Honors Introductory Psychology (PSY 101), Fall 2019
Syllabus and Lab Manual

Section 19, 10-10:50 AM, MWF, 148 Honors College
Section 18, 11-11:50 AM, MWF, 148 Honors College

Instructor: Jennifer Gross, Ph.D.
Office: Rm. 2319 Au Sable Hall (ASH)
Office Hours: 2-2:50 PM on Monday &Wednesday, 12:15-12:45 on Friday; 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. Although Psychology is a broad and diverse 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 changes could enhance learning? The "read-recite-review strategy" is a scientifically-proven technique for learning from a textbook that is more effective and efficient than hand-written notes[2]. With scientific literacy, you have the tools to distinguish between pseudoscience and real psychological research.

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 that depression 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 implied 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]

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.

Please note: This course is subject to the GVSU policies listed at http://www.gvsu.edu/coursepolicies/

Objectives: Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of the scientific process in Psychology.
2. Identify major psychological theories and use psychological terminology correctly.
3. Critically evaluate the findings of psychological research.
4. Recognize examples of how psychological concepts are applied to daily life.

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

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

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

Our Class: 104085 (Grand Valley State University, F19 Honors PSY 101)

Required textbook: Gray, Peter O. & Bjorklund, David F. (2018). ***Psychology*** *(Eighth Edition)*. ISBN-10: 1-319-01589-1; ISBN-13: 978-1-319-01589-3

- Rent, or buy, the book by going here: https://redshelf.com/book/847489/psychology-847489-9781319060350-peter-o-gray-david-f-bjorklund Rental prices start at $58.95 for 120 day access.

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
Exam #1	17%
Exam #2	17%
Exam #3	17%
(Final) Exam #4	17%
Weekly Laboratory Assignment	27%
Learning about Psychological Research	5%

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-IV:

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 the **Comprehension Qs** 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. Laboratory Reports:

The goal of this laboratory assignment is to foster your understanding of the scientific process in Psychology. Outside of class time, you will participate via the web in classic and contemporary experiments in Psychology. Take the time to read the background material for each lab at the host site. For all assigned experiments, you are expected to understand the theoretical underpinnings motivating the investigation; the procedures and methods of investigation including the independent and dependent variables; the predicted experimental outcome (i.e., hypothesis); the results of the experiment expressed in statistics and graphs; potential limitations of the investigation; and how each experiment is related to material covered in class and the assigned readings. The answers to many 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"*).

Laboratory Report Format: Answer the following questions, numbering your responses. Choose your words carefully. Write clearly, concisely, and with complete sentences. Check your grammar and spelling. I recommend preparing your responses in Word (or other, word-processing program). Submit ***Lab Reports*** to Blackboard via Assignments.

1. State the **name of the lab** and the **date of your participation**
2. Include your **UserId** and individualized, **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 individualized, summary results are not automatically provided, use your **UserID** to look up your results in the *Data* file at the host site. See the instructions '*To Retrieve Data'* elsewhere in the syllabus. Never report 'Trial-by-trial data'.
3. Identify and operationally define (explain how the variable is manipulated or measured) the **independent and/or predictor variable(s).**
4. Identify and operationally define (explain how the variable is manipulated or measured) the **dependent variable(s).**
5. State the experimental **hypothesis**.
6. **Determine** if your summary data (when furnished) is consistent with the **predicted outcomes**.
7. **Critique** the experiment. Offer potential, alternative explanations for the phenomenon observed that the researchers may have failed to consider. Consider the role of methodological limitations, variables not taken into consideration, or other weaknesses of the experiment. Be careful not to suggest the same "critique" for every lab.
8. Suggest **future directions**, such as how the experiment might be modified to improve the investigation. Future directions arise out of the research limitations identified for a specific lab and may include building on a finding; addressing a conceptual flaw in the design; or examining

the theory in a new context, location, or culture. Be careful not to suggest the same "future direction" for every lab.

Submit your laboratory reports to Blackboard by midnight on the due date to earn full credit. Late labs automatically receive ½ credit. No email submissions will be accepted. You are also encouraged to submit proof of completion up to two weeks early. You are encouraged to keep a copy of the laboratory report for your personal records (backup proof of completion; helpful when preparing for exams). Participation in all assigned labs is expected. Thus, failure to complete any lab report results in a corresponding grade deduction (as shown in the ***Laboratory Report Grade***).

