Attention!

This is a *representative* syllabus.

The syllabus for the course when you enroll may be *different*.

Use the syllabus provided by your instructor for the most up-to-date information. Please refer to your instructor for more information for the specific requirements for a given quarter.
New Syllabus for Psychology 606
High Level Vision

Instructor:
Prof. James Todd
200L Lazenby Hall
614-292-8661
Todd.44@osu.edu

Location:

Time: Tues, Thur 2:00 – 3:18 PM
Credits: 3
Office hours: Tues, Thur 3:30 – 4:30

Course description
This course will examine the perceptual processes by which humans and other animals are able to obtain knowledge about the three-dimensional environment. The material covered will include ecological optics, the representation of three-dimensional form, and the perceptual analysis of various aspects of image structure, including texture, shading motion and binocular disparity.

Evaluation
For the undergraduate version of this course, evaluation will consist of three exams, each worth 1/3 of your final grade. These exams will contain essay and short answer questions, and will cover material from both the readings and lectures. For the graduate version of the course, evaluation will consist of three exams, each worth 1/4 of your final grade, and a 10-15 page term paper that covers some topic in high level vision in greater depth than the material discussed in class or in the assigned readings.

Course web site
Powerpoint files and all readings can be downloaded for each lecture on Carmen. Warning: Some of these power-point files are quite large so you should not try to open them on line.

Academic Misconduct
It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term academic misconduct includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct.

Students with Disabilities
Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the Instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/.
Topic and required readings

Lectures 1 & 2)  Projective Geometry and Ecological Optics

Lectures 3&4)  The Perceptual Representation of 3D Shape

Lecture 5 & 6)  Object and Face Recognition

Lecture 7-8)  The Analysis of Image Contours and Shape from Texture

Lecture 9)  Lightness Perception

Lecture 10)  Shape from Shading

First Exam

Lecture 11 & 12)  Shape from Binocular Disparity

Lecture 13 & 14)  Shape from Motion
Lecture 15 & 16) Shape from Multiple Sources of Information

Lecture 17 & 18) The Analysis of Natural Scenes

Second Exam

Lecture 19 & 20) Neural Mechanisms of High Level Vision


Lecture 21 & 22) The Geometry of Visual Space


Lectures 23-24) Perceptual Control of Action


Lectures 25-26) Event Perception


Final Exam