

# Bemidji State University

## PSY 4459: Psychophysiology and Perception

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

An in-depth introduction, including the topics of the nervous system, electrochemical and neurochemical bases of behavior, vision, audition, somatic and chemical senses, movement, emotion, and cognition.

Prerequisites: PSY 1100, PSY 3401, and PSY 3402, or consent of instructor.

### B. COURSE EFFECTIVE DATES: 08/25/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Physiological Psychology: Philosophical & Ethical Issues
2. Psychopharmacology
3. Methods & Strategies of Research
4. Introduction to Perception: Psychophysics
5. Signal Detection Theory
6. Vision: Receptors and Neural Processing
7. Visual Processing
8. Perceptual Constancy
9. Color Perception
10. Structure & Functions of Cells of the Nervous System
11. Perceiving Loudness & Auditory Scene Analysis
12. Perceiving Motion
13. Perceiving Objects
14. Space & Size Perception
15. The Auditory System, Sound, & Pitch Perception

**D. LEARNING OUTCOMES (General)**

1. be able to apply concepts and principles to relatively new situations
2. be able to integrate and critically evaluate information from a number of different areas.
3. be able to relate theory and data and effectively communicate ideas.
4. be able to to critically evaluate and analyze a problem.
5. gain appreciation of and critical concern for ethical issues in research and applications.
6. gain knowledge of data demonstrating and related to perception as an active, constructive process.
7. gain knowledge of research findings, concepts, and basic terminology.
8. understand the methodology in physiological and perceptual research.
9. understand the structure and function of the nervous system and the cells that make it up.
10. understand the ties between physiology and perceptual experience.

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted