

Instructor:	Hongbo Joshua Yang Office: REIC 110; E-mail: hyang20@alaska.edu
Time:	Lectures: Mondays, Wednesdays, and Fridays, 9:15am-10:15am
Head TA for lab:	Drew Coffin, dacoffin@alaska.edu
Place:	Lectures: REIC 201; Labs: REIC 258
Office Hours:	Mondays, Wednesdays, and Fridays 10:15am-11:15am, or by appointment. Additionally, a help room (REIC 122) will be staffed at various times (the schedule is posted on REIC 122 door) to answer homework related questions.
Credits:	4 credits, 3 hours/week of lecture and 3 hours/week of lab
Required Text Book:	Physics: Principles with Applications , Douglas C. Giancoli, 7th Edition, ©2014 Pearson ISBN 9780321625922
Course Description	College Physics II (PHYS 104) is a very fast paced survey course which will cover chapters 16-33 in the text. We will begin with Electricity & Magnetism (chap. 16-22), Optics (chap. 23-25), and an introduction to Modern Physics (chap. 26-33). Modern Physics Topics covered are: Special Relativity, an introduction to Quantum Theory, Nuclear Physics, Elementary Particles and Cosmology.

Grading Policy:

Homework	15%
Lab	20%
Quiz	10%
Midterm 1	15%
Midterm 2	15%
<u>Final</u>	<u>25%</u>
Total	100%

The final grading for this course will be based on a curve, the average of which is usually taken to be the break-point of letter grade B- and C+, and the standard deviation of the grade point distribution will separate subsequent letter grades.

Homework:

On the average, 8-12 problems will be assigned each week on Fridays. The homework will be due by 9:15 AM the following Friday. There will be a designated dropbox for homework for PHYS 104X inside physics office (REIC 102). NO LATE HOMEWORK WILL BE ACCEPTED. NO EXCEPTIONS (barring emergencies and extreme situations). Group work is encouraged for solving problems, and for additional help with the homework the students are most welcome to consult the instructor during the office hour or other time by prior appointment. Any homework you submit should reflect your own best effort. Copying of homework is absolutely not acceptable and will result in a grade of ZERO for the assignment.

Quizzes:

6 - 8 short quizzes will be given in class during the semester. They will be closed book and no calculators allowed (or needed). All difficult formulas needed will be given and the quiz will be similar to some of the recent homework or topics covered in class.

Exams:

There will be **two** midterms (Feb 19 and Mar 26, 9:15-10:15 AM, REIC 201) and a final comprehensive exam (May 4, 8-10 AM, REIC 201). The first midterm will test the material covered in the first 5 weeks, and the second will test the material covered in weeks 6-10. The final will include material covered in chapters 16-33, with more weight on material covered after the second midterm.

NO MAKE-UP QUIZZES OR EXAMS WILL BE GIVEN.

If the student must miss a quiz or an exam, under rare circumstances where the student has a legitimate reason, the student must notify the instructor that the exam will be missed and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc., clearly stating the date AND time of the mitigating problem. If these conditions are met, the score on the comprehensive final exam will be substituted for the quiz or exam the student missed. Otherwise, a ZERO score will be assigned for the missed quiz or exam. In the event the Final Exam is not taken, under rare circumstances where the student has a legitimate reason for missing the final exam, a makeup exam will be administered.

Laboratory:

The laboratory is an integral part of this course, and each student must register for and attend the lab section and perform all labs that are listed in this handout. All labs and reports must be completed. Every effort must be made to make up a lab during the same week if possible. Last week of the semester would be set aside for makeup lab. Lab reports must be turned in on time. **A PASSING GRADE IN THE LAB IS REQUIRED TO PASS THE COURSE.** Questions about the lab should be directed to your TA.

Student Code of Conduct:

You are expected to submit work that is your own and properly acknowledge the work of others. You are responsible for understanding and adhering to the Student Code of Conduct that is printed in the UAF Course Catalog. Abide by it. Violations of the Code will be reported to the Dean of Students.

