

Grand Valley State University
Psychology 492 Capstone: Advanced General, Section 2, Spring 2022
SYLLABUS

Course Information

Psychology 492 section 2 (Capstone: Advanced General), Spring 2022, Asynchronous and synchronous online (Tuesdays 12-1:15pm)

Instructor Information

Taught by Prof. **Leon Lou**

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Online Office Hours: 9-12 Thu via Zoom or Collaborate Ultra; other times are possible by appointment

Description

As a senior of psychology major, you must have been told many times that psychology is the science of mind and behavior. But what kind of science is it? Are all the researches and practices of those who call themselves psychologists scientific or science-based? If so, in what sense? On matters of mind and behavior, what makes a scientific idea different from common sense, intuition and ideology? Do psychologists' life experience contribute to their theories? If so, are they still justified to consider their theories scientific? How much do we have to know about how our body functions, develops over life span, and evolves over eons in order to understand how our mind works? Does it still make sense to talk about human nature and a science of human nature despite the fact that individuals and groups of individuals live in different cultures and subcultures and have different values and faiths? These are some of the big questions that will be raised again and again in this class. Realizing that such questions are more challenging than one has thought can be the first step towards forming a coherent perspective on psychology and worldview. It is more important to grapple with the questions than confidently "knowing" the correct answers---a point frequently made but not truly appreciated. Why would anyone want to struggle with such questions? Could we make things too complicated than necessary? Well, all I must say is that doing the opposite---to believe in a simplistic reality that is actually complicated and hugely complex is to fool ourselves and ultimately dangerous and irresponsible.

We will discuss three aspects of psychology that makes its subject matter challenging:

- 1. Objectivity Problem:** Unlike prototypical natural sciences where the subject matters (trees, for example) are totally separate or separable from the human investigator, in psychology what needs to be understood (human perception and cognition, for example) often constitutes the means for the understanding. The objectivity of psychology might be questioned due to the concerns on the differences in the investigators' minds. But are such concerns justifiable? Do psychologists all over the world think that differently? Do they and should they follow a common set of rules for doing science? Where should we draw the line between science and politics, which is ostensibly shaped by, and concerned with self or group interests, faiths, and cultures?

2. Nature-Nurture (or Culture) and Mind-body Problem: A related problem has to do with the mind-body relationship, broadly defined. It is now widely accepted by most psychologists and the public that mind and brain are closely linked and it is only possible to change the mind to the extent that the brain can be changed. But how plastic is the brain? If the human brain is like a piece of hardware for computation, as it is often claimed, it is certainly a very peculiar type of hardware----a living organ of the human body that changes over life span of an individual and over millions of years of biological evolution. It is certainly not as rigid as an iPad. But is it infinitely malleable? Or, as some authors would like us to believe, that since about 10,000 years ago the biological evolution of the human species has nearly stopped and most, if not all the important issues in psychology are really issues of cultural evolution, cultural changes, and cultural differences that leave no traces in our genes? Indeed, science and technology, as components of the human culture, are playing ever more important roles in shaping the human mind and the society in which we live, and our future may be beyond our wildest imaginations. Does that prospect imply the mind's ultimate separation, or transcendence, over the biological body?

3. Is-Ought Problem: Finally, as the subject (or object?) matter of psychology, people are social beings and have moral concerns. The social or interpersonal experiences of human beings give rise to the question about the neutrality of scientific finding in psychology. There are many cases in psychology where facts, discoveries, or theories are nearly always associated with their potential positive or negative social implications and received very differently by the media and the public. Is scientific psychology different from natural sciences such as nuclear physics and molecular genetics which could be used for good or evil purposes that have nothing to do with the scientific understandings in those disciplines *per se*? Is it possible that some psychological and social science discoveries are so value-laden that their ethical implications are beyond dispute and deliberation?

