# Fall 2020 Course Syllabus PSY 365: Cognition (02) Hybrid Tuesday & Thursdays 4:00 pm - 5:15 pm, LOH 174 Department of Psychology

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<u>Virtual</u> Office Hours: Tuesdays 1:30 - 3:30 (& by appointment)

### **Hybrid Class**

Both traditional **face-to-face (f2f)** and **online** components are intended to be utilized in this class. A more detailed description of this intended structure has been outlined in previous emailed communications (& won't be repeated here). A reminder that you are strongly urged to **engage the online component of this course in a quiet place with your full and undivided attention** (e.g., don't "multitask" as you will unlikely be engaged at the required depth).

There exists the very real possibility that this class may have to abruptly transition to a complete online modality at some point in time. Thus you should be prepared for this contingency. Also note, that despite what group you find yourself in (A or B), you should be prepared to be available during any regularly scheduled class session time (f2f or online).

### **Course Description**

This course concerns itself with the *science of mind*. The contents and processes of mind such as thinking, reasoning, perceiving, attention, memory, knowledge and language are of central interest to theorists and researchers in the areas of cognitive psychology and cognitive science in general. This course will provide a historical background to the modern science of mind, illustrate some pertinent research methods, and cover some important *empirical findings* and theories in the study of cognition.

# **Course Objectives:**

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

- Summarize the important methods, research findings, and theories of cognition.
- 2. **Evaluate** current issues in cognition research.
- 3. **Compare** the strengths and weaknesses of various theories of cognition.
- 4. **Explain** how cognition is studied empirically.

### Textbook (Required):

Cognitive Psychology: Applying the science of the mind. **Third Edition**. (2012), by Gregory Robinson-Reigler & Bridget Robinson Reigeler, Allyn & Bacon.

### eReadings:

- Colom, R., et al. (2003) Working memory and intelligence. <u>Personality and Individual Differences</u>, <u>34</u>, pp.33-39.
- De Neys, W. (2006). Dual processing in reasoning. <u>Psychological Science</u>, <u>17(5)</u>, pp. 428-433.
- Evans, J. St. B. T. & Curtis-Holmes, J. (2005). Rapid responding increases belief bias: Evidence for the dual-process theory of reasoning. <u>Thinking & Reasoning</u>, <u>11(4)</u>, pp. 382-389.
- Pavani, F., Spence, C., & Driver, J. (2000). Visual capture of touch: Out-of-body experiences with rubber gloves. <u>Psychological Science</u>, <u>11</u>, 353-359.
- Pylyshyn, Z. (2003). Return of the mental image: Are there really pictures in the brain? TRENDS in Cognitive Sciences, 7(3), 113-118.
- Roediger, H. L. & Karpicke, J, D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention, <u>Psychological Science</u>, <u>17(3)</u>, 249-255.
- Roediger, H. L. & Marsh, E, J. (2005). The positive and negative consequences of multiple-choice testing, <u>Journal of Experimental Psychology: Learning</u>, <u>Memory, and Cognition</u>, <u>31(5)</u>, 1155-1159.
- Satel, S. & Lilienfeld, S. O. (2013). Losing our minds in the age of brain science, (Introduction; pp. ix-xxiii). From <u>Brainwashed: The Seductive Appeal of Mindless Neuroscience</u>.
- Shipstead, Z., Redick, T. S. & Engle, R. W. (2010). Does working memory training generalize? Psychologica Belgica, 50, 245-276.
- Shimamura, A. P. (2010). Bridging psychological and biological science: The good, bad, and ugly. <u>Perspectives on Psychological Science</u>, <u>5</u>, 772-775.
- Stanovich, K. E. (2013**a**). Falsifiability: How to foil little green men in the head. Chapter 2 (pp. 21-36) from <u>How to Think Straight About Psychology</u> (10th Ed.)
- Stanovich, K. E. (2013b). Operationism and essentialism: "But, doctor, what does it really mean?" Chapter 3 (pp. 37-52) from How to Think Straight About Psychology (10th Ed.)
- Swami, V., Voracek, M., Stiegler, S., Tran, & Furnham, A. (2014). Analytical thinking reduces belief in conspiracy theories. <u>Cognition</u>, <u>133</u>, 572-585.
- Wegner, D. M., Sparrow, B. & Winerman, L. (2004) Vicarious Agency: Experiencing Control Over the Movements of Others. <u>Journal of Personality and Social Psychology</u>, <u>86</u>, pp. 838–848.

