

Honors Introductory Psychology (PSY 101), Fall 2017

Syllabus and Lab Manual

Section 12, 11-11:50 AM, Monday, Wednesday, Friday, 148 Honors College

Section 4, 12-12:50 PM, Monday, Wednesday, Friday, 148 Honors College

Instructor: Jennifer Gross, Ph.D.

Office: Rm. 2319 Au Sable Hall (ASH)

Office Hours: 1:00-2:00 PM on Mondays and Fridays; 10-10:30 PM on Wednesdays, and by appointment.

Students with appointments have priority over walk-ins.

Office Phone: 616-331-3511

Email Address: grossj@gvsu.edu

Course Description:

Three themes capture our quest into all things psychological. Despite the breadth and diversity of the field, ranging from the anatomy of the eye, to forms of psychopathology, to psychology's insights on user-friendly design, all of *Psychology embraces the scientific study of human behavior (Theme 1)*. The scientific approach offers the highest standard of evidence, which affords a powerful approach to determine the validity of commonly made assertions (e.g., "Is watching violence on TV really harmless?"). With scientific scrutiny, you can critically evaluate advertising claims, propaganda, and other persuasive appeals. For example, are there really different "learning styles" (the idea that individuals differ in what mode [words vs. pictures vs. speech] of instruction is more effective, so instruction should be tailored accordingly)? Despite common beliefs about "visual learners" and "auditory learners", hot-of-the-press research found that "there is no adequate evidence base to justify incorporating learning styles assessments into general educational practice."¹ What type of valuable changes should be made in our education? The "read-recite-review strategy" is a scientifically-proven technique for learning from a textbook that is more effective and efficient than hand-written notes²!

The study of psychology reveals how even the simplest human behavior is influenced by a myriad of forces (Theme 2). This insight about the complexity of human behavior fosters avoidance of simplistic, naïve explanations for actions (like, there are two kinds of people in the world—the weak and the strong; the good and the evil). Nothing about human behavior is this simple. Consider the affliction, depression, which is one of the most common, and debilitating psychiatric conditions. With the popularity of antidepressant medications (e.g., Prozac, Zoloft) and the accompanying TV advertisements sponsored by pharmaceutical companies promising a cure, one might conclude that depression is due to a chemical imbalance in the brain. The premise: Fix the imbalance, alleviate the condition. Such a premise is simplistic and wanting. For one, this naïve premise fails to recognize the role of negative life events as risk factors for depression.³ Second, if a cure was so simple, given the widespread use of antidepressant medications, depression should be a thing of the past. By selectively publishing only the efficacious results of antidepressant trials, the medical community and the public have been misled.⁴

Finally, *Psychology has a practical impact on everyday life (Theme 3)* by scientifically answering questions like: should I take Ginkgo Biloba to prepare for my next exam, are there elevated risks when driving while talking on the phone, how does the mosquito ringtone evade detection by my professor, do we only use 10% of our brains, and can stress increase my susceptibility to colds? Join me as we scientifically probe the underpinnings of human behavior.

¹ Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105-119.

² McDaniel, M. A. et al. (2009). The read-recite-review study strategy: Effective and portable. *Psychological Science*, 20(4), 516-522.

³ Shrout, P. E. et al. (1989). Characterizing life events as risk factors for depression: The role of fateful loss events. *Journal of Abnormal Psychology*, 98(4), 460-467.

⁴ Turner, E. H., Matthews, A. M., Linardatos, E., Tell, R. A., & Rosenthal, R. (2008). Selective publication of antidepressant trials and its influence on apparent efficacy. *The New England Journal of Medicine*, 358, 252-260.

Course homepage on Blackboard (mybb.gvsu.edu):

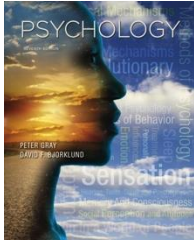
Class information (e.g., syllabus, announcements, laboratory assignments, required readings, lecture slides, and grades) will be posted on Blackboard.

Weekly laboratory participation via APA Online Psychology Lab (OPL): <http://opl.apa.org/>

Lab ID: 11123

Required textbook: Gray, Peter O. & Bjorklund, David F. (2014). *Psychology (Seventh Edition)*.

□ ISBN-10: 1-4641-4195-9 □ ISBN-13: 978-1-4641-4195-9



Required readings: Available electronically via “Course Documents” in Blackboard.

Course Grade Formula:

Course grades will be based on scores from the following, weighted activities:

Attendance and Participation	Leverage to round up or down a borderline grade
Examination #1	17.5%
Examination #2	17.5%
Examination #3	17.5%
Cumulative Examination #4	17.5%
Weekly Laboratory Assignment	30%
Learning about Psychological Research	-12 to +12 percentage points added to an exam
End-of-the-semester General Education Assessment	-8 to +8 percentage points added to an exam

Letter Grades will be calculated according to the following scale:

A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	60-66%
B-	80-82%	F	Below
C+	77-79%		

Forms of Evaluation I-V:**I. Attendance and Participation:**

You are expected to attend class and contribute to class discussion. Students who attend regularly do well in the class. By attending class, you benefit by hearing content presented exclusively in lecture. Your contribution to class discussion may include a question or a comment based on the readings or laboratory assignments. For ideas, see “Q (questions)” in the *Weekly Schedule*.

II. Exams:

To formally assess your understanding of course material, there will be four exams. Questions on the exams will be based on the material covered: 1) in lecture, 2) assigned readings, and 3) the laboratory assignments. See *Weekly Schedule* for exam dates. **Make-up exams** will be given for the following circumstances: Official university activities (e.g., participating in sporting events), illnesses, and extenuating circumstances. Please email the professor as soon as possible to explain the situation, and request permission for an alternate exam date.

III. (Weekly) Laboratory Assignment:

The goal of this laboratory assignment is to foster your understanding of the scientific process in Psychology. Outside of class time, you will participate in classic and contemporary experiments in Psychology via the web. You may complete the weekly experiments by using the GVSU computer labs or your own computer. Working on a GVSU computer, open the “Psychology Folder” on the desktop, then the “Online Psychology Lab.” If using your own computer, you will need to 1) download the required, complimentary software available at host site, and 2) allow pop-ups from the host site. A few labs require headphones, so please plan accordingly.

For each lab, you are expected to understand: the theoretical motivation; methods and procedures including the independent and dependent variables; predicted results (i.e., the experimental hypothesis); and potential limitations. The answers to most of these questions can be found at the host site by choosing one of two options (“*No, but tell me more about this experiment*” or “*Read about studies*”). Finally, you are expected to understand the relationship between the weekly labs and class material.

Submit your “Laboratory Assignments” following the instructions below to Blackboard by midnight on the due date to earn full credit. Late labs receive ½ credit. No email submissions will be accepted. You are encouraged to submit proof of completion up to two weeks early.