These are indeed heavy and challenging questions that many psychologists have been struggling with. They are not empty and useless questions. On the contrary, by sorting out and thinking as clearly and rigorously as possible, you are less likely to fool yourself and more likely to become both scientifically rigorous and socially responsible. As a college student of psychology major, you will be at a better position to assess the validity of psychological researches by informing yourself of the "big pictures". In sum, this class can be considered a seminar of "meta-psychology", concerning with various intellectual sources and ideas that have shaped and continue to shape psychological studies. You are expected to read a lot, raise a lot of questions, some of which you could confidently answer by finding references and/or working on them harder, and others may not have a good answer but by struggling with them you'll have a better understanding why. In the latter cases, my primary expectation is an improvement in your capacity to articulate the reasons or sources that make certain questions difficult, and in some cases, to raise alternative and related questions that can be answered.

Course Objectives (as in GVSU Syllabus of Record)

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

- 1) Identify concepts associated with major theoretical perspectives and empirical findings in the discipline.
- 2) Engage in the application of major theoretical perspectives and empirical findings in the discipline.
- 3) Describe alternative theoretical perspectives within the discipline and, where possible, integrate/synthesize across these perspectives.
- 4) Recognize various sources of bias in psychological research, and how these can affect the interpretation or usefulness of research findings.
- 5) Analyze and explain interdisciplinary approaches to psychological questions.
- 6) Recognize and produce an appropriate level of professional-style writing.

Course Content and Expectations

The course content is organized into two units and five modules.

Unit 1 (Foundations of scientific psychology) consists of the first three modules that deal with conceptual and philosophical issues in psychology. Specifically, you are invited to examine the three theoretical issues that make psychological studies difficult and distinct from other sciences: the question of objectivity, the relationship with biological sciences and their ethical implications and moral consequences. We will first discuss **how people are informed about the world and form beliefs, why science is so successful as a method of knowing, and why scientists are not free from biases**. We will then take an overview on some **new discoveries and ideas in neuroscience, evolutionary biology, and behavioral genetics that are highly relevant to the Nature-Nurture and Mind-Body problem, broadly defined**. Throughout class discussion, you will be asked to think systematically and educate yourself on **the relationship between science and ethics**. Although we will inevitably touch on specific issues and topics in psychology, the paramount goal of the unit is to reach a better understanding of the factors that make psychology challenging as a science.

Unit 2 (Pragmatic Issues) consists of the remaining two modules that cover two broadly-conceived issues: 1) Who we are and how we perceive other people and ourselves: commonalities and differences across age, sex, ethnicity, and other groupings, and how we form stereotypes and impressions of other people, and how we form and affirm our own identities; 2) How we treat other people and ourselves, which include topics of romantic love, conformation, cultural influences, values and beliefs about ourselves.

As you can see, the organization of the course content is different from that of most introductory psychology textbooks that start with a chapter on research methods and a brief history of psychology, a chapter on biological foundation of psychology, followed by several historically shaped research areas such as sensation and perception, cognition, emotion and motivation, social psychology, developmental psychology, personality and individual differences, and psychopathology. Instead, the content organization reflects a pragmatic approach, mirroring how people spontaneously think about psychological issues in life. Nearly every pragmatic psychological issue is connected with a multitude of conventional areas in psychology. For example, love has to do with sensation and perception, emotion, cognition, motivation, language, development, individual differences, intelligence and psychopathology. By shuffling and reorganizing content areas, I hope you will become accustomed to take a scientific perspective at various issues arising from your everyday experience, and agree that psychological science can indeed help gain insight into, and in some cases, help solve practical personal and societal problems. There are three themes running across all the issues we discuss in class: 1) Scientific studies demand respect for data, and overcoming all sorts of confirmation biases; 2) Both biological/evolutionary and social/cultural factors must be considered for explaining nearly every aspect of human mind and behavior; 3) Ethical decisions by individuals and institutions are separate from scientific discoveries about human nature, but can be informed by the latter.

Although you may find some of the topics familiar, please keep an open mind, be critical (but not blindly critical), and be prepared to gain new insights on the same “old” issues. You will be asked to write about your understanding and respond to your peers’ writings regularly, informed by various assigned readings. A skill essential for the class is raising meaningful as well as empirically answerable questions. To help reach these objectives, I will frequently ask you, in classroom and writing assignments, to elaborate and articulate your questions, or transform them into testable hypotheses. I will frequently ask you to search for research findings that support your ideas/conjectures. Similar to fitness training, mental strength is impossible to improve without resistance (contradictions and even hostile ideas).

