Psychology 1000 Study Guide Exam 1

**Format:** 40 questions, 3 pts each. 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. Make sure you know bold-faced terms defined on the margins.

*Topics covered include:*
- What is Psychological Science; What to Believe
- Scientific Foundations: Mind/Body problem; Nature/nurture debate
- Schools of Psychology (Be able to identify Psychologist with school and to identify the important concepts of each school)
- Latest Developments- brain chemistry, etc; Levels of analysis; Subfields

**Chap 2:** Again, you are responsible for all material in this chapter. Most was also covered in class. Make sure you know the bold-faced terms on the margins

*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; self-report bias)
- Ethical Issues with research (informed consent; privacy; etc)
- Data Analysis and Evaluation (internal vs. external validity; correlations; inferential statistics) descriptive statistics

**Chap 3:** Focus on material from 89-126, especially material we also covered in class.

*Topics Covered Include*
- 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; Caspi study, etc)
- Plasticity: (gender differences; phantom limb; radical hemispherectomy)

*Material not covered in class that may be on test includes:*
- Parts of a neuron and their function
- Electrical signaling: Resting membrane & Action Potential- general definitions
- Chemical signaling: Neurotransmitters

**Lecture Material:** Be able to define or identify the terms listed below

1. **Thinking like a psychologist**
   - Hallmarks of Scientific Thinking
   - Co-incidence
   - Biases: Definitions and examples of selective recall; confirmation bias; affect bias; availability bias; gambler’s fallacy
   - Facilitated Communication Video Example

2. **Evaluating “Evidence”**
   - Scientific Method: Theory, Hypothesis, Research
   - Characteristics of a good theory: falsifiable, parsimonious, etc.; Characteristics of a “true” theory
   - Goals of Psychology: describe, explain, predict, control
   - Steps in Scientific Method
   - Types of Psychological Research Designs (know pros & cons of each type ); Variables
   - Descriptive Studies: case study; naturalistic vs. participant; longitudinal vs cross-sectional; self-report; reactivity; observer bias
   - Correlational Studies: positive vs. negative correlations; problems (directionality; third variable); uses
- Experimental Designs: independent, dependent, and confounding variables; experimental vs. control group; random assignment vs. random sampling; confound; experimenter expectancy effect (Rosenthal experiment) & how to prevent it; Non-specific response to intervention (Hawthorne Effect)
- Quasi-Experimental Designs: when used; problems

III. Brain & Behavior
- Structures of the Brain: Cerebral Hemispheres; Brainstem: Corpus Callosum;
- Cortex: Gyri vs. Sulci; Lobes and their Function: Frontal; Parietal; Temporal; Occipital
- Techniques: case study; Brain-Body methods (polygraph; EEG recording techniques; intracranial recording; imaging techniques); Brain activation-inactivation techniques (intracranial stimulation; TMS)
- 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; Caspi study; twin vs. adoption studies)
- Plasticity: (gender differences; phantom limb; radical hemispherectomy; neurogenesis)
- Behavioral Genetics: Twin Studies; genotype vs. phenotype