**CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS**

# NEW COURSE PROPOSAL

PROGRAM AREA _____

1. **Catalog Description of the Course.** *[Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]*

BIOL 212. NEUROBIOLOGY AND COGNITIVE SCIENCE (3)
Three hours of lecture per week.
Prerequisite: BIOL 100 or BIOL 200 or BIOL 201 recommended
Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior.
Same as PSY 212
GenEd: B2, E

PSY 212. Neurobiology and Cognitive Science (3)
Three hours of lecture per week.
Prerequisite: BIOL 100 or BIOL 200 or BIOL 201 recommended
Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior.
Same as BIOL 212
GenEd: B2, E

2. **Mode of Instruction.**

| | **Units** | **Hours per Unit** | **Benchmark Enrollment** |
|---|---|---|---|
| Lecture | _____3___ | _____1___ | ____20____ |
| Seminar | _____ | _____ | _____ |
| Laboratory | _____ | _____ | _____ |
| Activity | _____ | _____ | _____ |

3. **Justification and Learning Objectives for the Course.** (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*

BIOL, PSY 212 is an elective course in biology and psychology and serves as a prerequisite for many advanced courses in psychology including PSY 300/301, 310,312, 313, 314, and 450. This course will explore the function of the nervous system with an emphasis on brain function.

Students who successfully complete this course will be able to:

- Describe the structure and function of cells that comprise the nervous system
- Explain chemical and electrical signaling in the nervous system
- Outline the sensory and motor systems
- Explain brain development and complex brain functions
- Generate a hypothesis from a set of observations and then suggest experiments to test the hypothesis

4. **Is this a General Education Course** **YES** **NO**
**If Yes, indicate GE category:**

| | |
|---|---|
| **A (English Language, Communication, Critical Thinking)** | |
| **B (Life Sciences)** | **X** |
| **C (Fine Arts, Literature, Languages & Cultures)** | |
| **D (Social Perspectives)** | |
| **E (Human Psychological and Physiological Perspectives)** | **X** |

**5. Course Content in Outline Form.** *[Be as brief as possible, but use as much space as necessary]*

Introduction to Neuroscience.
Cellular and Molecular Neuroscience.
Nervous System Development
Sensory Systems.
Motor Systems
Regulatory Systems
Behavioral and Cognitive Neuroscience

**6. References.** *[Provide 3 - 5 references on which this course is based and/or support it.]*


Bear, M., Connors, B. and Paradiso, M. Neuroscience: Exploring the Brain, 2nd edition. (2000). Lippincott Williams & Wilkins.

Zigmond, M.J., Bloom, F.E., Landis, S.C., Roberts, J.L. and Squire, L.R. Fundamental Neuroscience. (1998). Academic Press.

Nicholls, J.G., Martin, R.A., Wallace, B.G. and Fuchs, P.A. From Neuron to Brain, 4th edition. (2001). Sinauer.

Sobel, C. Cognitive Science, An Interdisciplinary Approach. (2001). McGraw-Hill.


**7. List Faculty Qualified to Teach This Course.**

Biology/psychology faculty

**8. Frequency.**
a. Projected semesters to be offered: Fall ____x_ Spring _____ Summer _____

**9. New Resources Required.**
a. Computer (data processing), audio visual, broadcasting needs, other equipment
b. Library needs
c. Facility/space needs

**10. Consultation.**
Attach consultation sheet from all program areas, Library, and others (if necessary)

**11.** If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

__Nancy Mozingo_____6 January 2003_____
Proposer of Course Date