

PSYC203 : Physiological Psychology Lab

General Information

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Course Code (CB01) :	PSYC203
Course Title (CB02) :	Physiological Psychology Lab
Department:	PSYCH
Proposal Start:	Fall 2025
TOP Code (CB03) :	(2001.00) Psychology, General
CIP Code:	(42.0101) Psychology, General.
SAM Code (CB09) :	Non-Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000532475
Curriculum Committee Approval Date:	11/27/2024
Board of Trustees Approval Date:	01/21/2025
Last Cyclical Review Date:	11/27/2024
Course Description and Course Note:	PSYC 203 is an introductory science laboratory course that surveys structure and function of the nervous system, neurological correlates of behavior, psychophysiological research methodology, and scientific research investigation. Students explore neuroanatomy, behavioral neuroscience, consciousness, emotion, stress, sensation and perception of vision, audition, touch, olfaction, and gustation.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none">Credit
Mode of Delivery:	<ul style="list-style-type: none">In-Person
Author:	No value
Course Family:	No value

Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none">Psychology
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Transferable to both UC and CSU

Transferability Status

Approved

IGETC Area

5C-Science Laboratory

Area

Science
Laboratory

Status

Approved

Approval Date

09/04/2012

Comparable Course

No Comparable Course defined.

CSU GE-Breadth Area

B3-Laboratory Activity

Area

Laboratory
Activity

Status

Approved

Approval Date

09/04/2012

Comparable Course

No Comparable Course defined.

Units and Hours

Summary

Minimum Credit Units (CB07)	1
Maximum Credit Units (CB06)	1
Total Course In-Class (Contact) Hours	54
Total Course Out-of-Class Hours	0
Total Student Learning Hours	54

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

 Variable Credit Course**Funding Agency Category (CB23)**

Not Applicable.

Cooperative Work Experience Education

 Status (CB10)**Weekly Student Hours**

	In Class	Out of Class
Lecture Hours	0	0
Laboratory Hours	3	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	0
Course In-Class (Contact) Hours	
Lecture	0
Laboratory	54
Studio	0
Total	54
Course Out-of-Class Hours	
Lecture	0
Laboratory	0
Studio	0
Total	0

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Prerequisites, Corequisites, Recommended Corequisites, and Recommended Preparation**Co-Requisite**

PSYC103 - Physiological Psychology (in-development)

(PSYCH 103 may be taken concurrently)

OR**Prerequisite**

PSYC103 - Physiological Psychology (in-development)

Objectives

- Define and use basic biological, physiological, and psychological terminology of the neurosciences.

- Differentiate among specialty areas within biological psychology and the related disciplines within the neurosciences and the types of research that characterize the biopsychological approach.
- Summarize the major issues in human evolution, genetics, and behavioral development that underlie the "biology of behavior."
- Generate and explicate concrete examples of invasive vs. noninvasive research methods and the general principles of research ethics for the study of animals and human beings, including the research safeguards and the peer-review process in science.
- Explain scientific approaches used in methodologies for the study of brain-behavior relationships.
- Explain the general anatomy and physiology of the nervous system and its relationship to behavior.
- Describe neural conduction and synaptic transmission.
- Discuss the role of the neuroendocrine system as it relates to behavior.
- Summarize examples of various brain-behavior relationships including ingestive behavior, motivation, sexual behavior, sleep, learning, memory, stress, drug dependence, and psychiatric disorders such as affective disorders and schizophrenia.

