VLST 101 - Eye, Mind, Image
Instructors
Professor Renata Holod
Professor Gary Hatfield

Synopsis
Philosophy and science of perception; art and the culture of seeing. The nature of seeing and visual cognition, its physiological, environmental, and cultural conditions; selected focal topics, such as color, beauty, medical imaging, and seeing and knowing.

Requirements
15% -- Assignment 1: Handed out 1/23, due 2/9.
20% -- Midterm exam: 2/27 in class.
40% -- Final exam: TBA 10% -- Participation in lectures, recitations/labs is mandatory.
Exams will draw on material from lectures, sections/labs, and the readings.

**Academic Integrity**
Your work and conduct will be held accountable under the University of Pennsylvania's
Code of Academic Integrity. You are responsible for reading and understanding this
code ([http://www.vpul.upenn.edu/osl/acadint.html](http://www.vpul.upenn.edu/osl/acadint.html)).

**Readings and Text**
Required Texts (available at the Penn Book Center, 34th and Sansom):
Reader, available at Campus Copy.
Reading assignments below refer to the required texts and to materials in the reader.

**Course Web Site**
Course information and materials will be provided through the blackboard web site for
the course, available through URL: [https://courseweb.library.upenn.edu/](https://courseweb.library.upenn.edu/).
Please check this site periodically for course announcements and assignments.

**Syllabus**

**What is vision? (2 lectures)**
Lecture T Jan 9: The eye and light (GH)
Lecture R Jan 11: Theories of Vision in History (RH)
Section F Jan 12: Dissection of cow’s eye – Leidy Labs 117

Reading: Gregory, *Eye and Brain*, chs. 1-3;
Livingstone, *Vision and Art*, ch. 1: “Light”;
Lindberg, *Theories of Vision*, chs. 2, 4: “Al-Kindi & Euclid,” “Alhazen and
Intromission.”

**Foundations: Space, motion, color, etc (9 lectures)**

Lecture T Jan 16: Theories of Vision: Perception of space (GH)
Lecture: R Jan 18: Depiction of space – overview (RH)
Section F Jan 19: Extramission and intromission theories

Reading: Livingstone, Chapters 7, 9: “Perspective,” “Stereopsis”;
Reader: Goldstein, ch. 6 (5th edn), “Perceptual Constancy,” pp. 157-158, 167-
170; ch. 8 (pp. 215-231), “Perceiving Visual Space.”

Lecture: T Jan 23 Depiction of space - perspective (RH)
Assignment I: distributed in lecture
Lecture: R Jan 25 Perception of motion (GH)
Section: F Jan 26: Psychophysics lab – MMETS PC Lab 2

Reading: Lindberg, ch. 8: “Renaissance”;
Solso, ch. 8, “Perspective and the History of Art”;
Gregory, ch. 6, “Seeing Movement,” ch. 9, “Realities of Art”;
Livingstone, ch. 10, “Motion.”

Lecture: T Jan 30 Depiction of motion (RH)
Lecture: R Feb 1 Perception of color (DB)
Section: F Feb 2 Color lab – Solomon Labs A3

Reading: Livingstone, chs. 1, 2, 3, 11, “Color Vision”;
Gregory, ch. 7, “Seeing Colours”;

Assignment I DUE in section

Reading: Reader: Hatfield, “Objectivity and Subjectivity Revisited: Colour”;
Gage, Color and Culture, chs. 9, 10, 11: “Newton,” “Palette,” & “Goethe.”

Lecture: T Feb 6 Color metaphysics (GH)
Lecture: R Feb 8 Color and culture (RH)
Section: F Feb 9 Color and culture

Mid-Term Review and Exam

Lecture: R Feb 22 Conversation/Summary (GH and RH)
Section: F Feb 23 Review for exam

Exam: T Feb 27: Midterm Exam
Lecture: R Mar 1: Moving Image (RH)

Spring Break
Brain, Mind and Culture

Lecture T Mar 13: The Brain (DB)

**Assignment II: Distributed in lecture**

Lecture R Mar 15: Cognitive Neuroscience (DB)

Section F Mar 16: Brain and perception

Reading: Gregory, ch. 4, “Brain”; Livingstone, Chapter 4.


Hatfield, “Mental Functions as Constraints on Neurophysiology.”

**Field Trip: Sunday, 3/18: DIA: Beacon in preparation for Assignment II**

Lecture T Mar 20: Consciousness and the mind-brain problem (GH)

Lecture R Mar 22: Do we learn to see? (GH)

Section F: Mind-brain problem and consciousness

Reading: Gregory, ch. 8 “Learning How to See”;

Reader: Crane, “Consciousness and the Mechanical Mind”;

Bickle, “The Philosophy of Neuroscience,” web link:


Lecture T Mar 27: Cultures of seeing (RH)

Lecture R Mar 29: Beauty (RH)

Section F Mar 30: Culture and beauty

**Assignment II: DUE in section.**

Reading: Solso, ch. 9: “Connections.”

Reader: Kemp, Visualizations, 12-13, 14-15, 30-31, 32-33, 34-35;

Nelson, chs. 1, 2, 5: “Eyes Have It,” “Mimesis,” “Peripatetic Vision.”

**Is Seeing Believing? (4 lectures)**

Lecture T Apr 3: Ideas of vision and knowledge (GH)

Lecture R Apr 5: Ideas of vision and knowledge (GH)

Section F Apr 6: Seeing and reality (Matrix)

Reading: Gregory, ch. 10, 11 “Illusions,” “Speculations.”

Reader: Nagel, What Does It All Mean?, chs. 1–4;

A. C. Grayling, “Epistemology.”

Lecture: T Apr 10: Visual memory; eyewitness testimony (GH)

Lecture: R Apr 12: Seeing and subjectivity – graphics (RH)

Section: F Apr 13: Medical imaging lab – MMETS PC Lab 2

Reading: Reader: Schacter, chs. 4, 5: “Misattribution”; “Suggestibility.”

Tufte, ch. 1, “Graphical Excellence.”

Lecture: T Apr 17 Seeing and subjectivity (RH)

Review (1 lecture)
Lecture: R Apr 19 Conversation/Summary
Section: Review for final

Final: TBA