INTRODUCTION TO BIOPSYCHOLOGY
PSYC370-01
TTh 11:00 - 12:15
Three (3) Semester Credit Hours

I. LOCATION INFORMATION:
INSTRUCTOR:
Dr. Thomas E. Van Cantfort
OFFICE: 212 Lauretta J. Taylor
PHONE: 672-1260
E-MAIL: tvancantfort@uncfsu.edu
WEB ADDRESS: http://faculty.uncfsu.edu/tvancantfort/

OFFICE HOURS:
W: 1:00 - 5:00 p.m.
TTh: 4:00 - 6:00 p.m.
By Appointment

II. COURSE DESCRIPTION:
A study of the structure and function of the nervous system relative to learning and to sensory-motor processes, with course discussions including reviews of contemporary research on such topics as biofeedback control, electrical stimulation of the brain, and bioelectric recording techniques.

III. REQUIRED TEXTBOOKS:

IV. COURSE OBJECTIVES:
The successful student is expected to master the following competencies:

1. Be able to explain the role that philosophy, biology and psychology played in the developmental of Biopsychology.
2. Be able to discuss neuroanatomy and neurophysiology.
3. Be able to describe the research methodology in Biopsychology.
4. Be able to discuss the role that the nervous system plays in sensory and perceptual processes.
5. Be able to explain the role that the peripheral nervous system plays in emotions.
6. Be able to explain the role the hormones and genetics play in the regulation of behavior.
7. Be able to describe the role that the central nervous system plays in cognitive processes such as learning and memory.
8. Be able to discuss the role that neuroanatomy and neurotransmitters play in psychological disorders.

V. STUDENT EVALUATION AND GRADING:

1. This class meets three (3) hours a week, you will need nine (9) hours a week to study for this class. The rule of thumb is that for each one hour in class you should spend three (3) hours outside of class studying.
Biopsychology is a challenging course and if you only put in a couple of hours per week studying for this class you are not likely to do well in the course.

2. There will be four (4) exams each worth fifty (50) points. Consult the syllabus for dates of these exams. There will also be weekly quizzes each worth ten (10) points. All quizzes and exams will be available in Blackboard.

3. Two (2) reaction papers are required. Each reaction paper is worth 25 points. These reaction papers will be a five (5) page paper in response to an article provided. The reaction paper must be typed using MS Word, in APA format and submitted electronically through Turnitin.com. See Course Information for an example of a reaction paper, how to submit your paper to Turnitin.com and the University’s policy on plagiarism.

4. There are NO make-ups for any missed quizzes or exams. The final grade will be based on three (3) of the best four (4) exams, the quizzes and the two (2) reaction papers. Therefore, you are allowed to miss one (1) exam or drop your lowest score. ALL STUDENTS MUST TAKE THE FINAL EXAM.

5. Missing two (2) exams is automatic failure.

6. The total points that can be earned in this class is 350. Final grades will be determined according to the following schedule:

   A ≥ 90% of highest total points earned
   B ≥ 80% and < 90% of highest total points earned
   C ≥ 70% and < 80% of highest total points earned
   D ≥ 60% and < 70% of highest total points earned
   F < 60% of highest total points earned

VI. COURSE OUTLINE:

   INTRODUCTION
   Aug.  21 Th.   Biological Psychology   Ch.  1, pp.  1 - 21
   Aug.  26 T.   Current Approaches       Ch.  1, pp.  21 - 27

   NERVOUS SYSTEM
   Aug.  28 Th.   Cell Structures          Ch.  2, pp.  33 - 43
   Sept.  2 T.    Nervous System           Ch.  2, pp.  43 - 67

   RESEARCH METHODS
   Sept.  4 Th.   Imaging Techniques       Ch.  1, pp.  13 - 21

   NEURAL SIGNALS
   Sept.  9 T.    Intraneuron Communication Ch.  4, pp.  110 - 114
Physiological Psychology

Sept. 11 Th. The Action Potential  Ch. 4, pp. 114 - 121
Sept. 16 T. Interneuron Communication  Ch. 4, pp. 121 - 128
Sept. 18 Th. TEST I
Sept. 23 T. Neurotransmitters  Ch. 4, pp. 128 - 141
Sept. 25 Th. Drugs and Behavior I  Ch. 5, pp. 147 - 154
Sept. 30 T. Drugs and Behavior II  Ch. 5, pp. 155 - 185

Hormones and Behavior

Oct. 2 Th. Endocrine Glands  Ch. 4, pp. 136 - 138
Oct. 7 T. How Hormones Work
Oct. 9 Th. FALL BREAK
Oct. 14 T. Hormones and Behavior

Sensations

Oct. 16 Th. Vision  Ch. 6, pp. 191 - 205
Oct. 21 T. The Eye  Ch. 6, pp. 205 - 218
Oct. 23 Th. The Visual Pathway  Ch. 6, pp. 218 - 222
Oct. 28 T. Hearing  Ch. 7, pp. 227 - 239
Oct. 30 Th. TEST II

Last Day to Withdraw from Classes

Nov. 4 T. Vestibular System  Ch. 7, pp. 240 - 252
Nov. 6 Th. Gustatory System  Ch. 7, pp. 253 - 257
Nov. 11 T. Olfaction  Ch. 7, pp. 257 - 261

Emotionality

Nov. 13 Th. Biological Basis of Emotions  Ch. 12, pp. 421 - 442
Nov. 18 T. Stress  Ch. 12, pp. 442 - 455
VI. TEACHING STRATEGIES:

This course is taught primarily by lectures and discussions with a library research component.

VII. BIBLIOGRAPHY:


