PSY 365 – COGNITION GRAND VALLEY STATE UNIVERSITY

FALL, 2024

Section 01: TR 1:00pm-2:15pm 2310 Au Sable Hall Section 02: TR 2:30-3:45pm D1227 Mackinac Hall

INSTRUCTOR: Joel Quamme, Ph. D. OFFICE: 1311 Au Sable Hall PHONE: 616-331-2153

E-MAIL: <u>quammej@gvsu.edu</u> (This is the best way to get ahold of me)

OFFICE HOURS: TR 10:00am-11:30am

During office hours I can accommodate either in-person meetings or virtual meetings via zoom. If you want to meet outside of office hours, just send an

email and we can decide on a time that works for both of us.

REQUIRED MATERIALS:

MindTap through GVSU Save: Goldstein - MindTap Psychology, 1 term (6 months) Goldstein's Cognitive Psychology: Connecting Mind, Research, and Everyday Experience, 5th. ISBN 9781337408295.

We are using an electronic version of the above textbook provided through the Cengage MindTap platform. All students enrolled in this class are automatically given access through the GVSU Save program the first day of class.

To access MindTap, go to the Blackboard page and click on either the "GVSU Save" link or go to the Weekly folders, where you can find specific links to assigned material for each week.

In addition to the MindTap, students will need weekly access to the following:

- A high-speed internet connection
- Computer with sound card and speakers or headphones, and an operating system that meets current Blackboard browser requirements (Windows 8 or above; OS 10.12 or above)

PREREQUISITES:

Psychology 101 (Introduction to psychology) is a prerequisite for this course

COURSE DESCRIPTION

The purpose of this course is to provide a broad introduction to the scientific study of human cognition. Cognition refers generally to any kind of *information processing* that goes on in the mind, and includes all the various the mental processes that underlie our behavior. Cognitive psychologists study how people recognize patterns, pay attention, remember facts and events, represent knowledge about themselves and the world around them, use and understand language, reason, solve problems, and make decisions. Cognitive processes operate in every aspect of our lives whether we are aware of them or not – from searching the classified ads, to driving on a busy highway, to deciding which political candidate to vote for. In short, cognitive psychologists try to understand everything that happens in your mind between "input" and "output".

This course will emphasize the major theories and findings of empirical research into human information processing. We'll discuss the methods cognitive psychologists use to study mental processes, and we'll look at research results from a variety of studies on cognitive phenomena, including psychological experiments, neuroscientific studies of brain activity and the effects of brain damage, measurement of individual differences in performance, and computer modeling of cognitive systems. We'll explore the logic and evidence of basic cognitive mechanisms, and their application to human behavior and performance in real life.

Course Objectives:

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

- 1. Summarize important scientific 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.

GRADING

Grades will be computed based on your performance on 3 exams, CogLab assignments, and your participation in in-class activities according to the following breakdown:

Three exams: 55%

Ten CogLab Assignments: 20% Mindtap Quizzes and Activities 20%

In-Class Activities: 5%

Grading scale. The percentage of total credit you earn will be converted to letter grades according to the following scheme:

Α	100-94	A-	90-93	B+	87-89	В	83-86
B-	80-82	C+	77-79	C	73-76	C-	70-72
D+	67-69	D	60-66	F	59 or lower		

READINGS

You will be responsible for all textbook readings assigned through MindTap, which you should read before the first day of class during the week they are assigned. Additional article readings may be assigned and made available on blackboard. We'll discuss the readings in class and all assigned readings will also be fair game for exams.

EXAMS

There will be three <u>non-cumulative</u> exams, worth a total of 55% of the grade. The material tested on exams will come from the textbook readings, class lectures, discussions, and activities, CogLab assignments, and additional articles. The exams will require you to know some definitions, but the main focus will be on describing theories and models of cognitive processes, the design, procedure and results of cognitive experiments, explaining what these results tell us about how cognitive processes work, and applying principles of cognition to real-world contexts.

MINDTAP ASSIGNMENTS

Most weeks there will be material assigned on MindTap. This consists of reading assignments, Chapter quizzes, which test your learning of the material, and other interactive activities related to material in the text. These assignments can be accessed either through the GVSU save link to MindTap, or through links posted to Weekly Content folder. They will generally be due Sunday nights at 11:59 and will be made available at least one week prior to the due date.

