

# Cognitive Psychology CTY Course Syllabus

WEEK ONE			
Day	Time	What (knowledge goals/concepts/reading)	How (activities)
<b>DAY 1</b> Monday	<b>morning</b>	Introductions	Brief talks
		Class responsibilities/honor code	Brief talks
		History of Cognitive Psych	Lecture
	<b>afternoon</b>	Methods of Cognitive Psychology: Behavioral and Neuroscientific	Lecture/Discussion  Activity: Design an experiment and present to the class.
	<b>evening</b>	Reading: Willingham, Ch 1-2	Read textbook.
<b>DAY 2</b> Tuesday	<b>morning</b>	Perception: Low-level visual processes.	Lecture/Discussion  Activity: Create your own optical illusion and present to the class.
		Resolving ambiguities in the visual system.	
	<b>afternoon</b>	Object identification and visual navigation	Lecture/Discussion  Activity: Design study on navigation or object perception.
	<b>evening</b>	Reading: Willingham, Ch 3	Read and discuss.
<b>DAY 3</b> Wednesday	<b>morning</b>	Attention: How is attention limited?	Lecture/Discussion  Design an experiment to assess the instructor's Attentional limits.
	<b>afternoon</b>	Attention: How is selection achieved?	Lecture/Discussion  Write a brief play or skit that demonstrates the different types of attentional filtering mechanisms.
	<b>evening</b>	Reading: Bargh and Chartrand (1999). "The Unbearable Automaticity of Being."	Read and discuss.

<b>Day</b>	<b>Time</b>	<b>What (knowledge goals/concepts/reading)</b>	<b>How (activities)</b>
<b>DAY 4</b> Thursday	<b>morning</b>	Primary Memory	Lecture/Discussion Activity: Come up with as many examples of real-world uses of primary memory as possible.
	<b>afternoon</b>	Working Memory	Lecture/ Discussion Select as many of your previous examples and describe in terms of working memory. Present results to the class.
	<b>evening</b>	Baddeley (2000), "The Episodic Buffer." Kane & Engle (2004), "Working memory capacity and the control of attention."	Reading/ Discussion, possible writing assignment.
<b>DAY 5</b> Friday	<b>morning</b>	Memory Encoding: Memory content.	Lecture, Discussion Activity: Design an everyday method of helping yourself remember things. Teach the class.
	<b>afternoon</b>	How does encoding happen?	Activity: Adapt your previous method so that it is more adaptable to influences from today's section.

## WEEK TWO

Day	Time	What (knowledge goals/concepts/reading)	How (activities)
Sunday	evening	Reading: Tulving (2002), "Episodic Memory: From Mind to Brain."	Read/Discuss
DAY 6 Monday	morning	Review memory encoding  Introduce memory retrieval: Unreliability of memory, encoding specificity, false memories.	Lecture, Lecture/Discussion  Design an activity that causes false memory creation, manipulating likelihood of false memory according to lessons in this and the previous chapter
	afternoon	Forgetting: Occlusion, Decay, Editing, Repression, Permanence	Lecture/Discussion  Develop a method for forgetting information you want to lose, and one that helps prevent you from losing things you don't want to lose.
	evening	Anderson (1984)	Read/Discuss
DAY 7 Tuesday	morning	Memory storage: Categorization	Lecture/Discussion Activity: Choose some random items to store in memory, and describe how each of the three views of categorization would describe it in memory.
	afternoon	Organization of memory: Hierarchical Theory, Spreading Activation, Parallel Distributed Processing	Lecture, Discussion Activity: Design a semantic network to describe a set of terms related to some concept.
	evening	Marsh et al (1998), "Investigation of everyday prospective memory" ; Einstein et al (2003), "Forgetting of intentions in demanding situations is rapid"	Read/Discussion
DAY 8 Wednesday	morning	Motor Control: Introduction. Motor Control as the Cinderella of cognitive psycholgy	Lecture, discussion Activity: Come up with an experiment to assess some aspect of one of the major problems of motor control research.
	afternoon	The posture-based motion planning model	Lecture, Discussion Write a play or skit that demonstrates a world without end-state comfort
	evening	Rosenbaum (2005), "A Cinderella Story..." ; Norman (1981), "Categorization of Action Slips"	Read/Discuss
DAY 9 Thursday	morning	Skill and Skill acquisition: Expertise and Skill Acquisition	Lecture, Discussion  Activity: Develop a new skill and demonstrate the development of expertise in it.
	afternoon	Implicit and Explicit learning and memory	Lecture, discussion Activity: Demonstrate how a person could learn a skill implicitly.

<b>Day</b>	<b>Time</b>	<b>What (knowledge goals/concepts/reading)</b>	<b>How (activities)</b>
	<b>evening</b>	Carlson & Sohn (2003) "Implicit Temporal Tuning" ; Keetch et al (2005) "Espacial Skills: Their Emergence with Massive amounts of practice"	Read/Discuss
<b>DAY 10</b> Friday	<b>morning</b>	Rationality: Humans are rational	Lecture/Discussion Activity: Write a skit or play to demonstrate rational human behavior and a theoretical basis for it.
	<b>afternoon</b>	Rationality: Humans are NOT rational	Lecture, Discussion  Activity: Adapt your previous skit or play to demonstrate how human behavior could be irrational in that situation, along with a theoretical basis for this.

## WEEK THREE

Day	Time	What (knowledge goals/concepts/reading)	How (activities)
Sunday	evening	Chater and Oaksford (2001), Shafir and LeBoeuf (2002)	Read / Discuss
<b>DAY 11</b> Monday	morning	Problem Solving: Solving Novel Problems	Lecture/Discussion  Activity: Create a problem and describe it in terms of the information in this section.
	afternoon	Problem Solving: Experience in solving problems	Activity: Attempt to assess the role expertise and knowledge could play in your problem from this morning.
	evening	Anderson (1993); Pedone et al (2001)	Read/Discuss
<b>DAY 12</b> Tuesday	morning	Language Structure: What is language?	Lecture/Discussion Activity: Design a new grammar and attempt to use it in casual conversation
	afternoon	Language Structure: Is language special?	Lecture/Discussion Activity: Design a study to use your language to assess the language capabilities of various animals.
	evening	Pinker and Jackendoff (2005); Hauser et al (2002)	Read/Discuss
<b>DAY 13</b> Wednesday	morning	Language Processing Why is language difficult to process?	Lecture/discussion Activity: Parse a body of text into its basic structure and design a flow chart for how you think it's processed.
	afternoon	Language Processing Resolving ambiguities; bilingualism	Activity: Identify and analyze the ambiguities you find in your text from this morning.
	evening	Brock (2007), Russo et al (2005),	Read/Discuss
<b>DAY 14</b> Thursday	morning	Emotional Regulation of Cognition: Valence and Affect	Lecture/Discussion Activity: Get into groups and describe experiences of affective regulation of cognition; look for themes
	afternoon	Emotional Regulation of Cognition: A Hot/Cool System	Lecture/Discussion Activity: With your same groups, look for expressions of the hot/cool system in your experiences from the morning
	evening	Barrett (2006) ; Metcalfe & Mischel (1999)	Read/Discuss
<b>DAY 15</b> Friday	morning	Ego Depletion, Lessons to take home	Lecture/Discussion, say goodbyes