Review Exam 2

**Format:** 48 questions, 2 pts each. Multiple Choice
Exam given in class on Oct 30

**Text Material:**

**Chap 3:** p 92-96
-Split brain studies- methodology; basic results for left vs. right brain specializations; interpreter

**Chap 4:** You are responsible for material from 121-142. Focus on bold-faced terms
*Topics Covered Include*
-What is consciousness: definitions; variations; brain activity; influence of unconscious processing (the interpreter)
-What is Sleep; Definitions; Stages of sleep, and brain waves; Sleep as Adaptive Behavior; Sleep deprivation; Functions of Dreams; Sleep Disorders
- **NOT COVERED on Exam:** Drugs and Consciousness; Hypnosis; Meditation; Flow

**Chapter 6:** You are responsible for all material from pages 207-217; 221-244
Topics covered include: habituation; sensitization; classical conditioning; phobias and their treatment; classical conditioning & drug addictions; conditioned taste aversion; operant conditioning; schedules of reinforcement; observational learning; vicarious learning, reinforcement & punishment; observational learning of fear: Mineka monkey studies; treatment for observationally learned phobia,
- **NOT COVERED on Exam:** p 218-220 (expectancy and prediction; role of dopamine)

**Chap 7:** You are responsible for material which covers H.M (p249-256), retrograde vs. anterograde amnesia(p276); different types of Long-term Memory; explicit vs. implicit, p270-273; anatomy of memory; p254 (Figure 7.6; types of memory associated with frontal lobe; hippocampus; amygdala; cerebellum); memory distortions /eyewitness testimony(p277- 284). Focus on bold-faced terms.

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

**I. Consciousness**
-Definition
-subjective experience
-link with brain activity
-Limits on consciousness: inattentinal blindness; change blindness
-controlled vs. automatic tasks
-extreme states: know symptoms and brain activity linked with: persistent vegetative; minimally conscious states; Locked-in Syndrome; Brain Death
-Determining Consciousness: brain imaging as way to determine existence of consciousness
-Results of studies with coma patients

**From Video: Split-Brain Studies**
-basic split-brain anatomy; testing procedure and results
-left vs. right hemisphere specializations; results from study with faces made of books
-the interpreter: definition; basic results with Joe
II. Sleep

Definitions
-3 Behavioral criteria
-Brain EEG patterns associated with each stage; physiological changes with each stage

Individual Variations
- amount of sleep needed vs amount gotten
-long vs. short sleepers: genetic influences
-brain activity in sleep deprived individuals

Effects of Sleep Deprivation
- emotional consequences
- cognitive consequences
- health consequences
- effects on decision-making
- sleep debt
- microsleeps

Longer Term Sleep and REM Deprivation Studies:
- Flowerpot Technique
- REM Rebound; REM Pressure
- Peter Tripp vs. Randy Gardner
- Familial Autosomnal Insomnia
- Consequences of Short-term vs. Long-term deprivation

Functions of Sleep
-Glymphatic channels during sleep
-Facilitation of Learning: Non-REM vs. REM tasks/types of learning

Dreams
- REM vs. Non-REM dreams: characteristics & changes in brain activity associated with each

Theories of Dreams
- Freud: Manifest vs. Latent content; evidence?
- Evolved Threat Rehearsal: theory and evidence?
- Activation- synthesis: theory and evidence?

Sleep Disorders: know symptoms and stage of sleep in which they occur
- Insomnia
- Hypersomnia
- Somnambulism: Case of Mr. A and sleepwalking violence
- Sleep Apnea
- Narcolepsy: cataplexy; sleep attacks
- REM Behavior Disorder

III. Learning

Definition

Non-Associative

- Habituation
- Sensitization
Classical Conditioning

- Pavlov's Famous Experiment and terms
- Be able to define and identify: UCS and UCR; CS and CR
- Acquisition; Generalization; Discrimination
- Extinction and Spontaneous Recovery

Applying Pavlovian Conditioning

- Conditioned Taste Aversion
- Development of Phobias: John Watson & Little Albert
- Fear conditioning
- Treatments for Phobias: exposure therapy
- Drug addiction and classical conditioning: conditioned cravings; treatment; conditioned tolerance; implications for drug overdose

Operant Conditioning

- Positive vs. Negative Reinforcement: definitions and examples
- Positive vs. Negative Punishment: definitions & examples
- Schedules of Reinforcement: FI, FR, VI, VR - how they affect behavior

Observational Learning

- Bandura & Bobo Doll: methods and results
- Consequences of model's behavior: Vicarious reinforcement and vicarious punishment

Applications of Observational Behavior

- Media and violence: what is the relationship?
- Can we really develop skills just by observing others?
- Mineka monkey studies on phobias; observational treatment for phobias

IV. Memory

Types of Long Term Memory

- H.M & Clive Wearing case studies; know symptoms; what part of brain responsible for memory problems; what types of memory they both retained
- Anterograde vs. retrograde amnesia
- Highly Superior Autobiographical Memory: characteristics, brain differences

Distortions of Memory

- Memory bias
  - Flashbulb Memories
- Suggestibility and Misinformation:
  - Loftus Experiments - suggestibility and memory distortions
  - Implications for Eyewitness Testimony: confidence vs. Accuracy; reasons for errors; how to improve