one (i.e., a study relying on the experimental method with a factorial design that has not yet been reported in the previous literature). In addition, it should address a topic that is different from the one you proposed at the beginning of the course. This final paper should contain the following sections: an Introduction that reviews the relevant literature and the particular question(s) you are posing; a Methods section (along with its appropriate sub-sections) that describes *how* you would do the study; a section relating the predicted pattern of results; and, of course, a Reference section. Your proposal is due on **April 12**.

The evaluation of these different activities will be weighted as follows:

Research Proposal	40%
Write-up of Lab Experiment	40%
Lab Participation & Attendance	20%

### **Course Objectives:**

- Learning to implement all steps of the scientific method, from beginning to end
- Refining critical thinking skills through the generation of original research questions and translating these ideas into rigorous experimental designs to address the questions of interest
- Learning to use statistical analysis techniques (e.g., ANOVA, post-hoc comparisons) and interpreting data in light of the original questions and theories motivating the research
- Learning to write research papers that convey ideas, arguments, and research findings effectively

### **Academic Support and Accommodations:**

Please contact me as soon as possible if you are having difficulties in the course. There are also many resources on campus available to you as a student, including the Office of Academic Resources (<https://www.haverford.edu/oar/>), the Writing Center (<https://www.haverford.edu/writing-center/>), and the Office of Access and Disability Services (<https://www.haverford.edu/access-and-disability-services/>).

Haverford College is committed to providing equal access to students with a disability. If you have (or think you have) a learning difference or disability – including mental health, medical, or physical impairment, please contact the Office of Access and Disability Services (ADS) at [hc-ads@haverford.edu](mailto:hc-ads@haverford.edu). The Coordinator will confidentially discuss the process to establish reasonable accommodations.

Students who have already been approved to receive academic accommodations and want to use their accommodations in this course should share their verification letter with me and also make arrangements to meet with me as soon as possible to discuss their specific accommodations. Please note that accommodations are **not retroactive** and require advance notice to implement.

It is a state law in Pennsylvania that individuals must be given advance notice if they are to be recorded. Therefore, any student who has a disability-related need to audio record this class must first be approved for this accommodation from the Coordinator of Access and Disability Services and then must speak with me. Other class members will need to be aware that this class may be recorded.

### **Academic Integrity**

- All your work for this course needs to accord with Haverford's Honor Code: <http://honorcouncil.haverford.edu/the-code/>
- All the work you turn in, whether for a grade or not, must be your own and all sources in all media must be accurately documented.
- When you document sources, use APA format as your guide. See [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/general\\_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)
- You should not turn in writing, in part or in whole, that you have submitted or will submit in another course.

## **LAB SCHEDULE**

### **Spring 2021**

<b>Monday – Feb. 15</b>	Introduction and overview of some general topics & methodologies
<b>Monday – Feb. 22</b>	Presentation of Research Ideas
<b>Monday - March 1</b>	Selection of Studies and Refinements
<b>Monday – March 8</b>	Set-up of Studies
<b>Monday – March 15</b>	Set-up of Studies
<b>Monday – March 22</b>	Data Collection – Review of APA Format
<b>Monday – March 29</b>	<b>Spring Pause – No Class</b>
<b>Monday – April 5</b>	Data Collection
<b>Monday – April 12</b>	<b>Research Proposal Due</b>
<b>Monday – April 19</b>	Data Collection
<b>Monday – April 26</b>	Data Collection
<b>Monday – May 3</b>	Data Collection/Data Analysis and Interpretation
<b>Monday – May 10</b>	<b>Write-up of Lab Project Due</b>