Review Exam 2

**Format:** 48 questions, 2 pts each. Multiple Choice
Exam given in class on Oct 26

**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; drug addictions; operant conditioning; schedules of reinforcement; observational learning; Social learning of fear: Minetka monkey studies; treatment for socially learned phobia,
- **NOT COVERED on Exam:** p 231-234 (expectancy and prediction)

**Chap 7:** You are responsible for only the definitions/topics given below, from p 285-289
-antegrade vs. retrograde amnesia
-Different types of Long-term Memory: evidence for existence
  -Explicit vs. Implicit Memory
  -Declarative
  -Episodic vs. Semantic
  -Procedural
-Anatomy of Memory: type of memory associated with each of the following brain structures
  -frontal lobe
  -hippocampus
  -amygdala
  -cerebellum

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

I. Consciousness
-Definition
-subjective experience
-link with brain activity
-Limits: 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
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 Autosommal Insomnia
- Consequences of Short-term vs. Long-term deprivation

Functions of Sleep
- Lymphatic 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
- Development of Phobias: John Watson & Little Albert
- Fear conditioning
- Treatments for Phobias: exposure therapy; counterconditioning; systematic desensitization
- 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

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?
- Minetka monkey studies on phobias

IV. Memory
- H.M: know symptoms; what part of brain responsible for memory problems
- Anterograde vs. retrograde amnesia
- Different types of Long-term Memory: evidence for existence
  - Explicit vs. Implicit Memory
  - Declarative
  - Episodic vs. Semantic
  - Procedural
- Anatomy of Memory: Role of following brain structures
  - Frontal lobe
  - Hippocampus
  - Amygdala
  - Cerebellum