Review Exam 2

**Format:** 48 questions, 2 pts each. Multiple Choice
Exam given in class on April 3

**Text Material:**

**Chap 3:** p 100-103
-Split brain studies- methodology; basic results for left vs. right brain specializations; 
interpreter

**Chap 4:** You are responsible for material from 131-154. 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 221-250; 254-259
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 231-234 (expectancy and prediction)

**Chap 7:** You are responsible for material which covers H.M (p266-267), retrograde vs. 
anterograde amnesia(p292); different types of Long-term Memory (p285-288; explicit vs. 
implicit), anatomy of memory ( Figure 7.4; types of memory associated with frontal lobe; 
hippocampus; amygdala; cerebellum); memory distortions (p295-303). 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: inattentional 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 Autosomal 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