

BRAIN, MIND & MOTION PICTURES

Psych 188 B: Fall '09

Time and place: W: 3:30-5:50pm, Kaufman 101
F: 3:00-4:50pm, Dodd 161

Instructor: Eran Zaidel, ezaidel@psych.ucla.edu; 7532B, Franz Hall; Office Hours:
Tuesday 2-3 pm, tel: (310) 825-4343

TAs: Rick Laughlin, r laugh@ucla.edu, 2567A, Franz Hall; Office Hours: Wednesday 2-3 pm

Mike King, mikeking@ucla.edu, 2567C, Franz Hall; Office Hours: Wednesday 5-6 pm

Course Description: This class will explore the cognitive neuroscience of film from two perspectives: first and foremost, how advanced brain research is represented in the films of the period; second, how modern cognitive neuroscience explains the experience of watching a movie. The syllabus this quarter emphasizes the first aspect.

Each week will be devoted to one film. The movie will be watched in the classroom (Kaufman 101) on Wednesday afternoon, with the lecture about the movie given on Friday of the same week (Dodd 161). All films will also be available on reserve for viewing at Instructional Media Lab in Powell Library Room 270 (tel: 310-206-1211). The films will also be available on the class website for watching on your own computer while on campus (not recommended- poor quality).

Students will be responsible for reading an assigned paper/chapter before watching the movie. A brief quiz on the reading will be given before showing the movie. There are no make-ups for weekly quizzes, but each student's lowest quiz score will be dropped from her/his final grade calculation.

During week 11, the Wednesday film watching will be replaced by a class experiment on the emotional effects of movies. The results will be discussed during Friday's class of that week.

Grading: The final grade will consist of 9 out of 10 quizzes (40%) and a final exam (60%). There will be no make-ups, and if you cannot make that date please do not register for the class.

Powell Room 270 Media Lab Hours:

M-Th: 9am-9pm

Fri: 9am-5pm

Sat: 12pm-5pm

Sun: 1pm-5pm

Syllabus (tentative):

Week 1: Introduction

Friday, September 25

Lecture: Introduction to cognitive neuroscience

Week 2: Monitoring and Modulating the Mind/Brain

Wednesday, September 30

Movie: The Manchurian Candidate (Original version, 1962, 126 minutes)

Paper: Raz, A., Fan, J., & Posner, M. (2005). Hypnotic suggestion reduces conflict in the human brain. PNAS, 102(28), 9978-9983.

Friday, October 2

Lecture: From Hypnosis to EEG Biofeedback

Week 3: Perception

Wednesday, October 7

Movie: Blink (1994, 106 minutes)

Paper: Fine, I., et al. (2003). Long-term deprivation affects visual perception and cortex. Nature Neuroscience 6(9), 915-916.

Friday, October 9

Lecture: The Agnosias

Week 4: Action

Wednesday, October 14

Movie: Awakenings (1990, 121 minutes)

Paper: Goodale, M.A. (2000). Perception and action in the human visual system. In Gazzaniga (Ed) pp 365-377.

Friday, October 16

Lecture: Motor Control: Principles and Disorders

Week 5: Emotions

Wednesday, October 21

Movie: Blade Runner: Director's Cut (1982, 117 minutes)

Paper: Iacoboni, M. Submitted Manuscript. Within each other: neural mechanisms for empathy in the primate brain.

Friday, October 23

Lecture: Blade Runner and the Nature of Consciousness

Week 6: Memory

Wednesday, October 28

Movie: Memento (2000, 113 minutes)

Paper: Squire, L.R., Clark, R.E., & Bayley, P.J. (2004). Chapter 50: Medial temporal lobe function and memory. In The Cognitive Neurosciences III. Ed. M.S. Gazzaniga. Cambridge: MIT Press, 691-708.

Friday, October 30

Lecture: Amnesia

Week 7: Language

Wednesday, November 4

Movie: Regarding Henry (1991, 108 minutes).

Paper: Alexander, M.P. (2000). Aphasia 1: Clinical and Anatomic Issues. In M.J. Farah & T.E. Feinburg (Eds.) Patient-based approaches to cognitive neuroscience. Cambridge, Mass: MIT Press, 165-182.

Friday, November 6

Lecture: Aphasia

Week 8: Natural Language Pragmatics

Wednesday, November 11

HOLIDAY

Friday, November 13

Lecture: Language in the right hemisphere

Paper: Soroker, N., Kasher, A., Giora, R., Batori, G., Corn, C., Gil, M., Zaidel, E. (2005). Processing of basic speech acts following localized brain damage: a new light on the neuroanatomy of language. *Brain and Cognition*, 57(2), 214-7.

Week 9: The Neuroscience of Movie Watching

Wednesday, November 18

Movie: The Good, the Bad, and the Ugly (1967, 161 minutes)

Paper: Hasson, U., Furman, O., Clark, D., Dudai, Y., & Davachi, L. (2007). Enhanced intersubject correlations during movie viewing correlate with successful episodic encoding. *Neuron*, 53(3), 452-462.

Friday, November 20

Lecture: Synchrony vs. Connectivity

Week 10: Split-Brain

Wednesday, November 25

Movie: House: Both Sides Now (2009, ~45 min)

Paper: Zaidel, E., Zaidel, D. W., & Bogen, J. E. (1999). The split brain. In G. Adelman & B. Smith (Eds.), *Encyclopedia of Neuroscience*, 2nd Ed. (pp. 1930-1936)

Friday, November 27

Lecture: The Split-Brain

Week 11: Hemispheric Specialization in the Normal Brain

Wednesday, December 2

Class experiment

Paper: deLange, F.P., Spronk, M., Willems, R.M, Toni, I., & Bekkering, H. (2008). Complementary systems for understanding action intentions. *Current Biology*, 18(6), 454-457.

Friday, December 4

Lecture: Results of the class experiment

FINAL: Time and Location TBA