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…	50%....

Instructions for getting started with, and obtaining proof of completion from, the Online Psychology Lab (https://opl.apa.org/)

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 you are using your own computer, *Google Chrome* is the recommended browser. Before beginning, 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.

1. Navigate to the Online Psychology Lab (https://opl.apa.org/).
2. Select "Student Login".
3. Register with Google (recommended) or your pre-existing APA account.
4. Find our class: **104085** (Grand Valley State University, F19 Honors PSY 101)
5. Participate in experiments! Please see "Weekly Schedule" for laboratory assignments and due dates.
6. Record (e.g., take a screen shot) your **User Id** and any **Summary Data** at the completion of experiment, which will be submitted as part of your lab report. When your summary data are not provided automatically at the completion of the experiment, look up your data in the Excel file by using the **UserId**. 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. Three kinds of enrichment activities are available.

- *Option 1* involves being a participant in research studies conducted by Psychology Department faculty and students.
- *Option 2* involves completing activities that will give you first-hand experience with research techniques used in Psychological research.
- *Option 3* involves writing summaries of research studies published in scholarly journals.

Students must earn ***four*** enrichment activity credits for this requirement. Each article summary (Option 3) is worth 1 credit, while Psychology Department research studies (Option 1) and research technique activities (Option 2) are worth a varying number of credits (the number of credits depends upon how much time it takes to complete the study/research technique activity).

In order to complete Option 1 and 2 activities, you must register for a SONA Systems account (Scheduling System Software). Once you have an account, you can log in whenever you want and sign up to participate in any available studies/activities for which you qualify. To access SONA Systems, along with downloadable registration instructions, follow this link: https://www.gvsu.edu/psychology/be-a-participant-in-research-296.htm Video tutorials are available at the following link that will walk you through the registration and study sign-up process: https://gvsu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?pid=14a9aaf9-814f-4a4c-830e-a9ce013e8887

SONA Systems maintains a strict policy protecting your privacy and confidentiality. This policy is available for review in the Psychology Office.

Option 1: Participation in Psychology Studies

Objective
By participating in psychology research studies, you will experience directly some of the procedures used in psychological research while also making a valuable contribution to the generation of knowledge within the discipline. All studies have been reviewed and approved by the university's Institutional Review Board (IRB). The IRB is an administrative body established to protect the rights and welfare of human research participants.

Step 1: Find a study and sign up
When you log in using your new SONA Systems account, you will see a list of studies. If there are available timeslots there will be a link on the right that will take you to a sign-up page. Before you sign up to participate in a study, review any listed restrictions (for example, "left-handed people only"). If you do not meet the posted eligibility requirements, you will not receive credit for the study.

Step 2: Participate in the study
Some studies on SONA Systems may be completed online, while other studies will require you to participate in person at a physical location (usually the Psychology Laboratories in Au Sable Hall). ***No more than 2 credits from online studies may count toward your 4 required enrichment credits***. If the study requires you to attend a session at a particular location, please arrive before the scheduled time, as studies start punctually. If you sign up for a study session but cannot attend, please cancel your session on-line.

At the beginning of a study session, you will first be given a description of what you will have to do, 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 24 hours after you participate in a study.

Under 18?
Special rules apply to students who are under 18. A general non-study specific Parent/Guardian Permission form must be completed and placed on file in the Psychology office before you are able to participate in any of the studies. In most instances, having the general non-study specific document on file will allow you to participate in studies. However, it is important to read carefully the eligibility requirements for a study. If you need a study specific Parent/Guardian consent form signed in order to participate, it will say so in the eligibility section of the study description. If you are under the age of 18 when you create your SONA Systems account, you will receive an informative email from Casimir Tokarski, the Psychology Department Laboratory Assistant detailing the steps you will need to take in order to document parental consent. Once your parental consent form is on file, you will see a list of studies for which you are eligible.

