Structure of Midterm

- A total of 40 multiple choice questions
  - Each with 4 answers
  - Choose the best answer
  - Each correct answer is worth 2 points
  - Bring Scantron F-288-PAR-L, to be submitted to the proctors

- A total of 5 short answer questions
  - Generally of the form “give two reasons”, or “give three reasons” or so on
  - Worth a minimum of 0 and a maximum of 4 points each
  - Short answers are a page of the question handout, all of which must be returned to the proctors with your name and student ID

- You have the full lecture slot to complete the exam, allowing for distribution and collection
Examinable Material

- The topics covered in lectures, especially on the slides, are the examinable material
  - Up to an including the last slide covered in lectures in the “Decision Making” section
    - i.e., up to and including page 23 of the decision making slides
Examinable Material

- Introduction and history
  - Disciplines in cognitive science
  - Empiricism, nativism, behaviorism, functionalism
  - Marr’s three levels

- Concepts and categories
  - Definitional, prototype and exemplar theories
  - Schemas, scripts
  - Ad-hoc and goal-derived categories
  - Hierarchical category structures
  - The basic level
  - Concept and category learning tasks, including one-shot tasks
Examinable Material

- Memory
  - Sensory registers, measuring capacity and time course of information loss
  - Short term memory
    - capacity, chunking, expertise, rehearsal
    - Sternberg task and interpretation of results
  - Long term memory
    - Time and information capacity
    - Decay, interference, and context as causes of forgetting
    - Prospective memory
    - Rational basis for forgetting
  - Assessing memory
    - Remembering, recall (signal detection theory measures) and recognition tasks (serial position curves)
Examinable Material

• Memory
  – Explicit (declarative)
    – Semantic (facts)
    – Episodic (events)
  – Implicit (non-declarative)
    – Procedural (skills & habits)
    – Priming
    – Associative learning
    – Artificial grammar learning experiments
  – Associative networks and priming
  – Everyday memory
Examinable Material

- Perception, action, cognition
  - Top-down apperception and bottom-up perception
  - Change detection and change blindness
  - Perceptual illusions (visual, McGurk effect)
  - Categorical perception
  - Perception as inference
  - Embodied cognition, spatial metaphors in thought and priming studies

- Decision making
  - Deductive and inductive decision making
  - ‘Rational’ and heuristic decision making
  - Representativeness, availability, anchoring and other heuristics (law of small numbers, ignoring base rates, ...)