Instructions for the Laboratory Assignments:

1. State the **name of the lab** and the **date of your participation**
2. Provide your **UserID** (e.g., 47981) that was furnished upon completion of the experiment. Careful, this proof of completion pops-up only once from the host site so copy the # immediately.
3. Find, copy, and paste your **summary data**. Some labs automatically provide a summary of your individualized performance upon completion of the experiment. For example, the Monty Hall Lab gives feedback about your “wins” and “losses” after every trial (at the bottom of computer screen). When your personal summary results are not provided automatically, use your UserID to look up your results via the *Data* tab at the host site. See the instructions ‘*To Retrieve Data*’ elsewhere in the syllabus. Never report ‘Trial-by-trial data’.
4. Identify and operationally define the **independent and/or predictor variable(s)**.
5. Identify and operationally define the **dependent variable(s)**.
6. State the experimental **hypothesis**.
7. **Critique** the experiment. Offer potential, alternative explanations for the phenomenon observed that the researchers may have failed to consider. Consider the role of confounding variables, methodological limitations, or other weaknesses of the experiment.
8. Suggest **future directions**, such as how the experiment might be modified to improve the investigation.

Please note: Participation in all assigned labs is expected. Thus, failure to complete any lab results in a corresponding grade deduction (as shown in the following *Laboratory Assignment Grade*). You are encouraged to keep a copy of the assignment for your personal records (backup proof of completion; helpful when preparing for exams).

Laboratory Assignment Grade: will be awarded, according to the following schedule:

15 (of 15) labs by due date	100%
14	93%
13	87%
12	80%
11	73%
10	67%
9	60%
8 or fewer	50%

Instructions for getting started with Online Psychology Lab (<http://opl.apa.org/>):

1. Working from a GVSU computer lab, look for and open the 'Application Folder' on the desktop.
2. Next, open the 'Psychology Folder'.
3. Launch the Online Psychology Lab (<http://opl.apa.org/>). If working from your own computer, be sure to download Adobe Flash plugin (available at host site) and permit pop-ups from host site before launching a lab.
4. Select 'Students Begin Here' and then select assigned experiment.
5. Enter class ID: **11123**
6. Enter requested demographic information (e.g., age, handedness) to proceed with experiment.
7. Upon completion of the experiment, write down the **UserId** (e.g., 47981) furnished upon completion of each experiment.

To retrieve data, select the 'Data' tab on the homepage of the Online Psychology Lab (<http://opl.apa.org/>):

8. Select 'data format' by scrolling down to 'Microsoft Excel'.
9. Select the name of the experiment by scrolling through options.
10. Select our class **'Grand Valley State University- F17, PSY 101 & 357'** from the list.
11. Select 'Download Data' option. An Excel data file will open in a separate tab.

12. By using the **UserId**, look up your summary data in the Excel data file. Copy and paste your summary data to be submitted with your proof of completion. Never report trial-by-trial data.

IV. Learning about Psychological Research

Students are required to participate in activities designed to acquaint them with the nature and variety of research in psychology. Students must participate in **four** enrichment activities. Two kinds of enrichment activities are available. **Option 1** involves participating in research studies, while **Option 2** involves reading and writing about papers that report research in scholarly journals.

Completion of all 4 enrichment activity credits results in 12 percentage points added to your lowest exam score. However, failure to do so results in a deduction of 3 percentage points from your highest exam score for every one enrichment activity credit not earned.

Earned enrichment activity credits	Percentage points applied to an exam score
0	-12
1	-9
2	0
3	6
4	12

Option 1: Participation in Psychological Research

Objective

The objective of this assignment is for you to gain direct experience with psychology research studies and what it is like to participate in them. In class, we shall discuss the social psychology of psychology research and how experimental designs take into account the expectations and beliefs of the participants. By participating in studies yourself, you can gain an understanding of the strengths and limits of psychological research. Psychology Department faculty and their research assistants perform the studies, all of which have been reviewed and approved by the university's Institutional Review Board.

Online Registration

To participate in studies, you must register on the *Study Scheduling System*, accessible from the Psychology Department website (<http://www.gvsu.edu/psychology/>). The vendor maintains a strict policy protecting privacy and confidentiality. (This policy is available for review in the Psychology Office.) Navigating the Study Scheduling System is straightforward, and if you need guidance, detailed instructions are available on the Psychology Department website.

Prescreening Survey

An on-line prescreening questionnaire is available during the first two weeks of the semester. Completing this survey counts as one Enrichment Activity. It will appear the first time that you log into the *Study Scheduling System*, and you can access it from your My Profile page. If you opt to complete the survey, plan to complete it in a single, one-hour sitting. Several of the studies taking place later in

the semester determine eligibility according to the responses on the Pre-Screening Survey, so completing it may increase the number of studies you will be eligible to choose. (You may receive invitations based on the Pre-Screening responses.) The last date to participate in the prescreening survey is **Sunday, September 10th**.

Participating in Studies

Register for studies on the Study Scheduling System. Before you sign up to participate in a study, review any listed restrictions (for example, “left-handed people only”). If you sign up for a study and you do not meet the posted eligibility requirements, you will not receive credit for the study.

Arrive before the scheduled time, as studies start punctually. You will be given a description of what participating in the study will involve, and you will be asked for your consent before the study begins. If you then choose not to participate, you may leave without penalty. You can check to see that you have received credit by selecting My Schedule/Credits, where credits are typically posted within a week after you participate in a study.

If you sign up for a study but cannot attend, please cancel your session on-line.

Under 18?

Special rules apply to students who are under 18. If you are under 18, please use *Option 2*, or see the Lab Assistant, Jeff Nolan, for information about permission requirements before participating in studies.

Need Help?

If you need assistance registering for studies, please contact Jeff Nolan, who can be reached in the Psychology Department Office (2224 Au Sable Hall, 616.331.3262) or by sending an email to psychlab@gvsu.edu.

Option 1 Deadline

The last day to participate in studies is **Tuesday, December 5th**.

Option 2: Papers on Experiments in Scholarly Journals

A second Enrichment Activity option is to read a selected journal article and then write a brief report on the article.

Summary of the Assignment

Pick a current, empirical article from a psychological journal listed below. Read the abstract, introduction, and conclusions of the article and skim the remainder of it to understand the gist. You are not expected to understand the details of the article; your task is to understand the article's general thrust, content, and conclusions. Write a brief summary (as detailed below) to document your reading. *Be sure to use your own words. Do not copy or paraphrase the abstract or the paper.*

Objective

This option, like the first, is intended to familiarize you with the nature and variety of psychological research. The objective is to broaden your understanding of psychological research and how it is conducted.

