PSY 365 – COGNITION GRAND VALLEY STATE UNIVERSITY FALL, 2020

Section 01: Online, Asynchronous

INSTRUCTOR: Joel Quamme, Ph. D.

OFFICE HOURS: WF 1:00pm to 2:00pm, or by appointment (I will hold all meetings virtually via

Blackboard Collaborate Ultra)

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

PHONE: 616-331-2153

REQUIRED MATERIALS & EQUIPEMENT:

Textbook and Coglab Access Code Bundle: ISBN-13: 9781305241794

Reed, S. K. (2012). *Cognition: Theory and Applications*. (9th ed.). Francis & Neath (2012). CogLab 5: Instant Access, 5th ed.

You will need both the textbook and an access code for the Online CogLab. At the bookstore, the textbook and a new access code with printed lab manual should come bundled together.

If you choose to get the text elsewhere, you will need to purchase a new access code for CogLab separately. If you do this, be sure to purchase a new code -- do not buy a used code from anyone! You can purchase a new code online with a credit card (after payment, you will receive an email with the access code in it) from:

https://www.cengage.com/shop/isbn/9781285461083

The lab manual is free online at the following address once you have registered and logged in: https://coglab.cengage.com/help/resources/CLStudentManual2013.pdf

In addition to the CogLab access and the textbook, 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.

COURSE FORMAT:

This is an asynchronous online course, and will be administered online through GVSU's Blackboard system. We will have a weekly schedule of activities in which you will have reading assignments to complete, video lectures to view, as well as other assignments, exercises, and quizzes with deadlines at the end of the week. In this format, you will have some flexibility each week as to when you engage with the course materials. However, to succeed in this class will require a great deal of self-motivation and self-discipline and perseverance to stay on track. You will need to keep close track of the course schedule and complete assigned tasks in a timely manner once they are announced and made available. You will need to and stay on top of due dates to avoid missing deadlines for graded activities.

Blackboard system. You will use to use blackboard to access all elements of the course other than CogLab Experiments. Our course webpage on Blackboard will contain all important information about the course, including announcements, a calendar of all important dates, lecture videos, study objectives for each chapter, details of all graded assignments and activities, and grades. Blackboard will also be used to deliver exams, quizzes, and other assignment activities. Students will be responsible for all information provided on Blackboard, and it will be your responsibility to check our blackboard page regularly – you will likely need to check in to the Blackboard course page 4-5 times during the week in order to complete all course requirements. To Access Blackboard, go to https://mybb.gvsu.edu/ and enter your log in and password.

GRADING

Grades will be computed based on your performance on 3 exams, 12 online CogLab assignments, 2 written article assignments, your participation in in-class activities according to the following breakdown:

Six non-cumulative exams: 60%

Twelve online CogLab assignments: 20%

Other quizzes/assignments/discussion board activities: 20%

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

A	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		

EXAMS

There will be six <u>non-cumulative</u> exams, each worth 10% of your grade (for a total of 60%). The material tested on exams will come from assigned readings, lectures, CogLab assignments, and additional activities and discussions. 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.

Exams are generally scheduled for <u>Mondays</u> (with one exception – see the schedule below) and always cover the material from the last 2-3 weeks since the previous exam. Exams will be made available from 6:00am to 11:59pm on the day they are scheduled, and may involve multiple choice and short answer questions that will test your understanding of key concepts from the course. You can begin the test whenever you are ready within this time window. However, there will be a time limit once you start. These exams are "open book" so you will be able to refer to notes and other course materials. However, many questions on the exam will require you to apply information you have learned in novel ways, so you won't be able to simply look up all the answers (and you will likely run out of time if you try). Thus, you should be sure to prepare for all exams just as you would if it were not open book/notes.

Scheduling Conflicts and Emergencies. Re-scheduling or making up an exam will be allowed solely at my discretion. I will excuse a missed exam related to a university-sanctioned event, a personal illness, family emergency, or major religious holiday provided you (1) can give me advance notice of at least one week (if your absence is forseeable), or a timely explanation on your return (if the absence is unforeseeable), and (2) you can provide me with documentation from an appropriate faculty member, university administrator, physician, or clergy member. An unexcused absence from an exam will constitute a score of 0.

COGLAB ASSIGNMENTS

Another 20% of the grade is based on completion of twelve web-based laboratory assignments at the CogLab Online Laboratory (https://coglab.cengage.com/). These assignments are reproductions of classic experiments on cognition, and are designed to enrich your understanding of how research in cognitive science is conducted. Each assignment is worth 2% and involves (1) completing the lab, and then (2) taking a short, 5-question quiz about the lab on blackboard. You will also be responsible for understanding the design, methods, results, and theoretical implications of these experiments on exams. When you complete a coglab assignment, the time and date of completion of both the experiment and the quiz will be recorded automatically. There are 13 CogLab assignments scheduled, and you are permitted to skip one without penalty. You will need to complete both the CogLab experiment itself, and take the quiz by the due date to get credit. Each *Coglab assignment –both the experiment and the quiz—is due by midnight on the date assigned on the schedule.* In most cases, the date is Sunday night. Check the schedule to see the due dates for each assignment.

See the "Steps to Register for CogLab" section at the end of the syllabus for information on getting started.

OTHER QUIZZES, ASSIGNMENTS, & ACTIVITIES

The remaining 20% of your grade will be based on a variety of activities we will do throughout the semester. These may include quizzes on material from readings or lecture, short written assignments, or discussion board activities. In all cases, they will be administered within blackboard, and you will have at least a one-week time window in which to complete the activity. These cannot be made up, but I will allow you to skip at least two such activities without penalty.

