

OPTICS (PHYS 355), Fall 2012

Class meetings: Natural Sciences Building, room 313
M-W-F: 10:00 - 10:50 a.m.

Instructor: Dr. Sergio B. Mendes, Professor of Physics
Dept. of Physics and Astronomy

Contact info: sbmend01@louisville.edu, (502) 852-0908

Office hours: Monday and Wednesday 11:00 a.m. - noon at the Shumaker Research Building (SRB), room 240. If you need special appointment, please email or call in advance.

Goals: Introduction to fundamental concepts in Classical Optics: geometrical optics, wave superposition, interference, diffraction, electromagnetic theory of light, polarization, coherence, and Fourier optics.

Textbook: Optics, Eugene Hecht, 4th ed., Addison-Wesley. Some sections of the textbook will be omitted due to time constraints.

Web site: <http://www.physics.louisville.edu/sbmendes/>
You will find (current and old) classnotes, homeworks & solutions, exams & solutions, additional literature, etc.

Evaluation:

- 2 exams:
 - 2 mid-term exams = $2 \times 20\% = 40\%$
 - 1 final comprehensive exam = 35%
- Average of homework assignments = 25%

Grading:

- A = 100% - 85%
- B = 84% - 75%
- C = 74% - 65%
- D = 64% - 55%
- F = below 54%

The instructor reserves the right to lower the grade limit.

Preliminary (and Tentative) Schedule:

Class #	Date	Chapter
1.	Aug 20	Intr. & 2
2.	Aug 22	2
3.	Aug 24	2
4.	Aug 27	3
5.	Aug 29	3
6.	Aug 31	3
7.	Sept 05	3
8.	Sept 07	4
9.	Sept 10	4
10.	Sept 12	4
11.	Sept 14	4
12.	Sept 17	4
13.	Sept 19	5
14.	Sept 21	mid-term
15.	Sept 24	5
16.	Sept 26	5
17.	Sept 28	5 & 6
18.	Oct 01	5 & 6
19.	Oct 03	5 & 6
20.	Oct 05	5 & 6
21.	Oct 10	7
22.	Oct 12	7
23.	Oct 15	7
24.	Oct 17	9
25.	Oct 19	9
26.	Oct 22	9
27.	Oct 24	9
28.	Oct 26	mid-term
29.	Oct 29	10
30.	Oct 31	10
31.	Nov 02	10
32.	Nov 05	10

33.	Nov 07	10
34.	Nov 09	10
35.	Nov 12	10
36.	Nov 14	8
37.	Nov 16	8
38.	Nov 19	8
39.	Nov 26	12
40.	Nov 28	12
41.	Nov 30	12
42.	Dec 03	12
43.	Dec 12 8:00-10:30 am	final exam

The instructor reserves the right to make changes and adjustments in the schedule as needed.