Selecting an Article

Choose a current article published in 2016 or 2017 that reports an empirical study (i.e. one that is based on the collection of data). The large majority of the papers published in the journals listed below are suitable for this assignment, but a few are not. In particular, reviews, meta-analyses, and other comparisons of studies from separate researchers are not appropriate for this assignment. The article you read should have sections labeled “Methods” and “Results.” Note that there are other journals, not acceptable for this assignment, which have misleadingly similar names. Make sure the title of the journal matches *exactly* one on this list:

Behavioral Neuroscience
 Developmental Psychology
 Experimental and Clinical Psychopharmacology
 Health Psychology
 Journal of Abnormal Psychology
 Journal of Applied Psychology
 Journal of Comparative Psychology
 Journal of Consulting and Clinical Psychology
 Journal of Counseling Psychology
 Journal of Educational Psychology
 Journal of Experimental Psychology: General
 Journal of Experimental Psychology: Animal Behavior Processes
 Journal of Experimental Psychology: Applied
 Journal of Experimental Psychology: Human Perception and Performance
 Journal of Experimental Psychology: Learning, Memory, and Cognition
 Journal of Personality and Social Psychology
 Neuropsychology
 Psychological Science
 Psychology and Aging

Finding the Journals

The journals are available electronically through databases you can access through the GVSU Library website. Base your paper on the “full text” of the paper. You can watch a video showing how to access the journals by going to <http://libguides.gvsu.edu/psych> and then clicking on the *Recommended Journals* tab. Access the journals *only* through the GVSU Library, not other sources or websites, as such materials may be incomplete or from the wrong journal.

Once you have located the journal article, select the “full text” version.

Documenting Your Reading

Write a brief, double-spaced paper summarizing the article. The body of your essay should contain three sections, each between 100-300 words. Start each of the three sections with a heading, copying the exact words for each heading described below. No separate introduction or conclusion is required, simply answer the three questions. Under each heading write a well-organized paragraph that specifically addresses the question posed in the heading:

1. *What question or questions does the article address?*
2. *Why are the question(s) that the article addresses important ones to consider?*
3. *What answers does the article provide?*

The Paper Must Be Your Own Work and Written in Your Own Words

At the core of Grand Valley State University's policy on plagiarism (described in the catalog and in the Student Code) is the principle that "[a]ny ideas or material taken from another source... must be fully acknowledged." This means that your paper must be written strictly in your own words, and it must acknowledge any ideas that you take from another source. Try to avoid quoting from the article, but if you must quote to make a point, take care that the phrases quoted are in quotation marks. All quoted phrases must be in quotation marks, even if the phrases are only two or three words long. Words or ideas borrowed from a source other than the target article should be acknowledged and completely referenced. If you submit a paper that violates this policy, you may receive a failing grade for the course.

Required Identifying Information

At the top left-hand corner of the first page of your summary, on separate lines, put your name, your student number (G-number), your professor's name, and the date. Immediately below this, provide a full reference to the article, with the information in the following order: Names of all authors (last name, comma, initials), the year of publication (in parentheses), the exact title of the article, the full name of the journal, the volume number, and the page numbers. Here is a sample of a reference with the information in the proper order:

Lastname, F. and Othername, S.B. (2013). A study of titles of research reports. *Journal of Obscure Psychological Research*, 13, 93-108.

If the article you select has not yet appeared in print, instead of page and volume numbers, include the words "Advanced online publication. doi:" and then give the *doi* number. The *doi* number is typically found in the upper right hand corner of the first page of the full-text paper. This reference information must be complete and accurate for you to receive credit for the paper.

Copy of First Page of Journal Article

To the back of your summary, staple a photocopy or printout of the first page of the full-text version of the article that you read. Make sure that the photocopy includes the exact name of the journal, the title of the paper, the volume number, the page numbers, and the abstract and first paragraph of the article. If you copy from the printed journal, all of the required information will usually be on the first page of the article, but if you download the "full text" version of the article from a library database, you may have to print several pages to make sure all the required information is present. If you select an article that has not yet been published in print version, volume and page numbers will typically not be available. In such cases, make sure the photocopy or printout you submit includes the *doi* number of the article, which is usually in the upper right hand corner of the first page of the full-text article.

Credit/No Credit Grading of Papers

The papers will be graded on a Credit/No Credit basis. No partial credit will be given. Most papers that receive a failing grade are ones where the writer fails to follow the instructions. Double-check your paper before you submit it, to make sure it conforms *exactly* to all the rules described above.

Submitting Papers for Grading & Deadline

Option 2 papers can be turned in anytime during the semester until the last day of class (**Friday, December 8th**).

V. End-of-the-semester General Education Assessment

During the last week of class, you will take a short quiz administered via Blackboard to provide the university with assessment data (a snapshot of student learning in general education courses). Information about GVSU's self-assessment plans can be found here: <http://www.gvsu.edu/assessment/>. Completing the 21-item quiz will result in at least 5 percentage points added to your lowest exam score. Up to three additional points will be awarded for doing well on the quiz. Failure to complete the quiz results in a deduction of 8 percentage points from your highest exam score. More details will be announced later in the semester.

Weekly Schedule:

Week 1 Introduction: *What constitutes science?*

Research Methods: *Experimental tools—Correlations and Experiments*

Testing washing machines relies on same scientific methods as does testing the mind

Readings:

pp. 1-27, Chapter 1, Foundations for the Study of Psychology

pp. 29-55, Chapter 2, Methods of Psychology

Bushman, B. J., & Anderson, C. A. (2009). Comfortably numb: Desensitizing effects of violent media on helping others. *Psychological Science*, 20(3), 273-277.

McDaniel, M. A. et al. (2009). The read-recite-review study strategy: Effective and portable. *Psychological Science*, 20(4), 516-522.

Lab (Friday, 9/1): In preparation for the weekly laboratory assignments, please familiarize yourself with the **APA Online Psychology website** at: <http://opl.apa.org/> From a GVSU computer lab, open first the "Psychology Folder" on the desktop, and then open the "Online Psychology Lab."

Q: Offer science-based advice on how to efficiently and effectively learn from a textbook according to McDaniel and colleagues' (2009) research. Explain the 3R method. What were the control conditions? Which study condition took the most time? Which study condition produced the best learning on immediate testing, delayed testing, and when answering inference-based test questions. What makes the 3R technique mnemonically so effective? How can you use, in a 3R-way, the study guides provided for the textbook?

Q: In a commitment to scientifically-validated practices, should we carefully govern the kinds of media being watched and games being played by our children? Specifically, is exposure to violence really harmless, based on Bushman and Anderson's (2009) research? Include "desensitization," "cognitive outcomes," and "affective outcomes" in your answer. As adults, are we less vulnerable to exposure to violence than are children? If the violence portrayed in media is make-believe (video games; corny television shows), are the consequences of viewing less harmful? If the exposure to violence is brief,

say 20 minutes, are the effects less worrisome? Be sure to defend your answers by including Bushman and Anderson's (2009) research. Imagine you're given a position in the Executive Office of the President of the United States of America. Your assignment is to foster national, if not worldwide, compassion. Name one change you would make to media, based on credible, scientific evidence.