COGLAB ASSIGNMENTS

Another 20% of the grade is based on completion of web-based laboratory assignments at the CogLab Online Laboratory, accessed through MindTap. These assignments are reproductions of classic experiments on cognition, and are designed to enrich your understanding of how research in cognitive science is conducted. In addition to completing the experiment, each coglab assignment will involve an additional quiz, set of questions to answer, or other activity to posted on blackboard. So to get full credit for a coglab, do the experiment first, then complete the blackboard assignment. There are 12 CogLab assignments scheduled, so you can skip two without penalty. As with MindTap assignments, the due date is Sunday night at 11:59pm. Check the schedule to see the due dates for each assignment. More details will be given about Coglab assignments in class.

IN-CLASS ASSIGNMENTS AND PARTICIPATION

The remaining 5% of your grade will be participation in in-class assignments. On some days, we will do short exercises, demonstrations, or other activities in class, and I will have you turn in something at the end as evidence of your participation (note: on the days we do this, I will *not* announce it ahead of time). Getting credit is an easy, 3-step process: (1) show up to class, (2) participate in the activity, and (3) turn in evidence of your participation at the end. Credit for participation can only be made up in the case of an excused absence in which you can provide documentation your absence was unavoidable (e.g., if you are quarantined)

EMERGENCY CLOSINGS

If for any reason the university cancels class on an exam day (e.g., severe weather), the exam will be moved to the next class meeting.

ELECTRONIC DEVICES

Please turn all cell phones, pagers and other electronic devices with audible signals or alarms OFF during class time.

ACCOMODATION FOR DISABILITY

Any student in this class who has need of accommodations because of a learning, physical, or other disability, please contact Student Accessibility Resources (SAR) at 331-2490. Furthermore, if you have a physical disability and think you will need assistance evacuating this classroom and/or building in an emergency situation, please make me aware so I can develop a plan to assist you.

CLASS SCHEDULE

The following schedule of topics for each day and, readings, and assignment dates is *tentative*, and may need to be modified later in the course. Any changes to the schedule will be announced in class and on blackboard. Readings will be announced in class and made available on blackboard or course reserve at least a week ahead of time. Exam dates will not change unless class is cancelled *on the date of the exam*.

Week	Date & Class Topic	Textbook Reading	Coglab Assignment			
1	T 8/27: & R 8/29: History & Perspectives on Cognition	Ch 1				
2	T 9/3 & R 9/5: Perception & Recognition	Ch. 3	Signal Detection			
3	T 9/10 & R 9/12: Attention	Ch. 4	Visual Search			
4	T 9/17 & R 9/19: Sensory, Short-term & Working Memory	Ch. 5	Phonological Similarity Effect			
5	T 9/24: Sensory, Short-term & Working Memory R 9/26: EXAM 1					
6	T 10/1 & R 10/3: Long Term Memory Organization	Ch. 6	Implicit Memory			
7	T: 10/8: Long Term Memory Organization R: 10/10: Long-Term Memory Processes	Ch. 7	Level of Processing			
8	T 10/15 & R10/17: Long-Term Memory Processes		Encoding Specificity			
	T 10/22: FALL BREAK					
9	R 10/24 Everyday Memory	Ch. 8	False Memory			
10	T 10/29 Everyday Memory R 10/31 EXAM 2					
11	T 11/5 & R 11/7: Visual Imagery	Ch. 10	Mental Rotation			
12	T 11/12 & 11/14: Categories & Concepts	Ch. 9	Prototypes			
13	T 11/19: Categories & Concepts R 11/21: Reasoning	Ch. 12	Lexical Decision			

14	T 11/26: Reasoning		Wason Selection			
	R 11/28: Thanksgiving Break					
15	T 12/3 & R 12/5: Judgment & Decision-Making		Risky Decisions			
Finals Week	ECTION 01: 12/10 Tuesday, 12:00pm-1:50pm ECTION 02: 12/12 Thursday, 2:00pm-3:50pm EXAM 3					