THE BIOLOGICAL BASES OF BEHAVIOR

* D.S.A.T.'s (neuron mnemonic); myelin sheath

* Resting state/resting potential
* firing threshold
* all-or-none law
* refractory period
* reuptake
* action potential

* excitation vs. inhibition
* agonists and antagonists

* mirror neurons
* afferent/sensory neurons
* inter-neurons
* efferent/motor neurons

* glutamate
* G.A.B.A.

THE NEURAL CHAIN

* the reflex arc
* glial cells

* substance p
* endorphins
* epinephrine/ norepinephrine
* acetylcholine
* serotonin
* dopamine

* the toilet analogy
* the lock and key analogy

* brain plasticity; LTP; neurogenesis

* Case study: Phineas Gage

The C.N.S.:
* the cerebral cortex
* the 4 lobes of the cortex (FPOT)
  - somatosensory, motor
* the medulla and reticular formation
* the cerebellum

The P.N.S.:
* the somatic system
* the autonomic system:
  - sympathetic
  - parasympathetic

THE NERVOUS SYSTEM

* the thalamus
* the hypothalamus
* the amygdala
* the hippocampus

* Split Brain research
  - corpus callosum

* Brain Lateralization

* Broca's and Wernicke's Areas

* EEG; CAT; MRI; fMRI; PET

* What is it?
* How does it function?

* the pituitary gland (note: oxytocin)
* the pineal gland (note melatonin)
* the thyroid gland (note: thyroxin)

THE ENDOCRINE SYSTEM

* the adrenals (note: adrenaline/epinephrine)
* the pancreas (note: insulin)
* the ovaries and testes (note: estrogen and testosteron)

* Genetic Determinism vs. Genetic Predisposition
* Twin Studies

* genotype
* phenotype

* epigenetics

GENETICS

Genetic Abnormalities:
- Down Syndrome
- Turner Syndrome
- Williams Syndrome
- Phenylketonuria (PKU)

For Discussion:
* genetics and body weight?
* genetics and alcoholism?
* genetics and schizophrenia?