Labor Day Recess, Sept. 3-5

Week 2 Research Methods: *Does TV violence cause violence among viewers?*
Classical Conditioning: *The role of timing and contingencies.*
Worksheet: *Classical conditioning in daily life*

Readings:

pp. A1-A8, Statistical Appendix

pp. 101-126 and pp. 136-143, Chapter 4, Basic Processes of Learning

Tierney, J. (1991, July 2). Behind Monty Hall's doors: Puzzle, debate, and answer? *New York Times*. Retrieved from: <http://www.nytimes.com/1991/07/21/us/behind-monty-hall-s-doors-puzzle-debate-and-answer.html?pagewanted=1>

Vul, E., & Pashler, H. (2008). Measuring the crowd within: Probabilistic representations within individuals. *Psychological Science*, 19(7), 645-647.

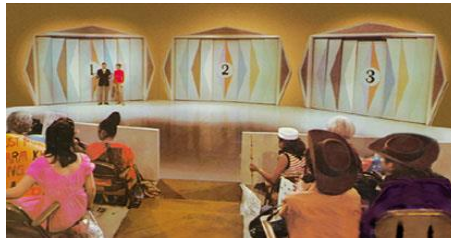
Lab #1: Monty Hall (due Friday, 9/8)

(Select "quit" to complete lab after at least 60 total trials, comprised of 30 "Stay" and 30 "Switch")

Your Data:

When you stayed with your first door choice, what percentage of times did you win the grand prize?

When you switched to a new door, what percentage of times did you win the grand prize?



The Monty Hall Lab was inspired by a television game show called, *Let's Make a Deal*, hosted by Monty Hall, first airing in 1963. In the television game show, contestants won big prizes if they correctly picked one (of three) doors, behind which the grand prize (e.g., a car) was hidden. Two of the doors, when opened, revealed booby prizes (e.g., a month's worth of Comet cleanser; a scrawny goat). In the show, after each contestant made her/his initial door choice, Monty opened one of two non-chosen doors to reveal a booby-prize. Then, Monty typically offered each contestant the option to **STAY** with his/her first door-choice, or to **CHANGE** by picking the other (non-revealed) door. If you were a naïve contestant on the show, would you **STAY** with your first door choice or **CHANGE** to another door, if given the opportunity? Amusement guaranteed! (A fun simulation of the lab is available here:

http://www.nytimes.com/2008/04/08/science/08monty.html?_r=1)

Q: Now that you have completed the lab, tell me, are your odds of winning the grand prize better if you **STAY** or **CHANGE**? When doing the lab, what governed your door selection? Probabilities?

Q: Are two guesses better than one? Specifically, according to Vul & Pashler's (2008) research findings, is there an advantage to asking yourself the same question twice? How is repeated self-polling related to the 1) "wisdom of crowds" effect, and 2) the Monty Hall Lab?

Week 3 Classical Conditioning: *How do we learn to like, or dislike, something?*
Operant Conditioning: *The power of consequences!*
Worksheet: *Operant conditioning in daily life*

Readings:

pp. 195-205, Chapter 6, Mechanisms of Motivation and Emotion

pp. 57-85, Chapter 3, Genetic and Evolutionary Foundations of Behavior

Olson, M. A. & Fazio, R. H. (2001). Implicit attitude formation through classical conditioning. *Psychological Science*, 12(5), 413-417.

Lab #2 Stroop (due Friday, 9/15) via alternate site: <https://faculty.washington.edu/chudler/java/ready.html>

Your Data:

Your reaction time for Word Set 1 _____

Your reaction time for Word Set 2 _____

What is the difference between your Word Set 2 time and Word Set 1 time?

(To calculate the difference: Word 2 time - Word 1 time = Difference) _____

Speculate on which condition you were more accurate in _____ and why this occurred _____

Q: Can you stop from reading billboards plastered along the highways? To fully answer this question, tell me what behavior was automatic (i.e., uncontrollable) in the Stroop experiment? What behavior was controlled (i.e., stoppable) in the experiment? Under what condition was your performance facilitated (made faster)? When did your performance suffer from interference effects (made slower and more error-prone)? Can you clarify the role of practice in the acquisition of automatic behaviors?

Q: We like to think that our attitudes and preferences are volitional. That is, we "choose" to like Charmin, because it is the softest bathroom tissue, and Crest toothpaste, because it is recommended by 3 out of 4 dentists. But, could our preferences be unknowingly, yet intentionally shaped by implicit forces, such as veiled messages embedded in advertising? Based on Olson and Fazio's (2001) findings, can attitudes towards previously neutral stimuli (i.e., Pokémon) be altered implicitly (without awareness and deliberate effort)? In Olson & Fazio's study, which behaviors were automatic? Which behaviors became controlled (i.e., conditioned)? Identify of the "unconditioned stimuli" and "conditioned stimuli" in your answer. What did the researchers co-vary in the study to implicitly shape attitudes? In real life, how do TV ads manipulate covariation? Give a real-life an example. What purpose does counterbalancing serve in the study (e.g., Metapod paired with hot fudge sundaes for half the participants, and cockroaches for the other half of the participants)? Finally, how did the design of the study avoid "demand characteristics" as an explanation for preferences for Pokémon?

Q: Biological Preparedness Theory (see textbook) contends that humans may learn some covariations (e.g., taste and nausea) more easily than other covariations (e.g., light and taste). How might this insight be exploited to promote more studious behaviors on a college campus; or reduce prejudice in a community; or design effective, health-campaigns (e.g., dangers of smoking)? Pick one of these issues and generate a potential example of an attitude-changing commercial that draws both from Olson & Fazio's findings as well as from Biological Preparedness Theory.

Q: As you look back over the entirety of this lab and the relevant readings, tell me, does "free will" exist? Be sure to defend your position.

Week 4 Operant Conditioning: *Can we reduce human suffering through conditioning?*
In-class movie (time-permitting): *The Dog Nose Knows, or The Behavioral Treatment of Autistic Children*

Exam 1, Friday, 9/22

(EXAM 2 MATERIAL BEGINS HERE)

Readings:

Siegel, S., (2005). Drug tolerance, drug addiction, and drug anticipation. *Current Directions in Psychological Science*, 14, 296-300.

Rogers, R. E. et al. (2008). Abstinence-contingent reinforcement and engagement in non-drug-related activities among illicit drug abusers. *Psychology of Addictive Behaviors*, 22(4), 544-550.

Lab #3: Lexical Decision Making (due Friday, 9/22)

Your Data:

Related Accuracy: Words= ____%; Nonwords= ____%

Related Reaction Time: Words= ____ sec; Nonwords= ____ sec

Unrelated Accuracy: Words= ____%; Nonwords= ____%

Unrelated Reaction Time: Words= ____ sec; Nonwords= ____ sec

Q: How is our mental dictionary similar to, and different from, a physical dictionary? You have a vocabulary in excess of 60,000 words stored in a mental dictionary. However, within fractions of a second, you can easily decide if "rimmelnode" is word you know. How might you do that? You may be fooled when asked, "*how many animals of each kind did Moses take on the ark?*" However, you are not fooled if "*Moses*" is replaced with "*Nixon*." Why not? Dictionaries alphabetically organize entries. Based on the experimental findings in the Lexical Decision Making Lab, how is information organized in our mental dictionary? What is the role of "context" (i.e., priming) in the lab? What appears to automatically spread in our minds? By the way, why did the experiment include "non-words" (fake words)?