Course Material

No textbooks are required. Instead, required course material include five non-fiction and one fiction books, many journal articles, book chapters, and various internet resources. Most reading material will be accessible from Blackboard or from the internet, except the six books. If they are not available from the GVSU library or public libraries, you must purchase or rent them from amazon.com or other online used bookstores such as alibris.com.

Most of them cost under \$15.

For a list of the assigned course material, see the last section of the syllabus

Goals and Activities

Pedagogical Goals

The design of this class is geared towards cultivating three essential skills---comprehension, critical and reflective thinking, and civil discourse. Comprehension means being able to understand what one reads or listens to and not confuse one's own understanding or position with that of the author. Critical and reflective thinking is essentially about being able to assess multiple sources of evidence bearing on an issue and keep one's emotions from hijacking reasons. Finally, civil discourse relies on the capacity for finding common ground with those one disagrees and debating issues with logic and evidence rather than resorting to attacks with derogatory terms.

Writing assignments

1. *Initial Report*

On the very first day of the synchronous class meeting (5/10), I will give an overview of the issues to be covered in this class. As part of the overview, I will raise several questions that I consider to be foundational to psychological science. We will have an initial discussion on some of them, and you will then have to answer each of the questions in writing without referring to any of the course material. This initial report serves to assess your current understanding of those important issues. We will revisit those issues throughout the semester and you will have an opportunity to revise your perspectives and understanding on the same issues in a final exam.

2. *Quizzes*

There will be five open-book quizzes designed to assess your understanding of course material in each of the five teaching modules. Each **quiz** contains 6-7 questions that ask for a short summary of about 100 words about the main points made in each piece of the assigned course material of the week. You are expected to use your own words to capture and communicate accurately and concisely the main points.

3. *Discussion assignments (DAs)*

To create opportunities for critical thinking, I will rely on the discussion board of Blackboard to create space for exchanges of ideas. The questions I post as **discussion assignments (DAs)** fall into two categories: 1) Introduction by provocation, which involves presenting a controversial discovery, a thought-provoking news story, or a clinical case, and ask you to explain it in psychological theories and propose ways to test your ideas; and 2) Extension of conclusions, which involves questions designed to expand your understanding by conducting library researches. There will be two due dates for each DA---the first one for submitting your answers, and the second one, two days later, for responding to your peers' answers. More detailed instructions for peer responses will be included in the instruction for each DA.

4. *Book Reports (BRs)*

Another important component of the class is **peer-responded book reports**. Five times during the semester, you will submit a journal entry of about 600 words (no maximum limit). There will be a detailed instruction posted on the Blackboard on how to write each book report. Most importantly, you are expected to convey in your book report your understanding of the key points made of the author(s), and raise your questions by "struggling" with the content material.

By "struggle", I mean mostly that you should try to spot parts of the book that challenge your customary beliefs and perceptions, that spark new questions in your mind, that lead to new insights or even inspire you in some way. In other words, do not simply treat the term "struggles" as being synonymous with "confusions." If you come across

an unfamiliar word, concept, reference, or allusion in any of the assigned readings, you should try doing a web search for clarification before citing it as a point of confusion.

Every time a BR is due, there will be a BR response due two days later. These responses (300 words minimum, no maximum) should engage the BR of another student you are assigned to respond. In these responses, you should grab on to some of the points raised by the journalist and further the discussion. I will be reading everything you write, but you are each other's primary audience. You should read the responses you receive from other students, and you can reply to these responses whenever you would like to turn a discussion into a conversation.

5. Final exam

There will be an online open-book open-note final exam. The first part of the exam is mainly designed to assess your understanding of some of the most basic ideas and concepts you are expected to have learned over the five modules. The second part consists of four or five open-ended short essay questions, all of which are closely related to the topics we discuss in the class, and at least two of them will require you to do some library/database researches. I will post the final exam one week before its due date.

Grading and late work policy

For each assignment I will provide written feedback to a selected number of students, especially those who do not meet the expected standards. All the assignment deadlines are firm and adjustable only in unexpected circumstances that occur to the whole class. All late works will receive a deduction of up to 60% of the maximal points depending on how late they are.

