

Course Syllabus

Physics 120: Light and Color

Fall Semester, 2013

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WWW: <http://academics.uww.edu/physics/courses/physcs212>
Desire2Learn: **The D2L site is linked from the UWW web site (www.uww.edu) choose e-learning tab and select D2L.**
Class Meetings: Lecture: M W 10:35 – 11:50 a.m; Lab: F: 9:55 – 11:50 am
Office Hours: M 2:00 – 5:00; T 2:00 – 4:00 or by appointment.
Exams: Midterms: See the schedule.
Final: **Mon. Dec 16** 10:00 – 12:00 noon.
Required Text: Falk, Brill and Stork **Seeing the Light**
Supplemental Text: Hyperphysics archive: <http://hyperphysics.phy-astr.gsu.edu/>
Math Pre/Co-requisite: Math 140 or Math 141

Note: The last day to drop classes is Sept. 16 (no 'W'); Oct 11 ('W' grade.)

Required materials:

You will need to bring paper, colored pencils. A scientific calculator (one with trigonometric and logarithmic functions, scientific notation, etc.), ruler and protractor would also be helpful. Other course materials will be distributed to you as needed during the course.

ATTENDANCE AND PARTICIPATION:

You are expected to attend class and participate. This is a participatory course and group participation is not only important for your own learning, but for the learning of your group members. By engaging in meaningful discussions with your group members, by actively participating in whole class discussions, and by performing interesting experiments, you will develop with your classmates a better understanding about Light and Color.

Because you will play such an important role in your own learning, **and especially the learning of your classmates, you are expected to come to class on time, come prepared, and participate every class period.** All personal electronic devices (e.g., cell phones, pager, iPods, etc.) **MUST** be turned off while in class. Be considerate to your group and **DO NOT TEXT** while in class. If you have your cell phone out, I will request that you put it in a box.

All personal electronic devices not required for note taking or calculation (e.g., cell phones, pager, iPods, etc.) must be turned off while in class. Texting or using a cell phone during class is **NOT PERMITTED**. It is distracting and causes other members of your group to be disturbed during the class lecture and activities.

If you are unwilling or unable to come to class on time, with your assigned homework completed, and to participate in the group activities and discussions or abide by course conduct, register for a different course!

HOMEWORK:

Homework will be due almost every class period (see schedule.) If the schedule is modified, I will post the changed schedule on the course Web site. Sometimes the homework will be discussed during the class period when it is due. Please ask if you have any questions about the homework. You may discuss assigned homework on the course D2L site. Unexcused **late** homework may only receive up to half credit if turned in within one week of the due date.

Note: Many of the assignments will require you to have access to a computer with an Internet connection in order to access simulator programs and movies. If you do not have a computer at home, or your computer cannot access the information, there are several computer labs on campus, or you can use the computers in our classroom before or after class. For homework and in-class activities requiring Internet access, the appropriate link will be available on the course D2L page.

It is your responsibility to locate and test the linked simulator applets located on the Web used in the course assignments before the assigned date to avoid any technical difficulties.

Paper and Presentation:

There will be one paper and short presentation assigned. The paper topic will be chosen from a lead article in Photonics (or similar) magazine. Papers must be original and have references for credit. Unexcused **late** papers will only receive a maximum of half credit. **Papers are to be submitted on the D2L dropbox and will be checked for uniqueness using Turn-It-In.** D2L will accept MS Word (.docx and .doc), Rich Text Format (.rtf), text (.txt), and PDF (.pdf) files. I can help you convert other file formats if needed. There will be a required draft and feedback on another student's draft. Unlike the final version, the draft is to be printed and submitted in-class. Your presentation will be based on your paper and will be presented to the class.

Software:

The simulator applets primarily use Java. There has been difficulty using the applets due Java issues. Let me know if this is a problem on your system.

Also, as a student, you can get Microsoft Office for about \$90 through the bookstore. This is a great deal. Even better are OpenOffice (<http://www.openoffice.org/download/index.html>) and LibreOffice (<http://www.libreoffice.org/download>) **These are free alternatives to MS Office** and can open/save most Word, Excel, and PowerPoint files.

GRADING CRITERIA AND TENTATIVE DATES:

Course grades will be determined by the percentage of total points assigned for the course.
93% = A, 90% = A-, 87% = B+, 83% = B, 80% = B-, 77% = C+, 73% = C, 70% = C-, 67% = D+, 63% = D, 60% = D-, < 60% = F.

Exams: There will be two mid-term exams as well as a comprehensive final. Exams may only be taken on the assigned day and may not be taken at other times. However, there will be the opportunity for a make-up exam for each of the two mid-term exams for those who miss or are unsatisfied with their performance on the initial exam. The make-up exam will **replace** the grade of the initial exam. This make-up opportunity only applies to the mid-term exams and not for the final. Questions for the exams will be similar to submitted homework problems and to problems in the in-class activities.

You will be provided with a TI 30X IIS or similar calculator for use during exams. If you have a similar calculator to use as an alternate, it must be checked and approved by the instructor **before** the exam. No other electronic devices are allowed during exams. **NO CELL PHONES ARE ALLOWED DURING EXAMS.** You will not be allowed to use a cell phone as a calculator during the exams or have your cell phone available.

The **approximate** distribution (and estimated midterm exam dates) and number of points are:

Course component	Point value		Date
Regular homework (23 @ 2 pts. each)	46 points	17%	See schedule.
Lab activities (12 @ 4 pts. Each)	48 points	17%	See schedule.
Paper draft and comments	4 points	2%	Dec. 2
Paper and Presentation	20 points	7%	Dec. 9
Midterm I exam	40 points	14%	Oct. 7 (retake 10/11)
Midterm II exam	40 points	14%	Nov. 11 (retake 11/15)
Final Exam	80 points	29%	Dec. 16
Total points =	278 points		

I reserve the right to adjust grades slightly based on class participation. There may be a few extra credit opportunities posted on D2L and other occasional opportunities for extra credit may arise. Any extra credit is limited to 10 points.