Q: How is the Lexical Decision Making Lab related to Siegel's (2005) article on drug addiction? Be sure to provide a conceptual link between the contingencies in the Lexical Decision Making Lab and the

contingencies in addiction. Include the role of external and internal cues, and the concept of “spreading activation” in your answer. How does tolerance develop? Explain the power of context (situational-specificity) in the maintenance of addiction? What are the goals of cue-exposure therapies, and what makes addiction so difficult to treat?

Q: What treatment advice would you give a friend who suffers from substance abuse, based on Rogers and colleague’s (2008) findings? When providing your advice, offer details about the study including: what substance was the addiction to, what three forms of treatments were provided, and why were patients randomly assigned to treatment conditions? How was treatment effectiveness measured over time? Which treatment proved to be most effective, and did everyone respond to this form of treatment? How was effective treatment related to engagement in enjoyable, non-drug related activities? Was treatment a cure? Any final words of advice to your friend?

Q: In looking back over the entirety the lab and the readings, do you think addiction boils down to the lack of self-control? Defend your answer.

Week 5 Sensation and Perception: *Psychology applied to engineering, for better living.*

Readings:

pp. 281-319, Chapter 8, The Psychology of Vision

pp. 245-279, Chapter 7, Smell, Taste, Pain, Hearing and Psychophysics

Winawer, J. et al. (2008). A motion aftereffect from still photographs depicting motion.
Psychological Science, 19(3), 276-283.

Lab #4: Ponzo Illusion (due Friday, 9/29)

Your Data:

Background present: Adjusted lower line to an average of ____% longer than the top line; judging the top line to be ____ [longer/shorter] than it actually was.

Background not present: Adjusted lower line to an average of ____% longer than the top line; judging the top line to be ____ [longer/shorter] than it actually was.

Q: Is perception veridical (truthful)? What do visual illusions reveal about perception? Incorporate this week’s lab in your answer, and identify the visual features that led to perceptual misjudgments. How is understanding the world an interaction of “sensation (bottom-up processing)” and “perception (top down processing)”? In what sense, and under what sort of circumstances, might “errors” such as perceptual misjudgments be problematic? When might these illusions be useful? Support your answers by generating novel examples of 1) a beneficial perceptual misjudgment, and 2) a deleterious one.

Q: Can a mere photograph of an implied action elicit in the viewer a compelling sense of actual motion, extrapolating from Winawer and colleague’s (2008) findings? Does viewing a photograph depicting motion involve the same neural and psychological representations as those used when viewing actual physical motion? Describe the nature of the evidence. For example, after viewing implied motion in one direction, what did the participants “see”? Why did the study measure “motion aftereffect,”

which is an illusion? Clarify the role of “adaption to implied motion” in your response. Based on the study’s findings, humans are seemingly capable, even adapt, at “unconscious inferences.” Explain.

Q: You’ve probably heard the old adage, “*Seeing is believing.*” As you look over the entirety of these readings, tell me, is our mind an accurate representation of reality?

For fun....How well can you judge gender based on motion cues? Go here to find out:
<http://www.biomotionlab.ca/Experiments/BMLmdsex/>. Poke around the website to see other cool demos.

Week 6 Sensation and Perception: *The Mechanics.*
Memory: *Memory feats, foibles, and fallacies.*

Readings:

pp. 321-365, Chapter 9, Memory and Consciousness

Wittlinger, M., et al. (2006). The ant odometer: Stepping on stilts and stumps. *Science*, 312, 1965-1967.

Zaragoza, M. S., Payment, K. E., Ackil, J. K., Drivdahl, S. B., & Beck, M. (2001). Interviewing witnesses: Forced confabulation and confirmatory feedback increases false memories. *Psychological Science*, 12(6), 473-477.

Lab #5 Numerical Memory (NOTE: requires headphones) (due Friday, 10/6)

Your Data:

Time: ____ sec

Audio # Correct (AUD): ____

Visual # Correct (VIS): ____

Lab #6 Mental Rotation (due Friday, 10/6)

Your Data:

(Copy and paste your data line from the site)

ANG0COR ANG0TIME DANG0COR DANG0TIMEetc.

Lab #5:

Q: Short-term (a.k.a., working) memory is conceptualized as a limited storage space that operates for a brief duration. In contrast, long-term memory is conceptualized as a permanent repository with vast capacity, yet prone to retrieval difficulties. How do the experimental findings of the Numerical Memory Lab elucidate the characteristics of short-term memory? That is, what is the capacity (digit span length) of short-term memory for spoken material? For visually-presented material? What modality (visual vs. auditory) produced longer “spans,” and speculate on what factors might account for this finding? Importantly, are the “spans” for both modalities consistent with *Miller’s Magical Number*? Besides number of items presented, what other factors influence the capacity of short-term memory? Rehearsal

time? Phonological similarity? Finally, did you engage in any strategic (a.k.a., elaborative) rehearsal process to remember the digits? Explain.

Q: Explain this statement: “short-term memory is the primary bottleneck in human information processing.” More generally, do you think you have limited memory to focus on what’s here-and-now? How might this attentional “bottleneck” affect your ability to do two things simultaneously? Imagine that you had to complete the lab again, but this time, you were asked to both hold the digits in temporary memory while simultaneously saying repeatedly “blah, blah, blah...” (i.e., an articulatory suppression task) until prompted to recall the digits. What would this articulatory suppression task actually suppress? My daughter insists that she can do her homework while simultaneously watching television. I disagree. Explain how this modified version of the Numerical Memory Lab with an articulatory suppression task might offer support for mom’s intuition.

Q: Based on Wittlinger and colleagues’ (2006) research, does the memory of Saharan ants—their ability to gauge distance traveled by some built-in odometer—surpass the ability of humans to count in transient, conscious memory? Explain your reasoning.

Lab #6:

Q: Some memories are described as picture-like. For example, our nation’s tragedy on 9/11 appears to be preserved in our minds as horrifying, almost surreal images. We can introspect about the details of this tragic event, recanting these seemingly “burned-in” pictures in our minds. Consistent with the *Picture in the Head Theory* (Kosslyn, 1994), most people report having a range of experiences stored in their mind as “mental images.” Let’s try to elicit this type of memory in you. How many windows are on the front of your residence? In which hand does the Statue of Liberty hold her torch? To answer these questions, most report “seeing” a visual image. What was your phenomenological experience when answering these questions?

Q: Could your memory be wrong regarding the number of windows at your residence and the Statue of Liberty’s hand preference? Our subjective experience about the form of a mental image is not necessarily veridical (truthful). For example, if we look at a scene, we see height, width, and depth (3-dimensions). Yet, our retinas (in the back of the eyes) only record 2-dimensions, similar to how only two dimensions are captured by a “flat” photo. The third dimension of depth is restored by our minds. Thus, there is good reason to be skeptical about introspective evidence. Instead of relying on introspections, how did the mental rotation experiment explore “mental images” in a scientific way? According to Shepard and colleagues’ mental rotation experiments, if it takes you one second to mentally rotate an object thirty degrees, how long will it take you to mentally rotate the object sixty degrees? What are the implications (i.e., take home message) of Shepard and colleague’s mental rotations experiments?

