PHYSIOLOGICAL PSYCHOLOGY  
PSYC370-02  
TTh 9:30 - 10:45  
Three Credit Hours

I. LOCATION INFORMATION:
INSTRUCTOR:  
Dr. Thomas E. Van Cantfort  
OFFICE: 203 JKSA  
PHONE: 672-1260  
E-MAIL: tvancantfort@uncfsu.edu

OFFICE HOURS:  
MWF: 11:00 - 12:00 p.m.  
TTh: 11:00 - 12:30 p.m.  
W: 4:00 - 6:00 p.m.  
By Appointment

Web Address: http://faculty.uncfsu.edu/tvancantfort/

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 development of Physiological Psychology.
2. Be able to discuss neuroanatomy and neurophysiology.
3. Be able to describe the research methodology in Physiological Psychology.
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. There will be four (4) exams each worth 50 points. Consult the syllabus for dates of these exams.
2. 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.
If you only put in a couple of hours per week studying for this class you are not likely to do well.

3. Two (2) reaction papers are required. Each reaction paper is worth 25 points. These reaction papers will be a 2 - 3 page paper in response to a presentation given by one of the Psi Chi Scholarly Lecturer. The reaction paper must be typed and in APA format. A handout will be provided for writing the reaction paper.

4. There are NO make-ups for any missed exams. The final grade will be based on three (3) of the best four (4) exams 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 200. Final grades will be determined according to the following schedule:

\[
\begin{align*}
A & \geq 92\% \text{ of highest total points earned} \\
B & \geq 83\% \text{ and } < 91\% \text{ of highest total points earned} \\
C & \geq 73\% \text{ and } < 82\% \text{ of highest total points earned} \\
D & \geq 64\% \text{ and } < 72\% \text{ of highest total points earned} \\
F & < 63\% \text{ of highest total points earned}
\end{align*}
\]

VI. COURSE OUTLINE:

**INTRODUCTION**

<table>
<thead>
<tr>
<th>Jan. 8</th>
<th>Th.</th>
<th>Biological Psychology</th>
<th>Ch. 1, pp. 1 - 18</th>
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<tbody>
<tr>
<td>Jan. 13</td>
<td>T.</td>
<td>Contributions</td>
<td>Ch. 1, pp. 19 - 27</td>
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**NERVOUS SYSTEM**

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<tr>
<th>Jan. 15</th>
<th>Th.</th>
<th>Cell Structures</th>
<th>Ch. 2, pp. 28 - 39</th>
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<tbody>
<tr>
<td>Jan. 20</td>
<td>T.</td>
<td>Nervous System</td>
<td>Ch. 2, pp. 39 - 63</td>
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<td>Jan. 22</td>
<td>Th.</td>
<td>Imaging Techniques</td>
<td>Ch. 2, pp. 63 - 71</td>
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**RESEARCH METHODS**

**NEURAL SIGNALS**

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<tr>
<th>Jan. 27</th>
<th>T.</th>
<th>Intraneuron Communication</th>
<th>Ch. 4, pp. 94 - 100</th>
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<tr>
<td>Jan. 29</td>
<td>Th.</td>
<td>The Action Potential</td>
<td>Ch. 4, pp. 100 - 107</td>
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<td>Feb. 3</td>
<td>T.</td>
<td>Interneuron Communication</td>
<td>Ch. 4, pp. 107 - 115</td>
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<td>Feb. 5</td>
<td>Th.</td>
<td><strong>TEST I</strong></td>
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Feb. 10 T. Neurotransmitters  Ch. 4, pp. 115 - 120
Feb. 12 Th. Drugs and Behavior I  Ch. 5, pp. 130 - 137
Feb. 17 T. Drugs and Behavior II  Ch. 5, pp. 138 - 159

HORMONES AND BEHAVIOR
Feb. 19 Th. Endocrine Glands  Ch. 4, pp. 122 - 125
Feb. 24 T. How Hormones Work  Ch. 4, pp. 125 - 128
Feb. 26 Th. Hormones and Behavior

SENSATIONS
Mar. 2 T. Vision  Ch. 6, pp. 160 - 163
Mar. 4 Th. The Eye  Ch. 6, pp. 164 - 172
Mar. 9 T. SPRING BREAK
Mar. 11 Th. SPRING BREAK
Mar. 16 T. The Visual Pathway  Ch. 6, pp. 172 - 191

Mar. 18 Th. TEST II
LAST DAY TO WITHDRAW FROM CLASSES
Mar. 23 T. Hearing  Ch. 7, pp. 192 - 204
Mar. 25 Th. Vestibular System  Ch. 7, pp. 206 - 207
Mar. 30 T. Gustatory System  Ch. 7, pp. 217 - 220

Apr. 1 Th. Olfaction  Ch. 7, pp. 221 - 225

EMOTIONALITY
Apr. 6 T. Biological Basis of Emotions  Ch. 12, pp. 356 - 372
Apr. 8 Th. TEST III
Apr. 13 T. Stress  Ch. 12, pp. 373 - 383

THIRST & HUNGER
Apr. 15 Th. Fluid Regulation  Ch. 10, pp. 320 - 327
VI. TEACHING STRATEGIES:
This course is taught primarily by lectures and discussions with a library research component.

VII. BIBLIOGRAPHY:


