



# Biology of Vision

[figs.wisc.edu/2019fall07](http://figs.wisc.edu/2019fall07)

**FIG 7 • Fall 2019**

main class instructor: **Bikash Pattnaik**

**10 credits**

**MAIN CLASS**

Interdisciplinary Courses (L&S) 101  
**Biology of Vision**

**LINKED CLASS**

Psychology 202  
**Introduction to Psychology**

**LINKED CLASS**

Chemistry 103  
**General Chemistry I**

This FIG introduces you to one of our most-used sensory systems by examining both how the human eye is put together and how it works. The main class of this FIG, **Interdisciplinary Letters & Science 101: “Biology of Vision,”** will make use of the vision science laboratory. In this

class, you will see how multi-disciplinary the study of vision is as they explore how psychology, physics, biology, and clinical practice are brought together:

- How do we perceive visual information (psychology)?
- How is light energy converted to chemical and electrical energy (physics)?
- What are the similarities and differences between a camera and the eye (physics)?
- How does the nervous system work to transmit visual messages and coordinated responses (biology)?
- How do photoreceptors transduce visual information and retina processes before it is analyzed by brain (biology)?
- What are the molecular biology of rhodopsin, G-protein coupled receptors, signal transduction, synapses to visual perception (biology)?

- What physiological or neurological factors cause a lack of visual perception (clinical practice)?

**Psychology 202: “Introduction to Psychology”** – Visual sensitivity like scene perception, human color vision, complex visual information of object recognition, contrast, depth, motion are all aspects of psychophysics. Blindness is an important aspect of neuropsychology. This class will help demonstrate how physiological events of visual perception are an important aspect of the psychological bases of human behavior.

**Chemistry 103: “General Chemistry I”** – Introduction to stoichiometry and the mole concept; the behavior of gases, liquids, and solids; thermochemistry; electronic structure of atoms and chemical bonding; descriptive chemistry of selected elements and compounds; and intermolecular forces. ●

more on the other side

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FIG 7 • Fall 2019

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00 am					
9:00 am	INTER L&S 101 SEM 1 9:55–10:45 am	PSYCH 202 LEC 1 9:30–10:45 am	INTER L&S 101 SEM 1 9:55–10:45 am	PSYCH 202 LEC 1 9:30–10:45 am	INTER L&S 101 SEM 1 9:55–10:45 am
10:00 am					
11:00 am		CHEMISTRY 103 LAB 625 11:00–2:00 pm			
12:00 pm					
1:00 pm	CHEMISTRY 103 LEC 2 1:20–2:10 pm		CHEMISTRY 103 LEC 2 1:20–2:10 pm		CHEMISTRY 103 LEC 2 1:20–2:10 pm
2:00 pm					
3:00 pm	CHEMISTRY 103 DIS 325 3:30–4:20 pm		CHEMISTRY 103 DIS 325 3:30–4:20 pm		
4:00 pm					
5:00 pm					
6:00 pm					

## Enrolled in a FIG and you change your mind?

FIG classes are designed to be taken together. When you enroll in a FIG, you are signed up for these classes as a whole group, not as separate classes.

### Dropping one FIG class means ending your enrollment in all of the classes in the FIG.

So, here's what you should know if you want to drop the FIG:

- You can drop all the classes on your own at [enroll.wisc.edu](http://enroll.wisc.edu). Any non-FIG class will not be affected.
- After classes begin, if you need to drop a single class within the FIG, please contact Kari Fernholz (see below) to review your situation. If necessary, she will provide the required authorization to drop the class.
- Wednesday, September 11, 2019** is the last day to drop a class without it appearing on your college transcript.
- Friday, September 13, 2019** is the last day to add a class without first getting department permission.

### MAIN CLASS

Interdisciplinary  
Courses (L&S) 101

## Biology of Vision

SEM 1: MWF 9:55–10:45

- Biological Science
- Elementary

credits: 3

class number: **56738**

### LINKED CLASS

Psychology 202  
Introduction to  
Psychology

LEC 1: TR 9:30–10:45

- Social Science
- Elementary

credits: 3

class number: **45564**

### LINKED CLASS

Chemistry 103  
General Chemistry I

LEC 2: MWF 1:20–2:10 +  
DIS 325: MW 3:30–4:20 +  
LAB 625: T 11:00–2:00

- Physical Science
- Elementary

credits: 4

class number: **45000**



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Nathan Phelps, director • 608-263-6504 • [nathan.phelps@wisc.edu](mailto:nathan.phelps@wisc.edu)

get help from **Kari Fernholz**, assistant director  
608-262-7375 • [kari.fernholz@wisc.edu](mailto:kari.fernholz@wisc.edu)

June 4, 2019 11:07 AM