Q: How could a researcher redesign the Mental Rotation experiment to examine if blind participants could perform mental rotation? Could such a version of the Mental Rotation experiment with blind participants potentially settle the debate about whether there are really pictures in our heads?

Q: Can mere questions and misleading feedback compromise the accuracy of our memory? Explain Zaragoza & colleagues’ [2001] research on faulty memories for previously seen, video-taped events.

Include the forces of “forced confabulation” and “confirmatory feedback” in terms of what is stored in our minds. Are viewers aware of conjuring up details? Are these confabulations long-lasting?

Q: As you look over the entirety of these readings, tell me, is our mind a veracious representation of the world? Explain your position on this matter to your friend who has falsely accused you of some wrongdoing.

Week 7 Memory: *Strategies for improvement.*

Thinking: *Rational and seemingly irrational thought investigated.*

Readings:

pp. 369-387, Chapter 10, Reasoning and Intelligence

Strayer, D. L. et al. (2006). A comparison of the cell phone driver and the drunk driver. *Human Factors*, 48(2), 381-391.

Lab #7: Self-Reference (due Friday, 10/13)

Your Data:

Self Hit Rate (SELF HR): ____

Self False Alarm Rate (SELF FAR): ____

Self Discrimination Index (SELF DI): ____

E-word Hit Rate (EWORD HR): ____

E-word False Alarm Rate (EWORD FAR): ____

E-word Discrimination Index (EWORD DI): ____

My data is ____ [consistent/inconsistent] with the hypothesis because the ratio of hits to misses for self-reference words is ____ [greater/less] for E-words.

Q: In the movie *Memento* (2000), the lead character is a man suffering from anterograde amnesia, unable to form new memories since his wife died. Thus, he cannot remember new names, dates, faces, and events. Rehearsal has no long-term effects on retention in his memory. When momentarily distracted, this amnesiac will completely forget what he has been holding in temporary, conscious memory. To hunt down his wife’s killer, this amnesiac makes up for his inability to retain new information by annotating instant snapshots, compiling sticky notes, and rereading his tattoos.



Commonly, people complain about the inability to remember the name of someone just introduced—a la *Memento* style. Based on: 1) the Self-Reference Lab and 2) Craik and Tulving’s (1975) research on Depth (Levels) of Processing (see textbook), offer science-based advice on how to minimize the “just-forgot-the-name” phenomenon. Be specific about the processes that influence the movement of information from short-term to long-term storage. Include the mnemonic benefits of “elaboration,”

“organization,” and the power of a well-developed construct of self (hint: self-reference lab) in your answer.

Q: As a distinguished graduate, your former high school has invited you to give an address to the senior class. You have been asked to share the wisdom that a college education has afforded you (so far). You decide to share the compelling scientific evidence about the dangers of talking on a cell phone while driving. In your oration, deliver your message about safe driving practices, by summarizing (in, perhaps, Myth Buster’s style) Strayer and colleagues’ (2006) research. Anticipate the common misconception that multitasking while driving is commonplace, and therefore, driving and talking on a cell phone poses minimal risk. Were the impairments associated with using a cell phone while driving as profound as those associated with driving under the influence of alcohol? Be sure to note if a hands-free cell phone reduced the risk. How does science offer a higher standard of evidence than do common opinions?

Week 8 Attention: *Can you simultaneously talk on that cell phone and safely drive, really?*

Exam 2, Wednesday, 10/18

(EXAM 3 MATERIAL BEGINS HERE)

Readings:

Keizer, K., et al., (2008). The spreading of disorder. *Science*, 322, 1681-1685.

Packer, D. J. (2008). Identifying systematic disobedience in Milgram’s obedience experiments: A meta-analytic review. *Perspectives on Psychological Science*, 3(4), 301-304.

Lab #8: Social Balance (due Friday, 10/20)

Your Data:

(Copy and paste your data from the site.)

Likes—Dislikes: ____

Likes—Loves: ____

Likes—Hates: ____

Likes—Likes: ____

Likes—Neutral: ____; etc.

Q: Would you be more prone to litter on campus (e.g., throw items over the Little Mac Bridge into the ravine), if you just witnessed students cheating on an exam? To help answer this question, begin with these: What was the role of environmental influences on disorderly behavior, as demonstrated by Keizer & colleague’s (2008) experiment? Does the mere presence of graffiti, littering, or other acts of vandalism trigger disorderly behavior and petty crimes? Be specific. What evidence in the study supports the “cross-norm inhibition effect”? Could fixing the “broken window” (so to speak) fix the problem? Finally, name one change/movement on campus that could potentially reduce an unwanted disorderly student behavior on campus.

Q: Would you be more willing to inflict pain on another if requested to do so by a legitimate authority figure (e.g., a professor on campus)? To answer this question, consider that Stanley Milgram in 1961 began a series of experiments to measure the willingness of ordinary people recruited from the local paper to obey an authority figure. Milgram's studies were motivated by the horrific acts of World War II, in which thousands of people complied to do harm to others. Milgram wondered what environmental conditions would compel so many people to participate in the atrocities of Nazi Germany? In his experiments, everyday citizens under the ruse of performing the role of a teacher were asked to punish a learner's memory mistakes. What environmental influences in Milgram's obedience experiments compelled ordinary people to comply with the request to punish the learner? In your answer, explain the "foot-in-the-door" technique and the role of "cognitive dissonance." In proposed follow-up experiments, what changes could be made to the experimental environment to increase, and decrease, compliance with the request to punish the learner? Finally, name one contemporary example of obedience to an authority that resulted in everyday people doing harm to others.

Fall Breather on October 21 and 22—No academic homework for the entire weekend. Practice the three "R"s: Relax. Restore. Reinvigorate.

Week 9 Social: *Subtle, unconscious ways in which the social world shapes how we act and think. Zajonc's (1960) concepts of balance, congruity, and dissonance.*

Drop Deadline - grade W, October 27

Readings:

pp. 539-570, Chapter 14, Social Influences on Behavior

Gray, H. M., et al. (2008). An in-group advantage in detecting intergroup anxiety. *Psychological Science*, 19(12), 1233-1237.

Jenkins, R. & Burton, A. M. (2008). 100% accuracy in automatic face recognition. *Science*, 319, 435.