In the event of university closure (for example due to flu), I will attempt to post relevant in-class information on D2L. In such an event, group discussions would occur on-line in the D2L forum area. Homework would be submitted to the D2L dropbox.

D2L Grade book: Grades (exams, papers, and the homework total) will be posted on D2L as a **courtesy** and are for your information so that you can check that all your items have been accounted for. The D2L grade book is not the definitive score as transcription errors can occur, but it should match my personal grade book. Please inform me if you notice any errors. The homework and extra-credit totals will only be occasionally updated; I will try to update the grades at other times if requested.

The University of Wisconsin-Whitewater is dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University Sponsored Events. (For details please refer to the Undergraduate and Graduate Timetables; the "Rights and Responsibilities" section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the Student Academic Disciplinary Procedures" [UWS Chapter 14]; and the "Student Nonacademic Disciplinary Procedures " [UWS Chapter 17]).

Updated on July 15th, 2013

EXAMINATION SCHEDULE FALL TERM 2013

All instructional staff are expected to meet with their on-campus and off-campus classes at the times scheduled for the final examination period. The final examination period may be used to administer course examination or as a regular period of instruction. Exception to meeting classes during the examination period requires specific written approval in advance from the college dean.

Courses meeting four or five periods a week, i.e. MTWTF at 7:45 or a combination of the MWTF vs TR, pattern may use either the MWTF or TR period for the exam, whichever is most convenient for all concerned. EXAMINATIONS IN OFF-CAMPUS EVENING CLASSES ARE SCHEDULED FOR THE REGULAR CLASS MEETING TIME THAT FALLS DURING THE EXAMINATION WEEK THAT BEGINS THURSDAY, DECEMBER 12.

FINAL EXAMINATION POLICY

All comprehensive final examinations shall be administered at the prescribed time during the final examination period. For those classes where there is no final examination, the time prescribed during the final examination period shall be used as a regular class meeting.

No student shall be required to take more than two comprehensive final examinations on the same day. Any student with more than two comprehensive final examinations scheduled on the same day who wants to reschedule the excessive examination(s) will try to make arrangements with the instructors involved. If the student and instructors are unable to reach mutual agreement about alternate arrangements, the student must notify the Registrar by Friday, October 18. The Registrar shall arrange times as necessary with instructors involved and shall notify the student of the arrangements by Monday, November 25.

This policy covers only comprehensive final examinations given during the final examination period.

Thursday, December 12, 2013

7:45-4:00 p.m. Study Day
4:00-6:00 pm TR classes beginning between 3:35-5:00 pm
6:15-8:15 p.m. Thursday evening classes beginning 5:05 p.m. or later

Friday, December 13, 2013

7:45-9:45 a.m. MWTF classes beginning between 8:50-9:50 a.m.
10:00-12 Noon MWTF classes beginning between 11:00-12:00 p.m.
1:00-3:00 p.m. MWTF classes beginning between 12:05-1:05 p.m.
3:15-5:15 p.m. MWTF classes beginning between 2:15-3:15 p.m.

Monday, December 16, 2013

7:45-9:45 a.m. MWTF classes beginning between 7:45-8:45 a.m.
10:00-12 Noon MWTF classes beginning between 9:55-10:55 a.m.
1:00-3:00 p.m. MWTF classes beginning between 1:10-2:10 p.m.
3:15-5:15 p.m. MWTF classes beginning between 3:20-4:20 p.m.
6:00-8:00 p.m. Monday evening classes beginning 4:25 p.m. or later

Tuesday, December 17, 2013

7:45-9:45 a.m. TR classes beginning between 9:30-10:55 a.m.
10:00-12 Noon TR classes beginning between 11:00-12:25 p.m.
1:00-3:00 p.m. TR classes beginning between 12:30-1:55 p.m.
3:15-5:15 p.m. TR classes beginning between 2:00-3:25 p.m.
6:00-8:00 p.m. Tuesday evening classes beginning 5:05 p.m. or later

Wednesday, December 18, 2013

7:45-9:45 a.m. TR classes beginning between 8:00-9:25 a.m.
10:00-12 Noon *Exam time available for make-up exams or for those classes offered at non-standard class times
1:00-3:00 p.m. not covered by the exam schedule
3:15-5:15 p.m. Wednesday evening classes beginning 4:25 p.m. or later
6:00-8:00 p.m.

Thursday, December 19, 2013

7:45-9:45 a.m. *Exam times available for those classes offered at non-standard class times
10:00-12 Noon not covered by the exam schedule
1:00-3:00 p.m.
3:15-5:15 p.m.

- Final examinations for web-based classes are scheduled during finals week at the discretion of the instructor.
- Courses meeting four or five periods a week, i.e. MTWTF, may use either the MWTF or TR period for the exam, whichever is most convenient for all concerned.
- Classes scheduled MW, MF, or WF are to follow the MWTF exam times.
- Examinations in off-campus evening classes are scheduled for the regular class meeting time that falls during the examination week that begins Thursday, December 12.
- Classes offered at non-standard class times do not have designated final examination periods. Instructors are to make arrangements to administer examinations during the Wednesday (10:00 am – 5:15 pm) and Thursday (7:45 am – 5:15 pm) exam times

FINAL GRADES DUE IN WINS BY MONDAY, DECEMBER 23 - 4:00 p.m.