Notes on Group Work

To promote exchanges of ideas and communications among peer learners, which is vital to success of online classes, you will be asked to comment on answers of your peers' discussion board assignments (DAs) and book reports (BRs). For each of five teaching modules, I will assign you randomly into a peer review group of three or four students. The groups are randomly assigned so as to provide ample opportunities for every student to interact with everyone else in class. Although you are primarily responsible to respond to members of your assigned group, you are welcome and indeed encouraged to respond to works by students outside of your group. In case one or more students of your assigned group failed to submit their work by the deadline, you may have to respond to a student outside of your assigned group. To make the workload manageable, you will be asked to comment on two answers of the DA of either one student or two different students and one BR written by one of the students of your assigned peer review group. All completed assignments are visible to the whole class.

Synchronous Class Meetings and Class Participation

Although this class relies mainly on asynchronous on-line teaching platforms (mainly the discussion board of the Blackboard), we will have 6 synchronous class meetings of 1 hour and 15 mins every Tuesday. Your attendance and participation in these synchronous class sessions will add up to close to 25% of your final grade. The attendance will be automatically logged by the blackboard. In addition, **your visual presence (with or without a real background) in the synchronous online meeting is required.** Please make sure that your computer's camera and speaker are working.

During the first meeting, I will give a brief overview of the course and raise some major target questions to be discussed throughout the semester. In each of the following five meetings we will discuss a selected set of issues related to the module of the week. I will post a list of questions to be discussed at least two days before a synchronous session. I will be the moderator in each session, and I will assign 4 -5 students each time to serve as discussion facilitators. To fulfil your role as a discussion facilitator, you must get prepared more than in other sessions to answer my questions and be prepared to raise follow-up questions and your own questions related to the readings of the module of the week. Although the facilitators are expected to be more involved, everyone joining a synchronous session is expected to actively contribute to classroom conversations. The class participation

component in the final score will reflect your contributions in all the synchronous sessions and especially the session in which you serve as a discussion facilitator.

Capstone Lounge

Capstone Lounge is special discussion board forum created for two purposes. Firstly, it is a place for all students, especially those assigned as discussion facilitators, to post questions and additional material (journal papers, YouTube video etc.) before a synchronous class session. Secondly, it is intended for casual exchanges of ideas and stories. So much that is happening outside the classroom and campus can deeply change our lives whether we want to pay attention to them or not. If you feel like sharing your experiences and feelings on anything bigger than yourself, Capstone Forum is one of the platforms. It is also a place where you can share your excitement, struggles, confusions, and frustrations related to, or because of, the class material, and offer help to your classmates.

Grading Scales

Your final grade will reflect your performance on following components:

1. **Quizzes include peer ratings** (10 points for each of 5 quizzes = 50 points)
2. **Discussion Assignments (DAs) including peer responses** (15 points for each of the 5 DAs = 75 points)
3. **Peer-responded book reports (BRs) including peer responses** (15 points for each of the 5 BRs = 75 points)
4. **Initial Report** (20 points)
5. **Final Exam** (70 points)
6. **Class Attendance** (10 points for each of 6 synchronous class sessions = 60 points)
7. **Class participation** (30 points)
Total: 100% or 380 points
8. **Capstone forum** (extra credits of up to 10 points)

Your total points will be converted into percentage points, and your final letter grade will then be determined according to the following scale:

A >94%; A- = 89-93%; B+ = 86-88%; B = 82-85%; B- = 79-81%;

C+ = 76-78%; C = 72-75%; C- = 69-71%; D+ = 65-68%; D = 60-64%; F <60

The Keys to Success in This Class

Be prepared for predictable on-line technical problems

Because on-line learning relies on internet access and the functionality of your computers, it is extremely important that you make sure you have access to the internet and Blackboard when you need it. Although the mainly asynchronous mode of communication required by this class is not very demanding on hardware and software, you should still be prepared for technical problems that can arise anytime. Please avoid waiting until the last minute to submit your work. Make a personal schedule for this class (and other classes you take) and set your own deadlines for submitting assignments at least one hour before the due time (typically the end of the due day). You are less likely to encounter technical problems or make avoidable mistakes such as uploading a wrong file when you are not acting in haste.

