

# Midterm Preparation

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Department of Cognitive Sciences, UCI

Psych 9A / Psy Beh 11A

January 30, 2014

**Midterm: Tuesday, February 4, 2014, 8:00AM**

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The midterm will cover textbook material from Gleitman textbook Chapters 1, 2 and 3.

The midterm is worth 100 points.

Part A. Multiple Choice Questions

(35 questions x 2 points apiece for 70 points total)

Part B. Picture Labeling Questions

(30 points total)

Total Possible Midterm Score: 100 points

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Part C. Bonus Essay Question

(10 points)

Chapter 1. (Gleitman pp. 21-49), Research Methods

EEE powerpoint: Lecture011414.ppt

Chapter 2. (Gleitman pp. 51-83), Genetic & Evolutionary Roots of Behavior

EEE powerpoint: Lecture011614.ppt

Chapter 3. (Gleitman pp. 85-131), Brain and Nervous System

EEE powerpoints: Lecture012214.ppt

Lecture012314.ppt

Lecture012814.ppt

**Bring a scantron**

(pink, F-288-PAR-L)

**Bring some #2 pencils**

**Bring your photo ID card**

No books, notes, calculators or electronic devices.

No need for a blue book.

*Prepare well for the midterm. The underprepared student may find that there is not enough time to get through the whole exam. The ace student works quickly and accurately. It is possible for each and every student to get an A in this course.*

## Part A. Multiple Choice Questions

(35 questions x 2 points apiece = 70 points total)

The following examples are ***not*** questions on the midterm.  
They are ***very similar*** to questions on the midterm.

**CHOOSE THE *BEST* ANSWER.**

**READ ALL OF THE ANSWERS TO MAKE SURE THAT YOU DO NOT CHOOSE THE  
SECOND-BEST ANSWER.**

The value of the correlation coefficient found to describe the correlation between two variables is  $-0.9$ . Which of the following best describes the correlation?

- (a) The two variables have a strong positive correlation.
- (b) The two variables have a weak positive correlation.
- (c) The two variables are uncorrelated.
- (d) The two variables have a weak negative correlation.
- (e) The two variables have a strong negative correlation.

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Nicotine molecules mimic the neurotransmitters to which postsynaptic nicotinic acetylcholine receptors in the brain are sensitive and, in this manner, activate the receptors and enhance this system's effects. Which of the following is NOT TRUE?

- (a) Nicotine is an agonist.
- (b) Nicotine crosses the blood-brain barrier.
- (c) Nicotine is an alkaloid found in the nightshade family of plants.
- (d) Nicotine is an antagonist.



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Choose the best sentence completion.

A gene that directs the development of a particular characteristic even when the corresponding gene on the other \_\_\_\_\_ is a different \_\_\_\_\_ is \_\_\_\_\_, while a gene that directs the development of a particular characteristic only if the corresponding gene matches it is \_\_\_\_\_.

- (a) zygote.....proximate cause.....genotypic.....phenotypic
- (b) chromosome.....zygote.....phenotypic.....genotypic
- (c) allele.....chromosome.....recessive.....polychromatic
- (d) chromosome.....allele.....dominant.....recessive
- (e) allele.....chromosome.....genotypic.....phenotypic

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In a true experiment, the experimenter manipulates the \_\_\_\_\_ and measures the \_\_\_\_\_, while in a \_\_\_\_\_, the experimenter studies existing differences between human (or animal) subjects.

- (a) independent variable.....control variable.....double-blind design
- (b) control variable.....dependent variable.....observational study
- (c) dependent variable.....control variable.....valid design
- (d) independent variable.....dependent variable.....double-blind design
- (e) independent variable.....dependent variable.....quasi-experiment

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Which of the following is *NOT* a neurotransmitter naturally found in the mammalian nervous system?

- (a)serotonin
- (b)gamma-amino butyric acid
- (c)dopamine
- (d)lysergic acid
- (e)glutamate

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Fluent aphasia refers to cases in which a patient seems able to produce speech but does not understand what is said to them. Furthermore, those with fluent aphasia often speak freely and rapidly but convey very little. This condition is often associated with damage to which part of the brain?

- (a) hippocampus
- (b) Golgi apparatus
- (c) Wernicke's area
- (d) contralateral cortex
- (e) mamillary body



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**Referring not just to Chapter 3 of the textbook but also to the lecture powerpoints concerning Chapter 3,**

**Describe five different brain-imaging methods. Be neat and concise.** At least one of the give listed methods must be invasive. For each listed method,

- (a) give its *full name* in addition to its abbreviated name (if it has one)
- (b) give a very brief description of its *principle of operation* (how it works)
- (c) give a very brief description of the *kind of information it produces* (waveforms? pictures? etc.)
- (d) note whether it is *invasive or non-invasive*
- (e) give a very brief description of an *experiment* that has been performed or could be performed with the method.