CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Psychology 220 – Learning

3 hours lecture, 3 units

Catalog Description
Examination of the basic principles and research in animal and human learning.

Prerequisite
"C" grade or higher or "Pass" in PSYC C1000 (formerly PSY 120) or equivalent

Entrance Skills
Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:
1) Distinguishing Basic Psychological Terminology
    a. Identify terms used within psychology
    b. Distinguish sub-areas within psychology
    c. Identify different approaches
2) Apply Research
    a. Scientific method
    b. Identify basic types of research methods
    c. Delineate the different strengths and weaknesses of each method
    d. Apply research-based critical thinking
    e. Use and misuse of statistics
3) Use and Distinguish Basic Information of each Sub-Area
    a. Learning:
        1. Classical conditioning:
            (1) Basic Pavlovian procedures
            (2) Food aversions and emotional reactions
            (3) Generalization and extinction
        2. Operant conditioning:
            (1) Law of effect
            (2) Shaping
            (3) Reinforcement and punishment
            (4) Generalization and extinction
        3. Observation learning:
            (1) Social cognitive learning
            (2) Bandura cognitive learning model
    b. Motivation and emotion
        1. Drives, theory, needs and goals, aggression, love
        2. Motivation to change behavior
    c. Development: physical, cognitive and social development
    d. Social psychology: attitudes, interpersonal attraction, influence, compliance

Course Content
1) Data Collection in behavioral Research and the scientific approach to the study of behavior
2) A step-by-step process for evaluating claims or evidence
    a. Continuous measurements
    b. Discontinuous measurements

3) Graphical presentation of data
4) Principles of the use of statistical analysis in research (presented) at a conceptual, not mathematical, level
5) Theories of learning, especially comparing the respondent and operant paradigms
6) Respondent principles including acquisition, extinction, spontaneous recovery, generalization, discrimination, higher-order conditioning, sensitization, sensory pre-conditioning, inhibition, overshadowing, blocking, conditioned emotional response
7) Operant principles including positive and negative reinforcement, punishment, discrimination in stimulus control, shaping, fading, secondary or conditioned reinforcers and punishers, and schedules of reinforcement
8) Observational learning
9) Verbal learning
10) Cognitive learning including the roles of attention, language and memory
11) Applications of the psychology of learning to assess behaviors and produce an appropriate behavioral intervention
12) Applications of learning theory in multiple situations and types of subjects

Course Objectives
Students will be able to:
1) Compare and provide examples orally or in writing of reflex, fixed action patterns and inherited behavioral traits.
2) Identify habituation, sensitization, releaser and a sign stimulus from research articles.
3) Describe and define research methods in behavioral psychology and compare and apply their use in research.
4) Define and contrast in writing different classical conditioning paradigms.
5) Identify and describe the variables that affect the rate and strength of classical conditioning.
6) Identify examples of contingency and contiguity in classical conditioning and operant conditioning procedures through the writing of a task analysis.
7) Compare and contrast stimulus substitution theory and conditioned compensatory conditioned response theory.
8) Apply the principles of classical conditioning to aversion therapy and fear conditioning.
9) Describe, compare and employ the practice of operant procedures including positive and negative reinforcement and punishment.
10) Analyze real life situations and produce a written acquisition plan using operant procedures.
11) Produce methods of shaping behavior using chaining and successive approximation in written skills based acquisitions plan for behavior acquisition and behavioral reduction.
12) Define and contrast procedures and results of vicarious learning.
13) Identify and implement the modification of behavior based on continuous, partial and complex schedules of reinforcement.
14) Compare characteristics of generalization and discrimination processes.
15) Describe the procedures presented in class that are used to study the behavior of memory in naturalistic and clinical settings.
16) Describe and recognize examples of the biological limits of learning.

Method of Evaluation
A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.
1) Written assessments or direct observation that measure the student's ability to recognize, describe, explain, and provide examples of the patterns, processes, and relationships associated with classical and operant conditioning.

2) Written assignments or direct observation that demonstrate the student's ability to apply concepts of classical conditioning, operant conditioning, and vicarious learning to research and natural settings.
3) Group projects and discussion to produce conclusions based on behavioral data.

Special Materials Required of Student
None

Minimum Instructional Facilities
1) Smart classroom
2) Internet and Remote learning device

Method of Instruction
1) Lecture and discussion
2) Group discussion, cooperative learning exercises
3) Guest speakers (optional)
4) Individual and group projects, structured in-class exercises, demonstrations
5) Service experience working with animals or humans.

Out-of-Class Assignments
1) Essays
2) Online quizzes
3) Project based on application of course content
4) Supervised observations behavioral modification

Texts and References
1) Required (representative example): Chance, Paul. *Learning and Behavior*. 10th edition. Cengage Learning, 2022.
2) Supplemental: None

Student Learning Outcomes
Upon successful completion of this course, students will be able to:
1) Apply basic scientific methodology to the analysis of human and animal behavior and the interaction of environmental conditions associated with changes in behavior.
2) Identify the components of Classical conditioning from Pavlovian and modern perspectives and their implications in complex human behavior and interactions.
3) Analyze the contingencies between stimulus, response, and consequences to establish reinforcement and punishment effects on behavior through various schedules and presentation techniques.
4) Discuss the limitations of the study of learning including biological limitations, complex social stimuli and the cognitive processes involving memory and attention.