

## SYLLABUS

Psych/Cogsci 126 **PERCEPTION** (Fall, 2005)

**Instructor:** Steve Palmer (642-7135), Professor of Psychology  
Office Hours: Wed, 1-3 (or by appointment); 3125 Tolman  
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**GSIs:** Tandra Ghose ([tandra@berkeley.edu](mailto:tandra@berkeley.edu)) 642-7135  
Jonathan Gardner ([jonathansgardner@gmail.com](mailto:jonathansgardner@gmail.com)) 642-7135

Office Hours: (TBA)

**Lectures:** Mondays & Wednesdays, 12:00 - 1:00 pm (1 LeConte Hall)

**Sections:** T 9-10, 10-11, 11-12, 12-1 (3140 Tolman Hall)  
W 9-10, 10-11 (2235 Tolman Hall)

**Course credit:** 3 units

**Course requirements:** 1st midterm (1 hour) 100 points (25%)  
2nd midterm (1 hour) 100 points (25%)  
Pop quizzes (~5 min.) 60 points (15%)  
Final exam (1.5 hours) 140 points (35%)

**Required Readings:** Palmer, S.E. (1999), Vision Science: Photons to Phenomenology, MIT Press

### **LECTURE SCHEDULE**

Day	Date	Ch. Pages	Topic
M	8/29	1: 1-15	The Nature of Visual Perception
W	8/31	1: 15-24	Optical Information for Vision
M	9/5	- -	LABOR DAY (Holiday)
W	9/7	1: 24-43	Basic Physiology of the Visual System
M	9/12	2: 45-59	Classical Theories of Visual Perception
W	9/14	2: 59-70	The Computational Approach to Vision
M	9/19	2: 70-92	Visual Representations & Processes
W	9/21	3: 95-102	The Computational Problem of Color Vision
M	9/26	3: 102-107	Image-based Color Processing
W	9/28	3: 107-122	Theories of Color Vision
M	10/3	3: 122-128;137-142	Color Constancy & Color Naming
W	10/5	- -	EXAMINATION 1 (Chapters 1-3)
M	10/10	4: 145-154	Receptive Field Structure
W	10/12	4: 154-163;193-197	V1 Architecture & Visual Pathways
M	10/17	5: 200-216;225-229	Surfaces in Depth: Stereo & Motion
W	10/19	5: 229-236;243-253	Surfaces in Depth: Pictorial Depth
M	10/24	6: 255-287	Perceptual Grouping
W	10/26	6: 287-300;305-309	Other Organizational Issues
M	10/31	7: 312-343	Perceptual Constancies

W	11/2	7: 348-361	Wholes and Parts
M	11/7	-	Review
W	11/9	-	EXAMINATION 2 (Chapters 4-7)
M	11/14	8: 363-385	Template and Feature Theories of Shape:
W	11/16	8: 385-407	Structural Description Theories of Shape
M	11/21	9: 409-433	The Structure of Categories
W	11/23	9: 433-453	Theories of Visual Categorization
M	11/28	10: 466-487	Image-based Processing of Motion & Events
W	11/30	10: 487-504	Object-based Processing of Motion & Events
M	12/5	13: 616-630	Visual Processing without Awareness
W	12/7	13: 630-644	Theories of Consciousness & Awareness

**FINAL EXAMINATION:** (Chapters 8-10, & 13 plus integrative essays)  
Exam Group 18: Monday, 12/19, 5-8 pm

The Final Exam will contain both essays and objective questions from the final section of the course worth 100 points (i.e., a third midterm), plus essay questions from the whole course worth an additional 40 points.

**MIDTERM EXAMS:** 60% definitions & essays (all available before exam)  
40% objective (multiple choice; matching; etc.)

**SECTIONS:** Sections will not meet the first week. The first sections will be Tuesday & Wednesday, Sept 6 & 7. There will also be no sections during the week following midterm exams to give the GSIs time to grade all those exams. **Students are responsible on exams for all material covered in sections.**

**WEBSITE:** A course website will be available at the Berkeley Blackboard site <<http://blackboard.berkeley.edu:8000>> under "Psychology 126". Powerpoint slides for lectures will be available on this website by 9 AM on the day of the lecture to facilitate taking notes in class.