

PSY 2600 Psychobiology Course Description

Henry Heffner, Prof.

Introductory Blackboard Page

Read the Syllabus.

The test and exam dates are listed on the Home Page.

Practice quizzes and Hear & Spell tests are taken from any computer.

Exams are taken supervised in University Hall, Room 5000 in the Fall and Spring Terms. Summer term exams are not proctored and the time allowed for each exam is shortened.

Get the textbook and begin.

The first three chapters of the textbook are available online so that you can begin studying now (click on "Textbook" in the menu on the left).

The textbook for this course is: *A Concise Guide to Psychobiology*. It is available from both the UT Bookstore and the Rocket Bookstore on Bancroft.

Syllabus

Psychobiology

PSYC 2600-901

Psychology

This course provides a basic introduction to psychobiology. It uses a textbook designed for college sophomores. Students take practice quizzes on each of the 20 chapters. Grades are based on 7 exams of approximately 18-30 questions each, as well as "Hear & Spell" tests for each chapter. Students are allowed to retake one exam at the end of the term.

Recommended Prerequisite: PSYC 1010 Introductory Psychology

Course Goals

The purpose of this course is give you a basic understanding of the neurological basis of behavior so that you can 1) better understand magazine and newspaper articles about the brain, 2) be prepared for advanced courses in neuroscience, and 3) have some knowledge of the neurological disorders that you may encounter during your lifetime.

Instructor Information

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B.A., Trinity College, Psychology; M.S., Florida State University, Psychology; Ph.D., Florida State University, Psychobiology.

Field of Interest: Role of auditory cortex; Comparative study of hearing; Tinnitus; Ethics of animals research.

For more about me go to: <http://psychology.utoledo.edu/showpage.asp?name=hheffner>

Textbook

A Concise Guide to Psychobiology . (Available from the UT Student bookstore and the Rocket Bookstore on Bancroft.)

Policies

Attendance consists of taking quizzes and exams on time. These policies and procedures will be followed as closely as possible, but are subject to change.

Course Requirements

Your grade for the course is based on seven exams, each covering two-three chapters. You will be allowed to retake one exam at the end of the course. The grade you receive on the retake will be the final grade for that exam, even if it is lower than your first score. (Note that the retake is optional and that you have to let me know which exam you want to retake.)

The grading scale is:

90% & above = A,

88-89.99% = A-,

86-87.99% = B+,

80-85.99% = B,

78-79.99% = B-,

76-77.99% = C+,

70-75.99% = C,

68-69.99% = C-,

66-67.99% = D+,

60-65.99% = D,

58-59.99% = D-,

below 58% = F.

Topics Covered

Chapter 1

Introduction to Neuroscience

Introduction

What is Neuroscience?

History of Neuroscience

Who are Neuroscientists

Chapter 2

Brief Introduction to Neuroanatomy

Introduction to the Nervous System

Commissures

Chapter 11
Chemical Senses: Taste, Olfaction, and the Vomeronasal Organ

Introduction
Taste (Gustation)
Olfaction (Sense of Smell)
Vomeronasal Organ
Cranial Nerves

Chapter 12
Somatosensory System

Introduction
Discriminative Touch
Thermal Sensitivity
Pain (Nociception)
Kinesthesia
Somatosensory System Anatomy
Vibrissae Sense

Chapter 13
Control of Movement

Introduction
Muscles and Motor Nerves
Spinal Reflexes
Control of Movement by the Brain

Chapter 14
Regulating the Internal Environment

Introduction
The Autonomic Nervous System
Neural Regulation of the Autonomic Nervous System
Eating and Appetite

Chapter 15
Biological Rhythms Including Sleep

Introduction
Biological Rhythms
Neural Control of Biological Rhythms
Sleep
Sleep Disorders

Chapter 16
Emotion and Stress

Introduction
The Study of Emotion
Central Nervous System Circuits
Prefrontal Cortex

Aggression
Reward Centers in the Brain
Stress

Chapter 17
Brain Mechanisms in Learning

Introduction
Habituation and Sensitization
Classical Conditioning
Operant Conditioning
The Medial Temporal Lobe and Memory
Other Human Memory Disorders
Long-Term Potentiation

Chapter 18
Language and Consciousness

Introduction
Animal Communication
Cortical Speech Areas
Lateralization of the Speech Areas
The Split-Brain
Consciousness

Chapter 19
The Malfunctioning Mind

Introduction
Psychiatric Conditions with Known Organic Causes
Schizophrenia
Environmental Considerations in Mental Illness

Chapter 20
The Symbiotic Nature of Animal Research

Introduction
Symbiosis
Domestication
How Humans Benefit from Their Mutualistic Relationship with Animals
How Animals Benefit from Their Mutualistic Relationship with Humans
Philosophical Issues