Be organized and be focused

Probably the biggest common obstacle to successful on-line learning has to do with the enormous amount of potential distractions of the online environment and the lack of externally imposed routines. Therefore, it is vitally important that you make for yourselves a weekly schedule that fits well with the assignment deadlines for this class and your other classes and activities. To facilitate making such a schedule, I have set most of the due dates regularly on Mondays and Thursdays. You can take advantage of the regularity to schedule your study times accordingly. To

minimize distractions and maximize your focus on assigned readings, please print out some of the course material, especially the longer ones. You will find it much easier to read the printed papers than their screen versions.

Student Support

Nothing is more important than your well-being. No one can be expected to reach their greatest academic potential if basic needs are not being met. I, along with the department, college, and university, am here to support you. Please visit <https://www.gvsu.edu/care/> for specific resources related to access to food, housing, internet, and software.

Schedule

Course Overview and Introduction to Science and Psychological Science

5/10: Synchronous Class meeting 1; Initial Report, Quiz1, DA1 & BR1 open

5/12: Initial Report due

Module 1: Science and Psychological Science

5/16: Quiz1 due

5/17: Synchronous Class meeting 2; Quiz2, DA2, & BR2 open

5/19: DA1 & BR1 due

Module 2: Mind and Body

5/23: Quiz2, DA1 & BR1 responses due

5/24: Synchronous Class meeting 3; Quiz3, DA3, & BR4 open

5/26: DA2 & BR 2 due

Module 3: Science and Ethics

5/30: Quiz3, DA2 & BR2 responses due

5/31: Synchronous Class meeting 4; Quiz4, DA4, & BR4 open

6/02: DA3 & BR 3 due

Module 4: Who we are and how we perceive others and ourselves

6/06: Quiz4, DA3 & BR3 responses due

6/07: Synchronous Class meeting 5; Quiz5, DA5, & BR5 open

6/09: DA4 & BR4 due

Module 5: How we treat others and ourselves

6/13: Quiz5, DA4 & BR4 responses due; Final exam open

6/14: Synchronous Class meeting 6

6/16: DA5 & BR5 due

6/21: Final Exam due; DA5 & BR5 responses due.

** Unless otherwise noticed, the due time for submitting all the assignments is the end of day (11:59pm) of the due day.

Course Readings, Videos and Audios:

Required Books:

- Andrew Shtulman (2017): **ScienceBlind: Why our intuitive theories about the world are so often wrong**, Basic Books.
- Robert Plomin (2018): **Blueprint: How DNA makes Who We are**, MIT Press.
- Gilligan, C. (1982). **In a Different Voice**. Harvard University Press.
- Banaji, M. R. & Greenwald, A. G. (2013). **Blindspot: Hidden biases of Good People**
- Jonathan Haidt (2013): **The Righteous Mind: Why Good People Are Divided by Politics and Religion**, Vintage.

Course Material placed on the BB:

Module 1: Science and Psychological Science

- Gilbert, D. (1991). How mental systems believe, *American Psychologists*, 46(2), 107-119.
- Shermer, M. (2008). Folk numeracy and middle land, *Scientific American*, September, 40
- Correlation and Causation: <https://www.sciencealert.com/watch-here-s-the-best-guide-we-ve-seen-to-how-correlation-and-causation-work>
- Reliability and Validity: <https://www.youtube.com/watch?v=L-ofOlsuI4U>
- P-value: <https://www.youtube.com/watch?v=3viE4s-Xm7U>
- A visual guild to Bayesian thinking: https://www.youtube.com/watch?v=BrK7X_XIGB8
- Feynman, R. P. (1974). Cargo cult science: Some remarks on science, pseudoscience, and learning how to not fool yourself. Caltech's 1974 commencement address. *Engineering and Science*, 37 (7), 10-13.
- Meinrad, P. (1991). The difference between everyday knowledge, ideology, and scientific knowledge, *New Ideas in Psychology*, 9(2), 227-231.
- Lillienfeld, S. O. (2010). Can psychology become a science? *Personality and Individual Differences*, 49 (2010), 281-288.

