

BIBB 217/PSYC 217

Visual Neuroscience

Course Meeting Time:

Lectures M/W/F 9-9:50a., Location: Stiteler Hall B26

Instructor Information:

Instructor: Nicole Rust
 Office: Room 317 C-Wing, 3401 Walnut Street (3417 entrance)
 Phone: (215) 898-4587 (but email is the best contact method)
 Email: nrust@psych.upenn.edu
 Office hour: M 2-3p

TA: Sean Madigan
 Email: smadigan@psych.upenn.edu
 Office hour: W 10-11a
 Office hour location: Conference Room, 314 C-Wing, 3401 Walnut Street (3417 entrance)

Course Web Site (Blackboard):

<https://courseweb.library.upenn.edu/>

Check the blackboard for homework assignments, lecture slides, reading assignments, reading notes, Q & A posted to the discussion board, and examples of exams from previous semesters

Prerequisites:

PSCY 1, BIBB 109, VLST 101, or COGS 001.

Requirements:

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|------------|--------------------------------|-----|
| Homework | Due dates posted on blackboard | 20% |
| Exam 1 | Friday February 10 (in class) | 25% |
| Exam 2 | Friday March 23 (in class) | 25% |
| Final Exam | Monday May 7, 12-2p | 30% |

Reading:

Readings will be drawn from class handouts.

Policy on late homework assignments:

Homework will be announced in class and due in class one week after it is assigned. Electronic submissions will not be accepted but you can submit the assignment to Sean's mailbox in the Psychology department (at 3720 Walnut Street, Solomon Lab Bldg) by 10a the day it is due. Graded homework assignments will be returned to you within one week after the due date. Homework assignments submitted after the due date but within one week will be graded with a 50% penalty. Homework assignments will not be accepted after the homework is returned to the other students (without a valid excuse).

Tentative Topic List:

Design of the human eye.

Light, image formation, optics.

Clinical issues in visual neuroscience.

Visual adaptations in other animals.

Spatial resolution and the contrast sensitivity function.

Overview of retinal anatomy, phototransduction, absolute threshold.

Color vision and trichromacy.

Eye movements, depth perception and binocularity.

Motion perception.

Object recognition and face processing.

Visual cognition, visual attention, and visual memory.