



PSYC 109 - Biopsychology

1. Discipline

PSYC Psychology

2. Catalog Description

Prerequisite: PSYC 101 or PSYC 101H. This course introduces the scientific study of the biological bases of behavior and its fundamental role in the neurosciences. Physiological, hormonal, and neurochemical mechanisms, and brain-behavior relationships underlying the psychological phenomena of sensation, perception, regulatory processes, emotion, learning, memory, and psychological disorders will be addressed. The course also notes historical scientific contributions and current research principles for studying brain-behavior relationships and mental processes. Ethical standards for human and animal research are discussed in the context of both invasive and non-invasive experimental research. C-ID: PSY 150. CSU, UC.

3. Schedule Description

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4. Title 5 Category

- AA-T, AS-T (ADT)

CB22 Non-Credit Category

Y - Not Applicable, Credit course

5. Certificate and Degree Applicable

California State University (CSU) General Education (GE) Requirements - Certificate of Achievement (Active)
 Liberal Arts: Math/Science Emphasis (18594) - AA Associate of Arts (Active)
 Math/Science Major (4976) - AS Associate of Science (Active)
 Psychology - Associate of Arts for Transfer (AA-T, ADT) (Active)
 VVC General Education Graduation Requirements - AA Associate of Arts (Active)

6. Number of Units (Zero Units for non-credit courses)

3.00

7. Contact Hours per term

Hour Type	Units	Contact Hours (Total Semester Hours - Min)	Contact Hours (Total Semester Hours - Max)	Minimum Outside-Of-Class Hours	Minimum Outside-Of-Class Hours
Lecture Hours	3.0	48.0	54.0	96.0	144.0
Lab Hours	0.0	0.0	0.0	0.0	0.0
Field Work Hours	0.0	0.0	0.0	0.0	0.0
Total	3.0	48.0	54.0	96.0	144.0

9. TOP Code

2001.00 - Psychology, General

10. Special Topics

No

11. Grading

Letter Grade Only (For Credit Courses Only)

12. Repeatability

This course is repeatable No

0X - No Repeats Allowed

14. Requisites

Prerequisite PSYC 101
Prerequisite PSYC 101H or

15. Instructional Objectives

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

Requires Critical Thinking No

2. Differentiate among specialty areas within Biological Psychology and the related disciplines within the Neurosciences and the types of research that characterize the biopsychological approach.

Requires Critical Thinking Yes

3. Summarize the major issues in human evolution, genetics, and behavioral development that underlie the “biology of behavior.”

Requires Critical Thinking No

4. 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.

Requires Critical Thinking Yes

5. Explain scientific approaches used in methodologies for the study of brain-behavior relationships.

Requires Critical Thinking Yes

6. Explain the general anatomy and physiology of the nervous system and its relationship to behavior.

Requires Critical Thinking Yes

7. Describe neural conduction and synaptic transmission.

Requires Critical Thinking No

8. Discuss the role of the neuroendocrine system as it relates to behavior.

Requires Critical Thinking Yes

9. Exemplify with concrete examples various brain-behavior relationships including ingestive behavior, sexual behavior, sleep, learning, memory, stress, drug dependence, and psychiatric disorders such as affective disorders and schizophrenia.

Requires Critical Thinking Yes

16. Student Learning Outcomes

1. **Explain the relationships among the major structures and functions of the nervous system to observable behaviors.**

- **Communication:** Read and write analytically including evaluation, synthesis, and research; deliver focused and coherent presentations.
- **Creative, Critical and Analytical Thinking:** Apply procedures for sound reasoning in the exercise of judgment and decision making; demonstrate intellectual curiosity, academic integrity, and a respect for learning; solve problems through analysis, synthesis, evaluation and creativity; identify, evaluate and appropriate use of multiple sources of information. Utilize the principle of charity, by which alternative viewpoints and diverse voices and are represented accurately and considered fairly.
- **Information Competency:** Demonstrate information competency and critical thinking skills through their ability to effectively locate, retrieve, evaluate and utilize use library and information resources within the guidelines of academic standards to meet collegiate and personal information needs.
- **Health and Human Flourishing:** Synthesize educational aims into a holistic approach to the many facets of human flourishing; apply principles of physical, psychological and emotional health and fitness; demonstrate scholarly skills that support intellectual virtues for life-long learning; embrace concepts of fiscal responsibility; and define goals that extend beyond oneself.

