

**Physics 4614**  
***Optics***

**Lectures :** MWF 12:20-1:10 pm, Room 122 Robeson Hall

**Text :** *Optics*, E. Hecht, 4<sup>th</sup> ed.

**Instructor :** Prof. R. Heflin, Room 108A Robeson, ext. 1-4504, rheflin@vt.edu

**Office Hours :** Tu 1:00 - 2:00 and F 11:00 - 12:00

**Homework :** Homework assignments will be given approximately each week. The only way to truly learn the material covered in the lectures is to solve problems on your own. I strongly suggest that you first try to do the homework on your own, and then discuss any problems with which you had difficulty with your classmates or see me.

**Web Page :** [www.phys.vt.edu/~rheflin/f05-4614](http://www.phys.vt.edu/~rheflin/f05-4614)

**Grades :**  
30% Homework  
20% 1<sup>st</sup> Midterm  
20% 2<sup>nd</sup> Midterm  
30% Final Exam

<u>Chap.</u>	<u>Title</u>
1	A Brief History
5	Geometrical Optics
6	More on Geometrical Optics
2	Wave Motion
3	Electromagnetic Theory, Photons, and Light
4	Propagation of Light
7	Superposition of Waves
8	Polarization
9	Interference
13.1	Lasers
10	Diffraction
13	Modern Optics

\*There is a separate laboratory course (PHYS 4624) associated with this class. It is only required of Physics majors. The lab will first meet during the third week of the semester.