Psychology 1000 Study Guide Exam 1

Format: 96 points. Multiple Choice. Exam is during regular class time. Please memorize your student number.

Text Material Covered on Exam
Chap 1: You are responsible for all material, even if not covered in class.
Focus on the topics below:
- What is Psychological Science; What to Believe
- Scientific Foundations: Mind/Body problem; Nature/nurture debate; Evolution & psychology
- Schools of Psychology: Be able to identify the concepts of major schools (e.g. behaviorism; functionalism; cognitive psychology; gestalt) and to identify the psychologist associated with each (e.g., Watson; James; Freud; Wundt)

Chap 2: Again, you are responsible for all material in this chapter. Most was also covered in class.
Topics covered include
- Scientific Inquiry (scientific method, theory, goals, etc)
- Types of Designs (descriptive, correlational, & experimental); Know pros & cons of each method
- Data Collection Methods (observational; case studies, self-report; correlational; experiments; quasi-experiments)
- Ethical Issues with research (informed consent; privacy; deception; etc)
- Data Analysis and Evaluation (internal vs. external validity; correlations; inferential statistics; descriptive statistics)

Chap 3: Focus on material from 81-91; 101-113, especially material we also covered in class.
Focus on the topics below.
- Basic Brain structures & functions (Any brain structure not also covered in class will NOT be on Exam)
Techniques to study brain function: case study; EEG; PET; MRI; fMRI; TMS (NOTE: We did not cover techniques in class, but questions will be on exam)
- Behavioral Genetics (genotype vs phenotype; behavioral genetics methods)
- Gender differences
- Plasticity: (phantom limb; taxi drivers; radical hemispherectomy)
Neurons; Action Potential, Endocrine system will NOT be on Exam

Lecture Material: Be able to define or identify the terms listed below
I. Thinking like a psychologist
- Scientific Thinking vs, Motivated Reasoning; definition critical thinking
- Co-incidence
- Heuristics: Definition and examples of recall heuristics; confirmation heuristics; availability heuristics; gambler’s fallacy

II. Scientific Method and Research Designs
- Scientific Method: definition of Theory, Hypothesis, Research; -Steps in Scientific Method: Darwin & Natural Selection Example
- Characteristics of a good theory: falsifiable, parsimonious, testable hypotheses; Characteristics of a “true” theory
- Goals of Psychology: describe, explain, predict, control; which research designs are appropriate for each goal
- Types of Psychological Research Designs (know pros & cons of each type):
  - Descriptive Studies:
    - case study
    - naturalistic vs. participant observation: reactivity; observer bias; ethical concerns
    - self-report measures: potential barriers to accuracy
  - Correlational Studies: positive vs. negative correlations; problems (directionality; third variable); correlation co-efficient; why design is useful
  - Experimental Designs: independent, dependent, and confounding variables; experimental vs. control group; random assignment vs. random sampling; confounding variable; selection bias; observer bias & how to prevent it
  - Quasi-Experimental studies: why are they used; problems
  - Inferential statistics: what does statistically significant mean?

III. Brain & Behavior
Structures of the Brain: Cerebral Hemispheres; Brainstem: Corpus Callosum; cortex
- Cortex: Gyri vs. Sulci; Lobes and their Function: Frontal; Parietal; Temporal; Occipital
- Know individual case studies like Phineas Gage, Broca’s area; Wernicke’s area; neglect, phantom limb; Blindsight; Alexia
- Phrenology: definition & problems
- Genetic Basis (genotype vs phenotype; behavioral genetics methods; twin vs. adoption studies; three laws of behavioral genetics)
- Plasticity: (gender differences; phantom limb; radical hemispherectomy; neurogenesis)

Assigned Video: Prisoners of Silence