Participation opportunity during the first 3 weeks of the semester: Prescreening Survey
An on-line prescreening questionnaire is available for the first three weeks of the semester when you log in to SONA Systems. **This is only available to students who are 18 years of age or older.** It is not necessary to do this survey, but by completing it, you may receive invitations to additional studies later in the semester based on your responses. Thus, completing the pre-screening survey may increase the number of studies you will be eligible to choose throughout the semester. Completing the survey counts as one-half credit toward Enrichment Activities. The survey 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, half-hour sitting. The last date to participate in the prescreening survey is **September 15, 2019.**

Option 2 Research Techniques Activities

Objective
By completing research techniques activities, you will carry out some of the procedures researchers use in their psychological research. For example, you may be asked to watch an exchange between two people and carry out behavioral coding of their interaction. In doing these activities you will gain an understanding of the strengths and limits of various research methods used in psychological science. Research Techniques Activities are listed in SONA Systems along with the research studies. There are no age restrictions on these activities. You may complete each activity only once.

Need Help?
If you have questions regarding any aspect of Enrichment Activities 1 & 2, please contact Casimir Tokarski, 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 complete Enrichment Activities Types 1 and 2 is **December 3, 2019.**

Option 3: Papers on Psychological Studies in Scholarly Journals

Objective
This option will broaden your understanding of psychological research and how it is conducted. You will select a research article published in a peer-reviewed psychology journal and then write a brief report on the article. To complete the summary, follow these steps:

Step 1: Find a Journal
Scholarly journals are available electronically through the GVSU Library website. Be sure to access the journals *only* through the GVSU Library, not through other websites or other sources.
You can watch a video showing how to search for and access journals by going to http://libguides.gvsu.edu/psych. Search for one of the following journals:

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

Be sure the title of the journal matches *exactly* one on this list. Only articles from the above journals qualify for this assignment. There are other journals with very similar names to those on the list above that do not qualify for this assignment.

Step 2: Select an article
Once you have chosen a journal, you must find an article in the journal. Choose an article that meets the following criteria:

- It must be published in 2018 or 2019
- It must report an empirical study (i.e. one that is based on the collection of data). The article should have sections labeled “Methods and “Results.”

Most articles in the journals listed above will qualify. However, some articles do not qualify for this assignment, so you must check them to be sure they have methods and results.

Download the .pdf file of the article to read it in full.

Step 3: Read the article
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.

Step 4: Write the paper

- First, put the following information in the top left-hand corner of the first page:

Your name
Your student number (G-number)
Your professor's name and the date

- Second, 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) Full title of the article here. *Name of the journal in italics here*, volume number, page range.

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.

- Third, make three headings, copying the exact words of the three questions below:

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?

Your article summary will consist of answers to these three questions. Under each heading, write a well-organized paragraph of 100 to 300 hundred words to address the question. Do this for each one of the three questions. No separate introduction or conclusion is required; simply answer the three questions.

The Paper Must Be Your Own Work and Written in Your Own Words. Do not just copy or paraphrase the abstract or the paper. Grand Valley State University's policy on plagiarism (described in the catalog and in the Student Code) states "[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.

Step 5: Copy of the first page of journal article
Print the first page of the article that you read and staple it to the back of your summary. Make sure that the printout 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 print from a pdf file, all of the required information will usually be on the first page of the article. 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.

Step 6: Double-check your paper
Before you turn it in, use this checklist to make sure you have met all the requirements:

____ Did you choose an article from a journal exactly matching one on the list above?
____ Is the article from 2018 or 2019?
____ Does the article report original findings, with methods and results?
____ Does your paper answer the 3 questions in 3 paragraphs of 100-300 words each?
____ Did you include your name, g-number, professor, and date at the top?
____ Did you include a reference?
____ Did you include a copy of the first page of the article?

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 3 papers can be turned in anytime during the semester. The last date to submit papers is **December 2, 2019.**

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:

Chapter 1, Background to the Study of Psychology (pp. 1-28)
(Be sure to consult study guide when reading the textbook!)

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

Lab (Friday, 8/30): In preparation for the weekly laboratory assignments, please familiarize yourself with the **APA Online Psychology website** at: http://opl.apa.org/ Reminder: Working frrom a GVSU computer lab, open first the "Psychology Folder" on the desktop, and then open the "Online Psychology Lab." If using your own computer, *Google* is the recommended browser. Before beginning, 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.