It is **important** that you keep up with the assigned readings throughout the entire duration of the course. Assigned readings will be officially announced on blackboard. Additional readings may be added on to the above eReserve listing (& not all of the above is likely to be assigned.)

### **Course Evaluation**

I. Assignments ~ 140 points\* (~ 70% of final grade)
 II. Assessments ~ 60 points\* (~ 30% of final grade)

\* Note this is an "aspirational" estimate. The goal here is to have a total sum of 200 points thus providing a nice round number that can be mentally converted into their percentage points equivalence with ease (i.e., 2 points = 1 final grade percentage point). The exact number of points and proportion of points allocated to assignments vs assessments, however, will likely differ slightly from that indicated above.

~200 points\*

### **Course Grade Schedule:**

Point-based scores will be converted to a percentage score at the completion of the course and letter grades will be recorded under the following grade schedule:

Α	93-100%	B+	88-89%	C+	78-79%	D+	68-69%
Α-	91-92%	В	82-87%	С	<b>72-77</b> %	D	60-67%
		B-	80-81%	C-	70-71%	F	< 60&

For purposes of letter grade submission, numerical scores are rounded up from the **second decimal place value** to the nearest whole number (i.e., xx.45 and greater). For example, 81.45, (a **B**-) would be rounded up to an 82 (a straight **B**.) An 81.44, however would remain a B- (the grade threshold does need to be placed somewhere.)

# **Assignments:**

There will be two types of assignments made available via blackboard. Lecture Assignments (LA) will be based on lecture/discussion content already presented prior to the assignment's due date and Reading Assignments (RA) will be based on assigned reading content that has primarily not yet been presented in our lecture/discussion component prior to the assignment's due date. Most of the assignments you will receive will be of the LA variety, but the overall total of points made available will be roughly equally dispersed between LAs and RAs (i.e., a single given RA will tend to be "heavier" in weight that a single given LA). You will need to upload your completed assignment back into blackboard by a provided due date. Due dates for these assignments will be strictly adhered to for grading purposes—this should actually be viewed by you as an element of what you are being graded on. It is an excellent idea to start an assignment early and hand it in well ahead of time in order to avoid any unanticipated problems that arise later and present challenges or obstructions to a timely completion. You

should think of these assignments as not only being concerned with the content of interest, but also as an assessment of your ability to plan, organize and manage your time in order to ensure scheduling constraints are satisfied.

# **Lecture Assignments (LA):**

You will typically be given a weekly **LA** assignment that will require you to have thoughtfully engaged with content presented in lecture/discussion (either f2f, online or both). Typically these will consist of a series of questions requiring short answer responses, but may also include fill-in the blank items and even multiple-choice items. Each **LA** will specify the exact number of points it will be worth.

# Reading Assignments (RA):

These assignments will require that you thoughtfully read some assigned material (it will often be an eReading item or two) and answer a set of provided questions. The quality and completeness of your responses to the questions will factor into the grading. Avoid skimming the assigned readings for "the answers" as this strategy will likely result in superficial responses that will affect your score. It is vital to take note that the nature of these assignments will ask that all of your responses are made using your own wording—e.g., do not make use of any quotations from the assigned reading(s). You will not be using citations or incorporating a reference section into these assignments. Do not incorporate the work of anyone else (including fellow students) into your responses. Doing so will be considered plagiarism (as described in the catalog and in the Student Code.) Assignments incorporating plagiarized material may result in a failing grade for the course. These assignments will vary in their weight and each RA will specify the exact number of points it will be worth.

### **Assessments**

There will be some quizzes made available online throughout the term. The format of these quizzes will likely predominately consist of multiple-choice items but may also include some fill-in-the-blank and short answer items. The total weight of the quizzes will be about 30 points (half of the 60 point allotment for assessments). The remaining 30 points will be allocated to a **final culminating experience assignment/activity** (**FCEA**). For the most part, the FCEA will look like a final exam that will be made available online. The FCEA will present some questions that will tap your **comprehension** of material covered throughout the course. Of particular importance will be the research methodology concepts initially covered in topic 2 that will continually resurface throughout the entire course. The FCEA will be held during the final exam week within the window of time allocated to this class by GVSU.

### Our responsibilities:

Both the professor and student have responsibilities in the teaching / learning process.

My responsibilities as an instructor include...

