Psychology 207 Brain & Behavior Fall 2004 Instructor: Dr. Sharon Lewis Office: 214B Seney Hall, Tel 4-8374 Office Hours: Mon/Wed: 11:00-12:30,

Tues., Thurs.: 2:15 -3:15

These hours are subject to change. Other times

by appointment; anytime by LL



One ounce of good luck is better than a ton of brains.

Yugoslavian Proverb

His brains hang at the top of his fez.

Lebanese Proverb

I not only use all the brains I have, but all I can borrow.

Woodrow Wilson (1856-1924) US president, political scientist, educator "If brains were money, you'd need to take out a loan to buy a cup of coffee."

Shelley Long (1950-____) US actress Line from TV show "Cheers," 1980s.

To repeat what others have said, requires education; to challenge it, requires brains.

Mary Pettibone Poole "A Glass Eye at a Keyhole," 1938

Text: Kalat, J.W. (2000), <u>Biological Psychology</u> (7th edition)

Class Organization:

The class will meet 2 times a week. Although attendance is not required, the exams will include items based on information presented in class. In addition, I think you will find some of the material easier to understand if you both read about it in your text and hear it explained in class.

The final grade is based on four 100-pt. exams, and your choice of a presentation or research paper, worth 100 points, for a total of 500. A letter grade will be assigned to the total number of points accumulated during the semester. An A requires a minimum of 450 points, a B 400 points, a C 350 points, a D 300 points, and anything below 300 points is an F. If your total puts you a few (2-3) points below a higher grade, your attendance record will be taken into consideration when assigning a grade. Make-up tests (which are all essays) will be allowed only for officially excused absences. Please make sure you are familiar with the College's Honor Code.

The brain is a wonderful organ. It starts working when you get up in the morning, and doesn't stop until you get to the office.

Robert Frost (1874-1963) US poet

LearnLink:

Everyone is required to sign onto LearnLink within the first three weeks of the semester (i.e., by 9/15) and write a 1-2-paragraph essay reflecting your thoughts on

something that you have learned in this course. You may earn up to 5 extra credit points for writing additional essays on LearnLink.

Presentation/Research Paper:

In the first 2 weeks you will need to decide whether you would like to turn in a paper or make an oral presentation this semester. You need to turn in your decision in writing to me by **Wednesday**, **September 8**. Presentations will start sometime in late Nov./early Dec.

If you plan to give a presentation, use your texts or lecture notes to find a topic in biological psychology that interests you. Then use the library to find some recent (2001-2004) articles that tell you in detail what is happening in that area right now. The articles you select must come from scientific journals (e.g. JCPP, SCIENCE, J. of Abnormal Child Psychology, Neurology, Sleep Research, J. of Comparative Neurology, Brain, etc.). Try to be careful not to select articles that are so technical you cannot understand them. Your presentation to us should be a 10-minute, creative, informative, and critical summary of the topic you have chosen. Please make sure you talk to me about your presentation, as your information must go beyond what I cover in class.

By **Wednesday, October 6**, you should submit to me your topic and a list of the articles you plan to present. During the next two weeks we will work together to make sure your topic is appropriate and you have the right type and number of articles. By **Wednesday, October 20**, I should have a copy of all your articles as well as a description of your topic.

On **Wednesday, November 3,** you should hand in a typewritten outline of your presentation. As soon as I know how many people will be giving a presentation, I will make up a schedule and announce the dates.

If you choose to do a research paper instead of a presentation, you must submit a topic with a bibliography for my approval by **Wednesday**, **October 6**. The topic must be relevant to the field of biological psychology, your references must be current (2001-2004), and come from scientific journals (see above for examples). During the next two weeks, we will work together to ensure your topic is appropriate, your topic is narrow enough to write a cohesive paper, and that you have the correct type and number of articles. By **Wednesday**, **October 20**, you must turn in your approved, typewritten topic and bibliography. On **Wednesday**, **November 3**, you need to hand in a typewritten outline of your paper. The paper will be due at the time of the first scheduled oral presentation. It must be typed, in APA format, and should be between 5-10 pages long.

Goals

My goal for this course is to have you learn and understand the biological basis of learning, memory, sensations, perceptions, motivations, emotions, development, drug effects, and psychological disorders.

Course Outline

I. Aristotle taught that the brain exists merely to cool the blood and is not involved in the process of thinking. This is true only of certain persons.

Will Cuppy (1884-1949) US writer, critic

Chapter 1 - The Major Issues

Chapter 2 - Nerve Cells and Nerve Impulses

Chapter 3 – Communication Within the Body: Synapses and Hormones – pp 51-67,

Chapter 4 - Anatomy of the Nervous System

Chapter 5 - The Development and Plasticity of the Brain

No child on earth was ever meant to be ordinary, and you can see it in them, and they know it, too, but then the times get to them, and they wear out their brains learning what folks expect, and spend their strength trying to rise over those same folks.

Annie Dillard (1945-___) US author

Exam I – Monday, September 27

II. Chapter 3 - pp. 68-77 (Drugs)

Let schoolmasters puzzle their brain,/ With grammar, and nonsense, and learning,/ Good liquor, I stoutly maintain,/Gives genius a better discerning.

Oliver Goldsmith (1728-1774) Irish-British poet, dramatist, author

Chapter 6 - Vision

Chapter 7 - The Nonvisual Sensory Systems

Chapter 8 - Movement

Chapter 9 - Rhythms of Wakefulness and Sleep

Exam II - Monday, October 25

III. Chapter 10 - The Regulation of Internal Body States

Chapter 11 – Reproductive Behaviors

"Measuring Up: Why Women Are Not Inferior

To Men" - C. Tavris - On reserve in the library

Chapter 12 - Emotional Behaviors

There can be no knowledge without emotion. We may be aware of a truth, yet until we have felt its force, it is not ours. To the cognition of the brain must be added the experience of the soul.

Arnold Bennett (1867-1931) English novelist

The brain is not, and cannot be, the sole or complete organ of thought and feeling.

Antoinette Brown Blackwell (1825-1921) US abolitionist, feminist, clergy

Exam III - Monday, November 15

IV. I like nonsense -- it wakes up the brain cells. Fantasy is a necessary ingredient in living. It's a way of looking at life through the wrong end of a telescope... and that enables you to laugh at all of life's realities.

Dr. Seuss (1904-1991) US author, illustrator

Chapter 13 - The Biology of Learning and Memory

Chapter 14 - Lateralization and Language

Chapter 15 – Alcoholism, Mood Disorders, and Schizophrenia

Final Exam – Wednesday, December 15, 10:00 – 11:30