Comprehension Qs: Is exposure to violence really harmless, based on Bushman and Anderson's (2009) research? Include the operational definitions for "desensitization," "cognitive outcomes," and "affective outcomes" in your answer. What happens if the violence portrayed in media is make-believe (video games; see Experiment 1)? Are the effects less worrisome if the exposure to violence is brief, say 20 minutes (See Experiment 1)? Defend your answers with data. Imagine you're a given a position in the Executive Office of the President of the United States of America. Your first assignment is to foster national, if not worldwide, compassion. Name one change you might make to media, based on credible, scientific evidence.

Labor Day Recess, Sept. 1-2

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:

Chapter 2, Methods of Psychology (pp. 29-57)

Back Matter, Statistical Appendix (pp. A1-A9)

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

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, 9/6)

(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?

Comprehension Qs: 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? Gut instinct?

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 the first door-choice, or **CHANGE** by picking the remaining, non-opened door. If you were a naïve contestant on the show, what would you do? Amusement guaranteed!

Comprehension Qs: Offer science-based advice on how to efficiently and effectively learn from a textbook according to McDaniel and colleagues' (2009) research. Most students prefer to take notes and reread texts when studying. Yet, retrieval practice produces robust learning that exceeds the benefits of additional study. **Q**uizzes, for example, are valuable retrieval practice! Explain the 3R method. What were the experimental and control conditions, and were they randomly assigned? What was the dependent variable? 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? Give your friend some advice—how can they study more effectively in any class using the 3R method?

Comprehension Qs: 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? Why

wait three weeks before asking yourself the same question? 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:

Chapter 8, Basic Processes of Learning (pp. 266-309)

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

Lab #2 Stroop (due Friday, 9/13) via alternate site: https://faculty.washington.edu/chudler/java/ready.html

Your Data (no UserId is furnished):
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 _____

Comprehension Qs: 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 with improved accuracy)? 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?

Comprehension Qs: 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 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 randomly 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?

Comprehension Qs: 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 Biological Preparedness Theory.

Comprehension Qs: 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, 9/20 (approximately 158 pages of reading)

(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 (due Friday, 9/20)

Your Data:
Related Accuracy: Words= ___%; Nonwords= ___%
Related Reaction Time: Words= ___ sec; Nonwords= ___ sec
Unrelated Accuracy: Words= ___%; Nonwords= ___%
Unrelated Reaction Time: Words= ___ sec; Nonwords= ___ sec

Comprehension Qs: 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 lab, how is information organized in our mental dictionary? Lexical decisions to the second stimulus are faster (called priming) when the pair of stimuli are related. For example, "nurse" primes "doctor", but not "horse", signifying that "nurse" and "doctor" are associates in semantic memory (Collins & Loftus, 1975). What is revealed about our semantic networks if "male" and "female" do not equally prime "doctor", or if negative words (e.g., "vomit") are stronger primes for faces of one race compared to another? By the way, why did the experiment include non-words (fake words)?

Comprehension Qs: How is the Lexical Decision lab related to Siegel's (2005) article on drug addiction? Be sure to provide a conceptual link between the contingencies in the Lexical Decision lab and the contingencies in addiction. Include the role of external and internal cues, and priming 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?

Comprehension Qs: 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?

Comprehension Qs: 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:

Chapter 7, The Psychology of Vision (pp. 225-263)

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, 9/27)

Your Data:

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.
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.

Comprehension Qs: Is perception veridical (coincide with reality)? 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.

Comprehension Qs: Can a mere photograph of an implied action elicit in the viewer a sense of actual motion, extrapolating from Winawer and colleagues' (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.

