IB’s Office: HNB 316, Ext. 0-6094, bieder@usc.edu.
Time: Class meets: Mon, 2:00-5:50 PM. Room: HNB 120F

Required Text + Journal Articles (Denoted by *). Other articles (no *) are for background edification and the content not covered in class will not be explicitly tested.
Journal articles can be downloaded (in Adobe Acrobat) from the course Blackboard site. Some readings might be added during the semester.

Evaluation: Evaluation will be based on two exams, each worth 40%. A large pool of possible exam questions will be made available at least a week prior to each exam. Approximately 80% of the exams will be directly taken from this pool. Most of the pool will be questions covered in the class Powerpoints/lectures. Questions can be answered in approx. a paragraph and can include diagrams. The remaining 20% of the evaluation will be based on class comments or questions that serve to illuminate the discussion or informed criticism (but not mere attendance) as well as a brief (~10-20 min) Powerpoint discussion on how course concepts relate to their own research or a problem of interest.

Topics: Roughly corresponding to weeks. There will be some reordering/rescheduling of topics and possibilities of additions/subtractions of readings. The last hour of each meeting will often be devoted to overview discussions.

   *GIM Chapters 1 Brief History. (Skim.)
   *GIM Chapter 2 Structure and Function of the Nervous System. (We will not cover the specifics of the molecular biology, e.g., of the cell membrane, ion channels, and neurotransmitters on pp. 28-36 but do understand the general principles). Cherniak, C. (1994). Component placement optimization in the brain. Journal of Neuroscience, 14, 2418-2427. (For background and edification. Not explicitly covered beyond what is discussed in lecture.)

2. Jan 18th No Class. MLK day.


GIM Chapter 4. Methods of Cognitive Neuroscience. Rather than consider methodology in isolation, we will primarily consider methods when considering
specific substantive domains such as perception, memory, etc. where methodological issues can be better appreciated.

*GIM Chapter 5. Sensation and Perception.

   Nonaccidental Properties. Invariances.

5. Feb 1: Higher Level Vision I: Continued

6. Feb 8th: Higher Level Vision II: Faces, Subordinate-Level Recognition; Scenes; Prosopagnosia vs. Phonagnosia

7. Feb 15th. No class. President’s Day.

   *GIM. Chapter 7. Attention
   GIM. Chapter 4. Hemispheric Specialization
   GIM. Chapter 14. Consciousness.

8. Feb 29th. Action
   *GIM. Chapter 8. Action

   *GIM Chapter 9. Memory.


11. Mar 21st Learning & Memory (Continued)
    First Midterm 40%

12. Mar 28th: Emotion
    *GIM. Chapter 10. Emotion.

*GIM. Chapter 11. Language.

*GIM. Chapter 12. Cognitive Control.

Second Midterm 40%


Students requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to me as early in the semester as possible. Their phone number is (213) 740-0776.