## **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

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#### **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

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