Comprehension Qs: 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.*

Readings:

Chapter 6, Smell, Taste, Pain, Hearing, and Psychophysics (pp. 192-223)
Chapter 9, Memory, Attention, and Consciousness (pp. 310-357)

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

Lab #5 Numerical Memory (NOTE: requires headphones) (due Friday, 10/4)

Your Data:
Time: ___ sec
Audio # Correct (AUD): ___
Visual # Correct (VIS): ___

Lab #6 Mental Rotation (due Friday, 10/4)

Your Data:
(Copy and paste your data line from the site)
ANG0COR ANG0TIME DANG0COR DANG0TIME ….etc.
_____ _____ _____ _____

Lab #5:
Comprehension Qs: 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.

Comprehension Qs: 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 "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.

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

Lab #6:
Comprehension Qs: Most people report having a range of experiences stored in their minds as "mental images" (a.k.a., *Picture in the Head Theory;* Kosslyn, 1994). For example, national and international tragedies (JFK assassination; 9/11; Hurricane Katrina; Malaysian airlines flight 370) evoke strong, emotional images. Tragic events seemingly leave "burned-in" pictures in our minds.

Let's try to elicit less emotional, pictorial memories in you. How many windows are on the front of your residence? In which hand does the Statue of Liberty hold her torch? Which is darker green—a pine tree or a frozen pea? To answer these questions, most report bringing visual images to the forefront of their mind. What was your phenomenological experience when answering these questions?

Comprehension Qs: Could your memory be wrong regarding the number of windows at your residence, Liberty's hand preference, and the green-ness of a pine tree? Our subjective experience is not necessarily truthful. For example, if we look at a scene, we see height, width, and depth (3-dimensions). Yet, our retinas (in the back of our eyes) only record 2-dimensions, similar to how only two dimensions are captured in a photograph. The third dimension of depth has to be reconstructed 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?

Comprehension Qs: 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?

Comprehension Qs: 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 role 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?

Comprehension Qs: 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**: ***Memory feats, foibles, and fallacies.***
Memory: ***Strategies for improvement.***
Attention*: Can you simultaneously talk on that cell phone and safely drive, really?*

Readings:

Chapter 9 (Cont.), Memory, Attention, and Consciousness (pp. 310-357)

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, 10/11)

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.

Comprehension Qs: In the movie *Memento* (2000), the lead character is a man suffering from anterograde amnesia, an 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.

Comprehension Qs: 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 and introspections?

Week 8 Thinking: ***Rational and irrational thought investigated.***

Exam 2, Wednesday, 10/16 (approximately 148 pages of readings)**:**

(EXAM 3 MATERIAL BEGINS HERE)

Readings:

Chapter 10, Reasoning and Intelligence (pp. 360-374 only)

- How people reason 1: Analogies and induction
- How people reason 2: Deduction and insight

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, 10/18)

Your Data:
(Copy and paste your data from the site.)
Likes—Dislikes: ___
Likes—Loves: ___
Likes—Hates: ___
Likes—Likes: ___
Likes—Neutral: ___; ….. etc.

Comprehension Qs: 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.

Comprehension Qs: 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 Break on October 20-22—Consider practicing 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 25

Readings:

Chapter 13, Social Psychology (pp. 493-532)

Lab #9: Facial Recognition (due 10/25)

Your Data:

Condition: ____ [Control / Experimental]
Day 1:
Hits: ___; Misses: ___; False alarms: ___; Correct rejections: ___
Day 2:
Hits: ___; Misses: ___; False alarms: ___; Correct rejections: ___

Comprehension Qs: 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 "witnesses" in the experimental condition were vulnerable to the "source monitoring error? How are all these issues related to the criminal case?

Week 10 Social: *Cognitive processes in prejudice.*
In-class Film: *Obedience* or *Experimenter*
Social and Emotional Development

Readings:

Chapter 12, Social Development (pp. 451-471 only)

- Infancy: Using caregivers as a base for growth
- Helping, comforting, and learning from others
- Parenting styles
- Roles of play in gender development

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 #10 First Impressions (due Friday, 11/1)

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: ___%

Comprehension Qs: 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?

Comprehension Qs: 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 11 Personality: ***Cognitive processes in personality.***
Do parent-child attachments become part of personality?
Do we have a need to belong?

Readings:

Chapter 14, Personality (pp. 536-554 and pp. 564-573 only)

- Personality as behavior dispositions, or traits
- Personality as adaptations to life condition

Lab #11 Implicit Association Test of your choice at Project Implicit **(due Friday, 11/8).** Go here: https://implicit.harvard.edu/implicit/.