Lab #9: Facial Recognition (due 10/27)

Your Data:

Condition: ____ [Control / Experimental]

Day 1:

Hits: ____; Misses: ____; False alarms: ____; Correct rejections: ____

Discrimination index (DI): ____

Day 2:

Hits: ____; Misses: ____; False alarms: ____; Correct rejections: ____

Discrimination index (DI): ____

Q: Imagine that you are a member of a jury deliberating a criminal case. The only evidence against the defendant is the testimony of an eyewitness who, under cross-examination, reported that the defendant was at the scene of the crime. The night before the jury's final deliberations, you completed this lab assignment (so the relevant research is fresh in your mind). To your fellow jury members, explain the

purpose of the Facial Recognition lab. In your oration, explain how “hit”, “miss”, “false alarms”, and “correct negatives” are calculated. Explain the “source monitoring error.” Do the experimental findings reveal that the witnesses were vulnerable to the “source monitoring error? Clarify why the “witnesses” in the experimental condition more likely to experience the “source monitoring error” than those in the control condition. How are all these issues related to the criminal case?

Q: To your fellow jurors, explain the link between the criminal case and the research on “cross-race bias” (a.k.a., “own-race bias”). Based on scientific evidence (Gray & colleagues, 2008), is it more difficult for different-race individuals to understand each other’s emotions (e.g., facially-displayed anxiety)? How was stress manipulated in the study? Explain the rationale behind the use of “global anxiety,” “vocal tension,” and “reassurance seeking” as measures in the study. Why measure participants’ cortisol levels? Back to your role as a juror—if persons have difficulty accurately identifying the emotions in faces of different races, what are the implications on 1) our judicial systems use of eyewitness testimony, and 2) our ability to genuinely feel empathy for others?

Q: Under what conditions are computers better than humans at detecting faces (see Jenkins & Burton, 2008)? Extrapolating from this study’s findings on ways to improve computer performance in facial recognition, how might you foster cross-racial face recognition and cross-racial empathy among members of a jury trial? Among members of a police force? Among school children? Among college students? Pick one of these efforts, and briefly describe the campaign to foster cross-racial emotion recognition and empathy?

Week 10 Social: *Cognitive processes in prejudice.*
In-class Film: *Obedience*

Readings:

pp. 503-537, Chapter 13, Social Perception and Attitudes
 pp. 231-241, Chapter 3, Foundations for Understanding Emotions

von Hippel, W. & Gonsalkorale, K. (2005). “That is bloody revolting!” Inhibitory control of thoughts better left unsaid. *Psychological Science*, 16 (7), p. 497-500.

Lab #10 First Impressions (due Friday, 11/3)

Your Data:

Alphas (A)

Popular: ____; Helpful: ____; Honest: ____; Lazy: ____; Unhappy: ____; Irresponsible: ____

Sum of Positive: ____

Sum of Negative: ____

Percent of Negative: ____%

Betas (B)

Popular: ____; Helpful: ____; Honest: ____; Lazy: ____; Unhappy: ____; Irresponsible: ____

Sum of Positive: ____

Sum of Negative: ____

Percent of Negative: ____%

Q: Is self-control at the heart of good social relationships? What role does inhibition play in maintaining amiable relationships, according to von Hippel and colleague's (2005) findings? How was social pressure manipulated? What specific (verbal and non-verbal) behaviors had to be inhibited? Under what conditions were the participants better at inhibition? When were they worse? In real life, how might we deduce (put on your Sherlock Holmes' hat) if a person has a stereotype, but is controlling the expression of the stereotype, or alternatively lacks the stereotype? (Hint: Draw upon von Hippel and colleague's (2005) findings.)

Q: Is self-control a limited, consumable resource? Might people differ in their skill at inhibition? How could psychologists measure the capacity for inhibition? Does inhibition tap into Working Memory capacity? How are attentional limitations depleted by asking participants to remember an 8-digit number (see von Hippel and colleague's study)? While still wearing "Sherlock Holmes' hat"—do you think the capacity for inhibition can be cultivated? Explain your reasoning.

Q: Would you be more prone to litter on campus (e.g., throw items from the Little Mac Bridge into the ravine), if you just witnessed students cheating on an exam? To help answer this question, begin with these: What was the role of environmental influences on disorderly behavior, as demonstrated by Keizer & colleague's (2008) experimental findings? Does the mere presence of graffiti, littering, or other acts of vandalism trigger disorderly behavior and petty crimes? Be specific. What evidence in the study supports the "cross-norm inhibition effect"? Could fixing the "broken window" (so to speak) fix the problem? Finally, name one change/movement on campus that could potentially reduce an unwanted disorderly student behavior on campus.

Q: Looking back over the entirety of these readings, tell me, is self-control at the heart of controlling (not necessarily eliminating) potentially unwanted pairings in the mind, like those tapped in the First Impressions Lab and those elicited by broken windows?

Week 11 **Personality: *Cognitive processes in personality.***
Social and Emotional Development.
Do parent-child attachments become part of personality?
Do we have a need to belong?

Readings:

pp. 573-594, Chapter 15, Personality
 pp. 461-468, Chapter 12, Social Development

Lab #11 Implicit Association Test of your choice at Project Implicit (**due Friday, 11/10**). Go here: <https://implicit.harvard.edu/implicit/>.

Your Data: At minimum, a one-sentence summary of your attitudes (e.g., "Your data suggest...")

Lab #12 First-Person Shooter Task (**due Friday, 11/10**). Go here: <http://psych.colorado.edu/~jclab/FPST.html>.

Your Data: A graph of your correct and incorrect responses and average response times as a function of target threat and race.

Q: Historically, people's attitudes and beliefs have been measured by self-report. Yet, self-report is vulnerable to social desirability (changing responses in accordance with presentation of one's desired image) (Greenwald & Banaji, 1995). For example, individuals may fail to self-report racial prejudices out of a fear of social reprimand. Self-report also relies on conscious introspection. Yet, research reveals that many mental processes occur outside awareness (Bargh & Chartrand, 1999). Thus, self-reporting individuals may fail to recognize that they harbor prejudices (Uhlmann, Greenwald, & Banaji, 2009). Instead of relying on self-report, the Implicit Association Test measures automatic, associative processes involved in attitudes and beliefs. In the Implicit Association Test, what conditions yielded longer reaction times and were more error prone? Under what conditions were reactions times faster and more accurate? What, then, are reaction times measuring? The Implicit Association Test researchers never explicitly labeled an object, person, or group with derogatory terms. Then, how did the researchers evaluate stereotypic views without the use loaded words? In the Implicit Association Test, were your responses difficult to fake or control? What similarities exist between the Implicit Association Test and the Stroop Lab?

Q: Based on your understanding of the Implicit Association Test's findings, can words be "loaded"? For example, should we remove words such as "he" and "chairman" from our language? Defend your answer.

Q: Looking back over the entirety of these labs and readings, if you wanted to plan a university-wide intervention at GVSU to reduce, or potentially eliminate race bias, what plan of action might you propose to the Student Senate?

Week 12 The Biology of Mind and Behavior
The neuroscience of reading faces and recognizing words
In-class Movie: *The Man with Two Brains*

Exam 3, Wednesday, 11/15

(EXAM 4 MATERIAL BEGINS HERE)

Readings:

pp. 159-164 and pp. 172-177 and pp. 180-192, Chapter 5, Neural Control of Behavior
 pp. 205-230, Chapter 6, Sex: An Example of a Non-Regulatory Drive; The Sleep Drive

Quinn, P. C., & Liben, L. S. (2008). A sex difference in mental rotation in young infants.
Psychological Science, 19(11), 1067-1070.

