Examples of human cognition in common tasks

Lesson I: Introduction module 06

University of Idaho
Three examples of common tasks

- **Studying for this course**
  - What are the cognitive demands when taking a college course online? Does cognitive psychology offer any insights into how to improve learning?

- **Driving a car**
  - What are the main cognitive demands while driving? How do people differ in their driving skills? What about driving distractions?

- **Decision making: Buying a house**
  - When buying a house, the buyer’s cognitive system has to evaluate a number of important factors. How does the cognitive system keep track of these? How (or do) we come up with a good decision?
Driving a car

- Developing expertise
  - Automation of driving tasks
  - Development of driving related schemata

- Perception
  - Object recognition
  - Lane following, collision avoidance

- Attention
  - Divided attention
  - Visual search and pop-out

- Memory
  - Spatial memory for routes
  - Declarative and procedural memory
Studying for this course

- **Memory**
  - Massed vs. distributed practice
  - Shallow vs. deep processing
  - Use of schemata and personal experience
  - Context effects on memory

- **Metacognition**
  - Thinking about one’s thinking
  - Strategies to improve recall of information
  - Mnemonic techniques

- **Decision making in multiple choice exams**
  - Heuristics and satisficing
  - Decision making fallacies
  - Deductive reasoning
Memory
  - Schemata and scripts

Mental representations
  - Visual imagery
  - Spatial imagery

Problem solving (how to get a mortgage)
  - Problem representation
  - Mental set and fixation
  - Problem solving strategies

Decision making
  - Satisficing
  - Reasoning
  - Biases