2. **Identify neural and chemical effects of external factors on normal and abnormal nervous system functions and behaviors.**

- **Communication:** Read and write analytically including evaluation, synthesis, and research; deliver focused and coherent presentations.
- **Creative, Critical and Analytical Thinking:** Apply procedures for sound reasoning in the exercise of judgment and decision making; demonstrate intellectual curiosity, academic integrity, and a respect for learning; solve problems through analysis, synthesis, evaluation and creativity; identify, evaluate and appropriate use of multiple sources of information. Utilize the principle of charity, by which alternative viewpoints and diverse voices and are represented accurately and considered fairly.
- **Social and Personal Responsibility:** Evaluate the relationship between natural, social and economic systems and the significance of sustainability; demonstrate responsible attitudes toward justice with respect to cultural diversity, citizenship, personal contribution to local and international communities, and the effect of human actions on the environment.
- **Information Competency:** Demonstrate information competency and critical thinking skills through their ability to effectively locate, retrieve, evaluate and utilize use library and information resources within the guidelines of academic standards to meet collegiate and personal information needs.
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3. **Demonstrate knowledge of current research methods and assessments used on human and animal models to explore the human brain.**

- **Communication:** Read and write analytically including evaluation, synthesis, and research; deliver focused and coherent presentations.
- **Creative, Critical and Analytical Thinking:** Apply procedures for sound reasoning in the exercise of judgment and decision making; demonstrate intellectual curiosity, academic integrity, and a respect for learning; solve problems through analysis, synthesis, evaluation and creativity; identify, evaluate and appropriate use of multiple sources of information. Utilize the principle of charity, by which alternative viewpoints and diverse voices are represented accurately and considered fairly.
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17. Course Content

Biological Psychology as a Course of Study

Genes and Behavior and Human Evolution

Research Methods and Ethical Considerations of Biological

Psychology and Neuroscience

- Invasive vs Non-invasive
- Research Ethics Applied to Animals and Humans

The Nervous System:

- Anatomy
- Development and Plasticity
- Communication within the Nervous System

The Effects of Psychoactive Drugs

Mechanisms of Perception, Conscious Awareness, and Attention

Wakefulness and Sleep

Ingestive Behavior

Hormones, Sexual Development, and Sexual Behavior

Learning and Memory

Emotion and Stress**Biological Bases of Psychological Disorders, Including Affective Disorders and Schizophrenia**

19. Assignments**1. Required Reading Assignment****Sample**

Read the chapters and readings as assigned in the course syllabus. Review the questions at the end of each chapter to prepare for examinations.

2. Required Writing or Performance Assignment**Sample**

You will complete two journal article reviews of peer-reviewed biopsychological research. For each assignment, you will conduct a search of the literature using the Psychology and Biological databases at the Victor Valley College Library. Topics must relate to the 9 Course Objectives for PYSC 109. To complete a journal article successfully, you will:

1. Summarize the main issue or question that the research investigates.
2. Summarize how the article relates to previous knowledge from chapter, readings, videos or lectures from the course.
3. Outline the method(s) used.
4. Explain the results found.
5. Identify 3 follow-up questions raised by the results of the article.

3. Required Out of Class Assignment**Sample**

You will create a 2-5 minute video explaining a sub-topic chosen from the course outline. To successfully complete a video submission you will:

1. Define and explain essential terms related to the topic.
2. Explain and detail how the chosen topic functions.
3. Discuss the importance of this topic and how it relates to human behavior.

20. Methods of Instruction

- Web Enhanced-full classroom w/online components
- Lecture
- Distance Education
- Correspondence Education (JEI, Mail, Radio, Newspaper)

Other No

21. Methods of Evaluation

Methods of Evaluation

- Exams/Tests/Quizzes
- Written Assignments
- Oral Presentation
- Projects
- Group Projects
- Class Participation
- Class Work
- Home Work

Other No

22. Text and Other Materials

Course Manual

1. **Author(s)** Freberg, L.

Title Discovering Behavioral Neuroscience: An Introduction to Biological Psychology

Edition 5th

ISBN-13 9780357798232

Publisher Cengage

Year 2023

Or Equivalent No

2. **Author(s)** Garret, B., & Hough, G.

Title Brain & Behavior: An Introduction to Behavioral Neuroscience (e-text)

Edition 6th

ISBN-13 9781544373454

Publisher Sage

Year 2022

Or Equivalent No

3. **Author(s)** Pinel, J. P. J., & Barnes, S. J.