- being well organized
- being courteous and helpful with students
- providing an updated and informative course
- · returning graded materials as promptly as possible
- being **fair** and **unbiased** with grading (e.g., equal treatment for all students) Your responsibilities as a student include...
- attending classes and being punctual--especially for assessments!
- paying attention, taking notes, and asking questions about material you do not understand
- seeking help with material if you're having difficulty (e.g., meeting with me)
- doing the assigned readings and studying the course material

# **Class Distractions (f2f):**

Please be courteous to your fellow students (& instructor) by not creating distractions during the class period.

- <u>silence your phones</u> (phones should also be placed away from view altogether)
- refrain from "chatting" with other students during the class period
- If you use a lap-top computer, please ensure that you are utilizing it for the sole purpose of taking notes (don't be watching videos, playing games etc.)

# A note about student dissatisfaction with grades:

An unfortunate reality of any course is that not all students will obtain the final grade they desire. As an instructor of the course, my responsibility is to insure that evaluation procedures were fair. To a very large extent, this can be determined by how the class is performing overall. If your performance as a member of this class is substantially below the general class performance, then you cannot simply claim that the evaluation procedures were unfair. Some careful thought has to be given to what else might possibly be wrong, and how it might be changed.

To minimize any damage to your student records, it is important that you consult with me very early once difficulty arises (e.g., discuss this with me during an office hour.) Remain vigilant about your progress in the course. When students approach me late in the term claiming that they NEED a specified grade, what can I (the instructor) do for them? the answer will be disappointing. As long as the grading procedures were fair, YOU as a student are in control and responsible for your own grade. As an instructor, I must be fair and unbiased with the grading procedures, which includes sticking to the same procedures that applied to the entire class. Deviations on my part from the outlined procedures

for any single student amounts to cheating those students who were evaluated under the original scheme.

### **Topics covered:**

The following is a list of the topics that will be covered in this course. Although no dates are indicated below, we will progress through the topics in the order listed. Topics are not of equal length (i.e., the duration of time we devote to them.) **Please note that Topic # ≠ Chapter #.** Throughout the course I will often refer to the <u>topic</u> number as indicated below, so please don't confuse topic number with chapter number.

Topic #	Topic Title	Assigned Readings† [eReadings are indicated in square brackets]
1	History & Foundations	Chapter 1 [Shimamura, 2010; Satel & Lelienfeld, 2013]
2	Common Methods Used to Study Cognition	E-Chapter Supplement: Research in Cognition: Investigating Mind and Brain [Stanovich, 2010a; Stanovich 2010b] [Swami et al., 2014]
3	Perception & Consciousness	Chapter 2: pp. 45-61 (stop @ Perception and Action) [Pavani et al., 2000] Chapter 5: pp. 186-90 (stop @ Individual Differences) Chapter 2: pp. 68-81 [Wegner et al., 2004]
4	Attention & Working Memory	Chapter 3: pp. 83-86; 98 (start @ Attentional Blink)-109; 116 (start @ Automatic Processing)-127.  Chapter 4: pp. 129-151 (stop @ A Unitary View of Mem.); 159 (start @ Mind Wandering)-161 (stop @ Ironic Processes); 164 (start @ Improving Executive Function)-170 [Colom et al., 2003] [Shipstead et al., 2010]
5	Memory Processes & Knowledge Representation	Chapter 6 and Chapter 7 (Chapter 8 is optional) [Roediger & Karpicke, 2006] [Roediger & Marsh, 2005] [Pylyshyn, 2003]
6	Reasoning, Judgment & Decision Making	Chapter 11; Chapter 12: pp. 510 (start @ Algorithms)-511. [De Neys, 2006] [Evans, 2005]

**†IMPORTANT:** The above readings should **NOT** be viewed as the official assigned readings that you are responsible for and is presented here only as a useful guide for

you. Some of the above may be scaled back, removed and/or **additional readings may be added**. These modifications will always be announced.

# **Important dates:**

Last day 100% refund Sept 4 (5 pm)

Labor Day Recess Sept 6 - 7

Last day 75% refund Sept 25 (5 pm)

Fall Break Oct 25 - 27

Drop deadline with a grade of "**W**" Oct 30 (5pm)

Election Day Nov 3

Thanksgiving Recess Nov 25 - 29

Final Culminating Experience Tuesday Dec 15
Assignment/Activity 4:00 - 5:50pm

# Important:

Your continuation in this course indicates your acceptance of all the above scheduling and procedure details along with the acceptance that some modifications may have to be made in the event of extenuating circumstances.

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