Module 2: Nature and Nurture; Mind and Body

- Palmer, J. A. & Palmer, L.K. (2002) Origins: The Roots of Evolutionary Psychology, in *Evolutionary Psychology: The Ultimate Origins of Human Behavior*, Allyn & Bacon, 1-25
- Maccoby, E. (2000) Parenting and its Effects on Children: On Reading and Misreading Behavior Genetics. *Annual Review of Psychology*, 51, 1-27
- Champagne, F. A. & Mashoodh, R. (2009). Gene in Context: Gene-Environment interplay and the origins of individual differences in behavior. *Current Directions in Psychological Science*, 18(3), 127-131.
- Piedimonte, A. Benedetti, F. (2016). Words and Drugs: Same Mechanisms of Action? *Journal of Contemporary Psychotherapy*, 46, 159-166.
- Solms, M. (2000). Freud returns. *Scientific American*, 290(5), 82-88.
- Weir, K. (2011). The exercise effect. *APA Monitor*, 42(11), 48-52.

Module 3: Science and Ethics

- Mobbs, D., Lau, H., Jones, O.D., & Frith, C.D. (2007). Law, Responsibility, and the brain, *PLoS Biology*, 5(4), 693-700.
- The Is-ought problem video clip: <https://www.open.edu/openlearn/history-the-arts/culture/philosophy/the-ought-problem>
- Kendler, H. (2002). Psychology and ethics: interactions and conflicts, *Philosophical Psychology*, 15(4), 489-508
- Morton Hunt (1999). *The New Know-nothings: Political Foes of Scientific Study of Human Nature*, Chapter 1: A Clear and Present Danger
- Schmitt, D. P. et. Al. (2017). Personality and gender differences in global perspective, *International Journal of Psychology*, 52:S1, 45-56.

Module 4: Who we are and how we perceive others and ourselves

- Podcast Radiolab: [G: The Miseducation of Larry P](#)
- Neisser, U. et al. (1996). Intelligence: Knows and Unknowns. *American Psychologist*, 51(2), 77-101.
- Sadjadi, S. (2019). Deep in the brain: Identity and authenticity in pediatric gender transition, *Cultural Anthropology*, 34(1), 103-129.

TED talk: The danger of a single story

http://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story?language=en

Ottari, V., Lee, Rubinstein, Y-T. (1995). Accuracy: A Neglected Component of Stereotype Research, In Stereotype accuracy: Toward appreciating group differences, by Lee, Yueh-Ting (ed.); Jussim, Lee J (ed.); McCauley, Clark R (ed.). 29-59, Chapter xiv, 330 Pages. Washington, DC, US: American Psychological Association.

Gawronski, B., Ehrenberg, K., Banse, R., Zukova, J., and Klauerb, K. C. (2003). It is in the mind of the beholder: The impact of stereotypic associations on category-based and individuating impression formation, *Journal of Experimental Social Psychology*, 39, 16–30.

Dutcher, J. et al. (2016). Self-Affirmation Activates the Ventral Striatum: A Possible Reward-Related Mechanism for Self-Affirmation, *Psychological Science*, 27(4), 455–466.

Module 5: How we treat others and ourselves

Fisher, H. E, Xu, X., Aron, A., & Brown, L.L. (2016). Intense, passionate, romantic love: A natural addiction? How the fields that investigate romance and substance abuse can inform each other. *Frontiers of Psychology*, 7:687

De Munck, V. C., Korotayev, A. (1999). Sexual equality and romantic love: A reanalysis of Rosenblatt's study on the function of romantic love. *Cross-Cultural Research*, 33(3), 265-277.

Klick, J., and Parisi, F. (2008). Social networks, self-denial, and median preferences: Conformity as an evolutionary strategy. *The Journal of Socio-Economics*, 37, 1319-1327.

Triandis, H. (2001). Individualism-Collectivism and Personality. *Journal of Personality*, 69(6), 907-924.

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1). <http://dx.doi.org/10.9707/2307-0919.1116>

Dweck, C. S. & Molden, D. (2008). Self-theories: The construction of free will. In J. Baer, Kaufman, J. N., & L. Lawrence (Eds.) *Are We Free? Psychology and Free Will* (pp.44-64) Oxford & New York: Oxford University Press.