Title Biopsychology (e-text)

Edition 11th

ISBN-13 9780137588596

Publisher Pearson

Year 2021

Or Equivalent No

23. Correspondence Education Addendum

Does (or will) this course have a Correspondence Education component? Yes

Course Prefix PSYC

Course Number 109

Course Name Biopsychology

2. Describe how the Methods of Instruction will be modified and/or replaced in the correspondence course.

- Instructors will have at least one (1) touchpoint with their students for every 10 "in-class" hours as detailed in the Course Outline of Record (COR)
- A "touchpoint" is a dissemination of instructional materials
- For each "touchpoint", instructors will send the Inmate Education Instruction Coordinator instructional materials for dissemination at least one week in advance
- Instructional Materials will include lecture materials to cover course content and assignments/assessments to check for understanding
- The Inmate Education Instruction Coordinator produces printed versions of the instructional materials for distribution
- Instructional materials are distributed to the facilities housing the enrolled student-inmates within one week of receipt from the instructor
- The Inmate Education Instruction Coordinator collects completed coursework for each "touchpoint"
- For courses with only one touchpoint, an acceptable interval between distribution and collection will be determined by the instructor
- The Onsite Program Supervisor distributes and collects work by course section and student inmate
- OTHER:

Regarding "The Inmate Education Instruction Coordinator produces printed versions of the instructional materials for distribution":

Dr. Wes Wilson has indicated to us that student-inmates WILL have access to computers. Therefore, the instructional materials may also be provided in electronic formats on DVDs, CDs, or USB drives. We have attached a document titled "Correspondence Ed PSYC QandA 09.22.22_WW" as evidence that the program DOES allow student-inmates to use computers and that instructors may provide instructional materials on DVD, CD, or USB drive as necessary.

5. List any special texts, equipment, or supplies needed for this course or sections of this course being offered through correspondence education:

- Correspondence courses in the Inmate Education Program utilize a paper/pencil packet format in lieu of technology
- Instructional materials packets are created by instructors and delivered to and picked up from the Onsite Program Supervisor for each touchpoint in the course
- OTHER:

Students taking PSYC-109 MUST have access to technology, including computing resources with word processing software. It is also essential that student-inmates are allowed to access instructional materials on DVD, CD, or USB drive as necessary. Student-inmates may need to submit assignments using DVDs, CDs, or USB drives, too. We have attached a document titled "Correspondence Ed PSYC QandA 09.22.22_WW" as evidence that the program DOES allow student-inmates to use computers and that instructors may provide instructional materials on DVD, CD, or USB drive as necessary.

Technology, including Reprographics (please describe):

All instructors teaching for VVC should have equal access to technology, including Reprographics. Additionally, the Inmate Education Program should provide FREE envelopes, boxes, and postage to instructors so that they can carry out the duties of this position. The Psychology Department recruits and hires instructors who live locally as well as instructors who live outside of the area (more than 2 hours away by car). If an instructor is unable to utilize the resources on the VVC campus because they live too far away, adjustments will have to be made by the Inmate Education Program to enable the instructor to prepare and receive assignment packets. Instructor safety and privacy needs to be secured with access to a mailbox on the VVC campus. Instructors who live outside of the area may need alternatives to protect their safety and privacy.

Student Support Services (please describe):

Students should have access to library resources, counseling, tutoring services, and wellness services if needed.

24. Distance Education

Does (or will) this course have a DE component? Yes

Delivery Method(s) - Check all that apply

FULLY ONLINE (FO) (also known as "100% online") – Instruction involving regular and effective online interaction that takes place synchronously or asynchronously and is supported by online materials and activities delivered through the college's learning management system, and through the use of other required materials. All approved instructional contact hours are delivered through these online interactions. Fully online classes do not require in-person assessments or activities. If synchronous online activities are required, the schedule of classes indicates dates and times.

Yes

PARTIALLY ONLINE (PO) (also known "hybrid") – Instruction involving regular and effective online interaction for -any portion of the approved contact hours that takes place synchronously or asynchronously and is supported by materials and activities delivered in person and online through the college's learning management system, and through the use of other required materials. Any portion of a class that is delivered online must follow a separate approval process. The approved online portion must meet the regular and effective contact regulation. The schedule of classes indicates dates, times and locations of the required in-person components.

Yes

25. Library Resources

The Library has sufficient resources presently available to support this course. Yes

The Library resources are sufficient to offer this course but new materials should be added to improve and update the holdings in this subject area.

No

The Library's resources are not presently adequate to support the teaching of this course.

Accordingly, it is recommended that the items listed below be purchased prior to the first offering of this course.

No

26. Dates

Board of Trustees: 04/12/2023

Effective: 04/17/2023

State Approval: 04/17/2023

CC Approval: 03/07/2023

27. Proposed Start Date

Fall 2023

29. Need for Course

Required Title V update. This curriculum was last updated in Fall of 2014.

This revision closely follows the C-ID descriptor that was revised on December 2, 2014. See attachments.

30. Attached Files

Correspondence Ed PSYC QandA 09.22.22_WW.pdf (/Form/Course/_DownloadFile/7688/4415?fileId=1089)

C-ID PSY 150 Introduction to Biological Psychology - updated 12.02.14.pdf

(/Form/Course/_DownloadFile/7688/4415?fileId=1092)