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 Studies (descriptive, correlational, & experimental)
   -Data Collection Methods (observational; case studies, etc. Know Hawthorne effect; Experimenter Expectancy Effect; self-report bias)
   -Ethical Issues with research (informed consent; privacy; deception; etc)
   -Data Analysis and Evaluation (internal vs. external validity; correlations; inferential statistics)

Chap 3: Focus on material from 89-126, 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)
   -Genetic Basis (genotype vs phenotype; behavioral genetics methods)
   -Gender differences
   -Plasticity: (phantom limb; taxi drivers; radical hemispherectomy)

Lecture Material: Be able to define or identify the terms listed below
   I. Thinking like a psychologist
      - Scientific Thinking vs, Motivated Reasoning
      -Co-inci-dence
      -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: potentials 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
- Techniques: case study; correlational techniques (EEG recording techniques; intracranial recording; imaging techniques); Experimental brain activation-inactivation techniques (intracranial stimulation; TMS; optogenetics)
- 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)