Your Data (no UserId is furnished): Typically, a one-sentence summary of your attitudes (e.g., "Your data suggest…")

Lab #12 First-Person Shooter Task (due Friday, 11/8). Go here: http://psych.colorado.edu/~jclab/FPST.html.

Your Data (no UserId is furnished): A chart of your correct and incorrect responses and average response times as a function of target threat and race.

Comprehension Qs: 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 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. Explain. In the Implicit Association Test, what conditions yielded longer reaction times and were more error prone? What conditions yielded faster reactions times and were 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? In the Implicit Associaiton Test, were your responses difficult to fake or control? What similarities exist between the Implicit Association Test and the Stroop Lab?

Comprehension Qs: 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.

Comprehension Qs: 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 a form of 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, Monday, 11/11 (approximately 152 pages of readings)

(EXAM 4 MATERIAL BEGINS HERE)

Readings:

Chapter 4, The Neural Control of Behavior (pp. 113-118; pp. 130-148 only)

- Methods of mapping the brain's behavioral functions
- How hormones interact with the nervous system
- Hemispheric differences in the cerebral cortex
- Changes in the brain over time
- Thinking critically about neural control of behavior

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, 11/15)
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)

Comprehension Qs 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 famous16th 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?



Comprehension Qs: Are there gender differences in mental aptitude? Which gender has the advantage on mental rotation 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 shown 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.

Comprehension Qs: 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, and 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:

Chapter 15, Psychological Disorders (pp. 577- 622)

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

Lab# 14: Mirror Drawing (due Friday, 11/22)

NOTE: Ideally, when tracing the outline of the star, you should trace with your finger as a stylus on a trackpad or touchscreen.

Your Data:
Hand Preference: ____ [Right/Left]
Time for Left: ____ sec; Time for Right: ____ sec

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

Thanksgiving Break, November 27 – December 1

Readings:

Chapter 15 Cont., Psychological Disorders (pp. 577- 622)

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.

Comprehension Qs: By the way, based on Shrout and colleagues' (1989) findings, what is the role of fateful life events on risk for depression? By the way, define "fateful". 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:

Chapter 16, Treatment of Psychological Disorders (pp. 624-655)

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.

Lab #15: Dichotic Listening (NOTE: requires headphones) (due Friday, 12/6)

Your Data:
Hand Preference: ___
Number Correct Left Ear: ___; Number Correct Right Ear: ___
Total Trials Per Ear: ___

Comprehension Qs: 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?

Comprehension Qs: 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?

Comprehension Qs: 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 (approximately 135 pages of readings):

Section 19 (Class meets 10-10:50 AM): Monday, December 9, 10-11:50 AM
Section 18 (Class meets 11-11:50 AM): Wednesday, December 11, 10:00-11:50 AM

The mission of the Grand Valley State University General Education Program is to provide a broad-based liberal education experience that fosters lifelong learning and informed citizenship. The program prepares students for intelligent participation in public dialogues that consider the issues of humane living and responsible action in local, national, and global communities.

PSY 101 Introductory Psychology
Foundations - Social and Behavioral Sciences

Student Learning Outcomes:

1. Explain how knowledge in the social and behavioral sciences is created and applied
2. Explain major approaches, methods, theories, and substantive findings of the field
3. Weigh and apply ideas and claims from the social and behavioral sciences outside the classroom
4. Critical Thinking – use systematic reasoning to examine and evaluate information and ideas and then synthesize conclusions to propose new perspectives and solutions. Students will:
    - Assess relevant information, perspectives and assumptions.
    - Construct logical conclusions based on reason and evidence.
    - Formulate novel approaches or create innovative interpretations.
    - Evaluate the proposed ideas or approaches.
5. Ethical Reasoning – use a decision-making process based on defining systems of value. Students will:
    - Recognize ethical issues when presented in a complex situation.
    - Demonstrate understanding of key concepts and principles underlying various systems of reasoning.
    - Participate in activities that engage them in ethical reasoning.
    - Demonstrate the ability to deal constructively with ambiguity and disagreement.