

**PSY 365 – COGNITION  
GRAND VALLEY STATE UNIVERSITY  
FALL, 2019**

**Section 01: TR 8:30am – 9:45am, 2130 Au Sable Hall**

**INSTRUCTOR:** Joel Quamme, Ph. D.  
**OFFICE:** 1311 Au Sable Hall  
**PHONE:** 1-2153 (not recommended)  
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**OFFICE HOURS:** TR 10:00 am – 11:15 am, or by appointment

**REQUIRED MATERIALS:**

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

Reed, S. K. (2012). *Cognition: Theory and Applications*. (9<sup>th</sup> 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>

**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. Class periods will consist of lecture and discussions, class demonstrations and activities, and videos that demonstrate cognitive phenomena. We will use these activities to explore the logic and evidence of basic cognitive mechanisms, and their application to human behavior and performance in real life. Students will be evaluated according to their performance on exams, their completion of online lab assignments based on classic cognitive experiments, and participation in class activities.

### 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.

### READINGS

Students will be responsible for reading the assigned textbook chapter or article for each class topic by the day on which the topic is scheduled (see class schedule below). Additional article readings may be assigned some weeks and made available on blackboard. We'll discuss the readings in class. All assigned readings will also be fair game for exams. Thus, it is likely that **your grade will suffer if you do not keep up with the assigned reading.**

### 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:

**Three exams: 75%**

**Ten Online CogLab Assignments: 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:

A	100-94	A-	90-93	B+	87-89	B	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 three **non-cumulative** exams, each worth 25% of your grade (for a total of 75%). The material tested on exams will come from the lectures, textbook, CogLab assignments, additional articles, discussions and class activities. 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.

## COGLAB ASSIGNMENTS

Another 20% of the grade is based on completion of ten 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 12 CogLab assignments scheduled, so you can skip two without penalty. You will need to finish the CogLab Assignment by the day it is due to receive credit. Each **Coglab assignment –both the experiment and the quiz—is due by midnight on the date it is assigned on the schedule.** In most cases, the date is a Friday. 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.

## 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 **cannot be made up** if you miss the activity.

## 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 special needs because of a learning, physical, or other disability, please contact me or Disability Support Resources (DSR) 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. Any additional readings will be announced in class and posted blackboard 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	Reading	CogLab Assignments
1	T 8/27	Introduction and Orientation	Reed, Ch. 1	Register for CogLab!
	R 8/29	History & Perspectives on Cognition		
2	T 9/3	Pattern Recognition	Reed, Ch. 2	#18: Partial Report (due 9/6)
	R 9/5	Pattern Recognition		
3	T 9/10	Attention	Reed, Ch. 3	#7: Visual Search (due 9/13)
	R 9/12	Attention		
4	T 9/17	Short-term/Working Memory	Reed, Ch. 4	#26: Phonological Similarity Effect (due 9/20)
	R 9/19	Short-term/Working Memory		
5	T 9/24	Short-term/Working Memory		
	R 9/26	EXAM 1		
6	T 10/1	Long Term Memory	Reed, Ch. 5	#29: Levels of Processing (due 10/4)
	R 10/3	Long Term Memory		
7	T 10/8	Memory Codes	Reed, Ch. 6	#28: Encoding Specificity (due 10/11)
	R 10/10	Memory Codes		
8	T 10/15	Metamemory	Schacter (1999)	#35: Memory Judgment (due 10/18)
	R 10/17	Metamemory		
9	T 10/22	FALL BREAK		#38: Mental Rotation (due 10/25)
	R 10/24	Visual Imagery	Reed, Ch. 7	
10	T 10/29	Visual Imagery		
	R 10/31	EXAM 2		
11	T 11/5	Categorization	Reed, Ch. 8	#48: Prototypes (due 11/8)
	R 11/7	Categorization		
12	T 11/12	Semantic Organization	Reed, Ch. 9	#42: Lexical Decision (due 11/15)
	R 11/14	Semantic Organization		
13	T 11/19	Reasoning	Reed, Ch. 13 (pp. 320-7)	#54: Wason Selection (due 11/22)
	R 11/21	Reasoning		
14	T 11/26	Judgment & Decision-Making	Reed, Ch. 14	#51: Monty Hall (due 11/26)

	<b>R 11/28</b>	<b>Thanksgiving Break</b>		
15	T 12/3	Judgment & Decision-Making		#52: Risky Decisions (due 12/6)
	R 12/5	Judgment & Decision-Making		
<b>Finals Week</b>	<b>12/12 Thursday, 8:00am-9:50am</b>			<b>EXAM 3</b>

## 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: **CognitionFall2019**

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.