Exam Review
Exam

- About 50 questions.
- Multiple choice & true/false.
- No essay or fill-in.
- Answer on scantron-type sheet, so bring pencils.
Concepts to know

**Psychology**: science of behavior

**Behavior**: any physical activity of the organism

**Goal of Psychology**: Description, prediction, and control of behavior.

“Problem of Rarity”/Base-Rate fallacy

**Deductive vs Inductive methods of science.**

**Events vs constructs**

**Descriptive vs Inferential constructs**

**Reification**—turning descriptions into things.
Concepts to know

**Reliability:** consistency

**Generality:** degree to which observation or findings apply to different situations.

**Replicability:** degree to which an observation or finding can be repeated using the same or similar techniques; replication.

**Reactivity:** the degree to which your measurement technique interferes with the thing being measured.
Concepts to know

**Independent variable:** the events the scientist manipulates in the study.

**Dependent variable:** the effects of the independent variable.

**Operational definition:** an objective description of the measurement of your variables.
Concepts to know

• **Frequency**: events per unit of time; responses per minute.

• **Period**: amount of time between events; reciprocal of frequency.

• **Duration**: how long an event lasts

• **Latency**: time between stimulus and response; reaction time.

• **Probability**: events per opportunity.

• **Intensity**: amount of energy emitted by the event.

• **Magnitude**: size of the event.

• **Topography**: form of the event.
Concepts to know

- **Blinding in experiments** (single-blind, double-blind)
- Placebo control
- One-shot case study
- Pretest-posttest design
- Pretest-posttest with control
- Posttest only
- Static groups comparison
- Solomon four-groups
- Interrupted time series
Concepts to know

• A “True” Experiment involves random assignment to conditions.

• AB design

• ABA (Reversal or ABAB) design

• Multiple Baseline design

• Alternating treatments design

• Changing criterion design

• Multiple sequential withdrawal design
Concepts to know

- **Reflex**: stimulus and response
- **Static laws**: basically bigger stimuli produce bigger quicker responses
- **Habituation**: repeated elicitation reduces response strength.
- **Sensitization**: repeated elicitation increases response strength.
- **Potentiation**: an unrelated stimulus increases response strength.
- **Recovery** (spontaneous recovery)
- **Pavlovian conditioning** (also Type-S/Respondent/Classical)
"Static Laws"

Response Strength vs. Stimulus Intensity graph.

- Response Strength
- Stimulus Intensity
- Duration
- Magnitude
- Probability
- Latency

Graph showing the relationship between stimulus intensity and response strength.
Concepts to know

- **Standard**: CS immediately followed by UCS.
- **Trace**: Brief CS, wait a while, then present UCS.
- **Delay**: Long CS immediately followed by UCS.
- **Backward**: UCS then CS. (i.e., Meat then bell.)
- **Simultaneous**: UCS and CS at same time.
- **Temporal**: Repeatedly present UCS
Effects of Types of Pavlovian Conditioning

- **Standard**: Most rapid conditioning
- **Trace**: Slower conditioning; UCR comes to anticipate UCS
- **Delay**: Slower conditioning; UCR comes to anticipate UCS
- **Backward**: Ineffective for most stimulus combinations
- **Simultaneous**: Ineffective for most stimulus combinations
- **Temporal**: Similar to Trace; each UCS becomes a CS.
Concepts to know

- **Blocking**: a new stimulus element added to an effective one usually won’t become associated with the response.

- **Overshadowing**: one element of a stimulus combination can prevent another from becoming associated with the response.

- **Sensory Preconditioning**: parts of a previously established stimulus combination usually all become associated with the response.

- **Extinction**: reduction in the response strength due to absence of UCS.

- **CS pre-exposure effect**: A CS previously paired with no specific stimulus takes longer to condition to a new stimulus.
Concepts to know

• **Conditioned taste aversion:** a selective association formed to a taste that may not require close association of the CS and UCS.