Lab #13: Word Recognition (due Friday, 11/17)

NOTE: To fully appreciate the lab, you will view in class the Scientific American Frontiers segment titled, *Man With Two Brains*.

Your Data:

Hand Preference: ____ [Right/Left]

Right: ____ (proportion correct); Left: ____ (proportion correct)

Lab# 14: Mirror Drawing (due Friday, 11/17)

Your Data:

Hand Preference: ____ [Right/Left]

Time for Left: ____ sec; Time for Right: ____ sec

Q for Labs 13 & 14: Are the two hemispheres of the brain created equal? To answer this question, offer as evidence the results of this week's lab that investigates hemispheric specialization. Which hemisphere should have the advantage in word recognition? Which hemisphere should have the advantage in visual spatial tasks? Include the concepts of "brain lateralization" and "contralateral control" in your answer. To further elucidate the hemispheric specializations of the brain, where is face recognition in our brain? As depicted in the film *"Man With Two Brains,"* if a split-brain patient was shown to the right visual field a painting of a face-made-out-of-books by the famous 16th Century Italian artist Giuseppe Arcimboldo (who constructed faces from ordinary objects [e.g., flowers; books]), what would this patient report seeing? What would happen if the face-made-out-of-books painting was presented to the patient's left visual field? Based on your answer, what advice would you give product package designers on the placement of verbal and visual elements on product packaging?



Q: Are there sex differences in mental aptitude? Which sex has the advantage on mental rotation tests, based on Quinn & Liben's (2008) findings? Include "familiarization," "looking times," and "novelty-preference scores" in your answer. Could the gender difference in mental rotation abilities as evidenced in the study be attributed to different childhood rearing (experiential) practices? For example, are boys more likely to receive trucks and girls more likely to receive dolls as presents? Could such stereotypic gifts foster different aptitudes? Could these rearing differences account for Quinn and Liben's findings? Defend your position.

Q: If your best friend suffers a serious injury, what credible advice regarding stress would you give to help him/her heal more quickly, based on Gouin and colleagues' (2008) research? The scientists utilize an "anger expression questionnaire" that has three subscales: "anger out," "anger in," and "anger control." Give an example of a questionnaire item from each of these subscales. With healing status at day 4 as the outcome, which of the three types of anger expression significantly distinguished between fast and slow healers? Which groups of individuals were more likely to take more than 4 days to heal? What did cortisol levels indicate in the experiment? Did the researchers control for potential confounds (hostility, negative affect, social support, and health behaviors) that also influence healing? Did relaxation therapy promote faster healing? Was this outcome surprising? What is a "floor effect," which is the likely explanation for this finding? You've probably heard the adage, "A sound mind lives in a sound body." Should this saying be rewritten as, "a sound body needs a sound mind?" Defend your answer.

Week 13 Stress, Health and Coping: *Can stress increase susceptibility to the common cold?*
In-class Movie: *To heal or not to heal*
Psychological Disorders: *The suffering mind: Forms of mental disorders.*
Worksheet: *Diagnosing Psychological Disorders*

Readings:

pp. 617-659, Chapter 16, Mental Disorders

Gouin, J-P., et al. (2008). The influence of anger expression on wound healing. *Brain, Behavior, and Immunity*, 22, 699-708.

Thanksgiving Break, November 22 – 26.

Week 14 *Social and genetic influences in schizophrenia and depression*
Biology of Mind and Behavior: *Can depression result from a chemical imbalance?*

Readings:

pp. 617-659 (cont.), Chapter 16, Mental Disorders

Shrout, P. E. et al. (1989). Characterizing life events as risk factors for depression: The role of fateful loss events. *Journal of Abnormal Psychology*, 98(4), 460-467.

Lab #15: Dichotic Listening (NOTE: requires headphones) (due Friday, 12/1)

Your Data:

Hand Preference: ____

Number Correct Left Ear: ____; Number Correct Right Ear: ____

Total Trials Per Ear: ____

Q: Imagine you are a clinical psychologist who has been asked to recommend how to appropriately screen, diagnose and treat soldiers returning from war. You anticipate that depression and post-traumatic psychiatric disorder (PTSD) will be prevalent. Recognizing that a diagnosis of a psychiatric disorder often bears a stigma that may hamper accurate screening (e.g., patient's reluctance to report symptoms), you decide to implement the Dichotic Listening experiment as a diagnostic tool. What advantage might this tool, which relies on automatic processing, have over traditional questionnaire-based screening methods?

Q: Using the Dichotic Listening experiment to screen for depression, you will ask soldiers to shadow (repeat aloud) neutral words and phrases presented to their right ear. A depressed soldier, compared to a nondepressed one, will more likely attend to what type of words/phrases presented to his/her left, unshadowed ear? That is, generate five examples of words and/or phrases which will be uniquely distracting to a depressed person when presented in the nonattended ear? To use the Dichotic Listening experiment to screen for PTSD, what five words or phrases would be uniquely distracting to these sufferers when presented to their nonattended ear?

Q: By the way, based on Shrout and colleagues' (1989) findings, what is the role of fateful life events on risk for depression? Which fateful events place persons at greatest risk?

Week 15 Treatment: *Scientific evidence on the effectiveness of psychological therapy*
Can talking about personal problems relieve suffering?
Can relationships protect people from illness?

Readings:

pp. 663-692, Chapter 17, Treatment

Lange, A., et al. (2003). Interapy: A controlled randomized trial of the standardized treatment of posttraumatic stress through the internet. *Journal of Consulting and Clinical Psychology*, 71(5), 901-909.

Q: Upon making a diagnosis of PTSD, you advocate for internet-based therapy as the preferred method of treatment. Tell the soldiers at least two advantages of Interapy (as described in this week's reading) when compared to traditional methods. Also, explain to these soldiers what are the mechanisms considered crucial to overcoming a traumatic event. Include "habituation," "exposure (self-confrontation)," and "cognitive reappraisal" in your tutorial. Next, explain to the soldiers the treatment protocol (i.e., what Interapy treatment requires patients to do) for all three phases. In your tutorial, tell why it is important to write in first person? Why include sensory details (e.g., smells; sounds) in their writing assignments? How is cognitive reappraisal fostered? Why write a culminating, dignified letter in Phase 3? Finally, based on impressive empirical evidence (Lange & colleagues, 2003), what are the symptoms of PTSD that will likely diminish in frequency following Interapy?

Your esteemed colleagues, the soldiers, and your professor thank you for recommending scientifically-validated therapeutic practices!

Final Exam Schedule:

Section 12, Honors PSY 101 (Class meets 11-11:50 AM): Wednesday, December 13, 10-11:50 AM
Section 4, Honors PSY 101 (Class meets 12-12:50 PM): Wednesday, December 13, 2:00-3:50 PM