Entry Standards

Entry Standards	Description
No value	No value

Course Limitations

Cross Listed or Equivalent Course	Description
No value	No value

Specifications

Methods of Instruction	
Methods of Instruction	Lecture
Methods of Instruction	Laboratory
Methods of Instruction	Discussion
Methods of Instruction	Multimedia
Methods of Instruction	Collaborative Learning

Methods of Instruction	Demonstrations			
Methods of Instruction	Field Activities (Trips)			
Methods of Instruction	Guest Speakers			
Methods of Instruction	Presentations			
Out of Class Assignments				
<ul style="list-style-type: none"> • Homework assignment (e.g., diagram and label facial muscles recorded for electromyography) • Short papers or essays demonstrating application of concepts and critical thinking skills (e.g., written critique of a journal article's conclusions) • Research paper (e.g., final project report regarding student's experimental hypothesis, rationale, methods, results, and interpretation) • Individual projects (e.g., design experiment to compare levels of stress hormone) • Group project (e.g., present results on experiment regarding electrodermal activation) 				
Methods of Evaluation	Rationale			
Activity (answering journal prompt, group activity)	Answering journal prompt on class activities			
Exam/Quiz/Test	Practical examination			
Presentation (group or individual)	Oral presentation			
Exam/Quiz/Test	Examinations requiring demonstration of course exit standards			
Other	Peer review or critique of student work			
Evaluation	Instructor evaluation of in-class assignments			
Presentation (group or individual)	Instructor evaluation of in-class presentations			
Evaluation	Evaluation of technical skills			
Textbook Rationale				
No Value				
Textbooks				
Author	Title	Publisher	Date	ISBN
Pinel, John	Biopsychology	Pearson	2020	9780135710883
Other Instructional Materials (i.e. OER, handouts)				
No Value				

Learning Outcomes

Course Objectives

Apply procedures of psychophysiological research methods.

Test hypotheses regarding psychophysiological mechanisms that underlie behavior by designing experiments and evaluating the results.

Analyze the neurological correlates of behavior.

SLOs

Explain the structure and function of the nervous system.

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Communicate clearly, ethically, and creatively; listen actively and engage respectfully with others; consider situational, cultural, and personal contexts within or across multiple modes of communication.
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<i>SOC S</i> Social Sciences	Demonstrate critical thinking skills and a basic understanding of the complex interrelationships between human kind and the biophysical environment
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Assess and critically analyze procedures of psychophysiological research methods.

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
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Course Content

Lecture Content

No value

Laboratory/Studio Content

The Research Process (3 hours)

- Research articles and scientific journals
- Databases and literature searches
- Scientific writing and manuscript fundamentals

Scientific Method (3 hours)

- Research methods: descriptive vs. experimental studies
- Independent, dependent, and confounding variables
- Hypotheses testing
- Statistical inference

Anatomy and Physiology of the Nervous System (8 hours)

- Structure, function, and neurotransmitters of the nervous system
- Neural communication
- Neuropsychological assessment

Psychophysiological Techniques (10 hours)

- Electroencephalogram
- Event-related potentials
- Electro-oculogram
- Electromyogram and startle response
- Skin response
- Heart rate

Consciousness (6 hours)

- Sleep and wakefulness
- Psychophysiological correlates of states of consciousness

Emotion and Stress (6)

- The hormone system
- Autonomic nervous system

Sensation and Perception: Vision and Audition (2 hours)**Sensation and Perception: Touch, Olfaction, and Gustation (2 hours)****Learning and Memory (5 hours)**

- Brain structures and memory
- Biochemical mechanisms in memory
- Memory consolidation

Psychiatric Disorders (5 hours)

- Mood disorders
- Schizophrenia
- Anxiety disorders

Current Topics in Behavioral Neuroscience (4 hours)

- Neuroscience of decision-making
- Regeneration of neurons
- Infections as a cause of Alzheimer's

Total Hours: 54**Additional Information****Repeatability**

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Is it possible this course will have a material fee?

No Value

I have contacted my library liaison (<https://campusguides.glendale.edu/faculty/liasons>):

No Value

What term(s) will this course be offered?

No Value

Will any additional resources be needed for this course? (Click all that apply)

No Value

If additional resources are needed, add a brief description and cost in the box provided.

No Value

Resources

Did you contact your departmental library liaison?

No

If yes, who is your departmental library liaison?

No Value

Did you contact the DEIA liaison?

No

Were there any DEIA changes made to this outline?

No

If yes, in what areas were these changes made:

No Value

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value