Computational Models of Vision

Psych W3270. 3 pts.

A regular two-hour weekly meeting time will be arranged at the organizational meeting, which will be held in the first week of the semester.

Instructor: Norma Graham
Email: nvg1@columbia.edu

The overall topic of this course is the study of vision and visual perception—considering both behavioral and physiological data—within a framework of computational and mathematical descriptions. You choose your own topic during the first few weeks of the term and then work on it throughout the term. This is a seminar class, and the work for the class includes making several presentations, participating in discussion, and turning in a written summary paper on your own topic at the end of the course.

The grade for this course takes into account (with approximately equal weight) the following components: each presentation a student gives to the group; the final summary paper the student writes; and the degree to which the student is a good audience for the other members of the seminar.

Given the nature of this course, it is important that every student attend every class meeting except, of course, for serious illness or other serious situations.

A previous course in vision IS NOT required. Some background in one of the following is probably a good idea: psychology, biology, physics, computer science, mathematics, or electrical engineering.

The instructor’s permission IS required. Please contact the instructor before the first meeting for further information about the course and/or permission to attend the course (email is surest). You may attend the first organizational meeting, however, even if you have not yet received permission from the instructor.

(This is an undergraduate course number. If you are a graduate student, please see Psych W4235, Special Topics in Vision.)