ACCOMODATION FOR DISABILITY

Any student in this class who has special needs because of a learning, physical, or other disability, please contact me or Disability Support Resources (DSR) at 331-2490.

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. Exam dates and atypical due dates for Coglabs are indicated in **bold**.

Week	Dates	Topics	Reading	Coglab Assignments		
1	8/31-9/6	Course orientation, introduction, and perspectives	Reed, Ch. 1 (pp. 1-15)	Register for CogLab		
	9/7	M 9/7 LABOR DAY BREAK				
2	9/8-9/13	Information processing stages & pattern recognition, part 1	Reed, Ch. 2 (pp. 17-34)	#18: Partial Report (Due 9/13)		
3	9/14- 9/20	Pattern & object recognition, part 2 attention, part 1	Reed, Ch. 2 (pp. 34-42) Reed, Ch. 3 (pp. 44-57)	#7: Visual Search (Due 9/20)		
4	9/21- 9/27	M (9/21): EXAM 1 Attention, part 2; Short term & Working memory, part 1	Reed, Ch. 3 (pp. 57-70) Reed, Ch. 4 (pp. 72-77)	#13: Stroop (Due 9/27)		
5	9/28- 10/4	Short-term & Working Memory, part 2	Reed, Ch. 4 (pp. 78-96)	#26: Phonological Similarity (Due 10/4)		
6	10/5- 10/11	M (10/5): EXAM 2 Long Term Memory systems & Dissociations	Reed, Ch. 5 (pp. 97-124)	#31: Serial Position Effect (Due 10/11)		
7	10/12- 10/18	Long term memory encoding & retrieval processes, part 1	Reed, Ch. 6 (pp. 125-142)	#29: Levels of Processing (Due 10/18)		
8	10/19- 10/25	Long-term memory encoding & retrieval processes, part 2 F (10/23): EXAM 3	Reed, Ch. 6 (pp. 142-150)	#28: Encoding Specificity (Due FRIDAY 10/23)		
9	10/26- 11/1	Long term memory reliability and reconstruction	Schacter (1999) (on blackboard)	#33: False Memory (Due 11/1)		
10	11/2- 11/8	Visual Mental Imagery	Reed, Ch. 7 (pp. 151-178)	#38: Mental Rotation (Due 11/8)		
11	11/9- 11/15	M (11/9): EXAM 4 Concepts and Categories	Reed, Ch. 8 (pp. 179-204)	#48: Prototypes (Due 11/15)		

12	11/16- 11/22	Organization of Semantic Memory	Reed, Ch. 9 (pp. 205-235)	#42: Lexical Decision (Due 11/22)		
12	11/23- 11/24	M (11/23): EXAM 5				
13	11/25- 11/29	THANKSGIVING BREAK				
14	11/30- 12/6	Reasoning	Reed, Ch. 13 (pp. 319-327)	#54: Wason Selection (Due 12/6)		
15	12/7- 12/13	Judgment & Decision-Making	Reed, Ch. 14 (pp. 345-373)	#52: Risky Decisions (Due 12/13)		
Finals Week	12/14- 12/20	M (12/14): EXAM 6				

Steps to Register for CogLab:

- 1. Go to http://coglab.cengage.com/help/register.shtml
- 2. Fill in the form at the bottom of the page. You will need the following:

a) Group Name: CognitionFall2020

b) Group Password: mindware

- c) Your registration code. It may be on a sticker on the inside front cover of your CogLab Student Manual. It may have been bundled with your textbook on a postcard. Or, you may have purchased a registration code electronically (also called an e-Pin). Select "Start registration." It should be either 11 or 16 characters (both will work)
- 3. When you click on "Start Registration", your Web browser will connect with the CogLab server to verify your information. If the information is correct, a new window will appear. The first line, highlighted in yellow, is your User ID. You should write this down because you will need it to access CogLab. The second line is your registration code.
- 4. You will be asked to enter some more information:
 - The next two lines ask for your first name and your last (family) name.
 - Next, enter a password. You'll use this when you login. The password must be at least 8 characters long. It is best not to enter a password you use on other web sites.
 - The next line asks you to re-enter the password.
 - The next two lines ask for your email address and then confirmation of this address. This email address will be used if you forget your password.
 - Next, enter a security question and answer. Make sure to use a question that only you can answer correctly. Also, remember whether you use uppercase or lowercase letters in your answer: you'll need to enter your answer exactly the same if you forget your password.
 - If necessary, select your keyboard layout (for keyboard help, see http://coglab.cengage.com/info/keyboards.shtml).
 - Finally, decide if you want CogLab to remember you so that you don't need to login each time. If not, uncheck the box next to Remember Me.

After filling in all the text fields, click or tap on the Complete Registration button. Your CogLab account is now ready to go!

To Start Doing Experiments:

Point your Web browser to http://coglab.cengage.com and log in with your User ID and Password. Then Click on "LABS" at the top. Select the lab experiment that you want to perform by clicking on the link. Read the
Background and Instructions carefully, and scroll to the bottom to begin the experiment when ready. If you have logged in, you'll see a rectangle. Make sure that you can see the full area before you begin the lab.

Note: You need to read the instructions before you can complete the experiment!

At the end of the experiment, the browser window will load a summary of your data for the experiment. When you see this window, you are finished with the experiment.

If You Have Problems with CogLab:

Look under the HELP tab for frequently asked questions, password help, or to contact Tech Support.