Disabilities Services:

If applicable, it is your responsibility to arrange for these services. The UAF Center for Health and Counseling provides services for UAF students with disabilities to ensure equal access to educational opportunities. The Center's Disability Services Program ensures compliance with §504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. If you believe you are eligible for 504 and/or ADA accommodations, please contact them at 474-7043 (WHIT 203).

General Advice:

Physics is not something you read and memorize, rather it is something you learn how to do. Try the following study procedure:

1. Read the chapter prior to lecture, so that you will know what it's about.
2. Listen carefully to the lecture and take notes.
3. This is crucial: Do not go back and read and re-read the chapter until you "understand it." Rather, start working problems, going back through the chapter to clarify points as they come up. I suggest you try to answer all "Checkpoint" problems in the text and the questions at the end of the chapter. If you understand these, you've probably understood the salient points of the chapter.
4. Think! Don't simply try to fit the problems into the form of another problem, think through the problem first.
5. Start your homework on day one so that you have ample time to think about the questions and get the help you need.

Tentative Weekly Schedule			
Week	Date	Lecture Subject	Homework
1	W Jan 17	Syllabus/Introduction to Physics (Review of 103)	1
	F Jan 19	Ch16: sec 1-4	1
2	M Jan 22	Ch16: sec 5-9	2
	W Jan 24	Ch17: sec 1-5	3
	F Jan 26	Ch17: sec 7-10	4 Homework 1 is Due
3	M Jan 29	Ch18: sec 1-4	5
	W Jan 31	Ch18: sec 5-7 (Quiz 1)	6
	F Feb 2	Ch19: sec 1-4	7 Homework 2 is Due
4	M Feb 5	Ch19: sec 5-8	8
	W Feb 7	Ch20: sec1-5	9
	F Feb 9	Ch20: sec 6-10	10 Homework 3 is Due
5	M Feb 12	Ch21: sec 1-5 (Quiz 2 Ch 18-20)	11
	W Feb 14	Ch21: sec 6 – Ch22:3	12
	F Feb 16	Ch22: sec 4-7 (Review)	13 Homework 4 is Due
6	M Feb 19	Mid-term Exam 1 (Ch 16-22)	
	W Feb 21	Ch23: sec 1-4	14
	F Feb 23	Ch23: sec 5-8	15 Homework 5 is Due
7	M Feb 26	Ch24: sec 1-5	16
	W Feb 28	Ch24: sec 6-10	17
	F Mar 2	Ch25: sec 1-5 (Quiz 3)	18 Homework 6 is Due
8	M Mar 5	Ch25: sec 6-11	19
	W Mar 7	Ch26: sec 1-6	20
	F Mar 9	Ch26: sec 7-11 (Quiz 4)	21 Homework 7 is Due
9	M Mar 12	Spring Break (no classes)	
	W Mar 14		
	F Mar 16		
10	M Mar 19	Ch27: sec 1-4	22
	W Mar 21	Ch27: sec 6-9	23
	F Mar 23	Ch27: sec 10-13 (Review)	24 Homework 8 is Due
11	M Mar 26	Mid-term Exam 2 (Ch 23-27)	25
	W Mar 28	Ch28: sec 1-5	26
	F Mar 30	Ch28: sec 6-11	Homework 9 is Due
12	M Apr 2	Ch30: sec 1-4	27
	W Apr 4	Ch30: sec 5-8	28
	F Apr 6	Ch30: sec 9-13	29 Homework 10 is Due
13	M Apr 9	Ch31: sec 1-4 (Quiz 5)	30
	W Apr 11	Ch31: sec 5-9	31
	F Apr 13	Ch32: sec 1-4	32 Homework 11 is Due
14	M Apr 16	Ch32: sec 5-8	33
	W Apr 18	Ch32: sec 9-12	34
	F Apr 20	Ch33: sec 1-4 (SpringFest) (Quiz 6)	35 Homework 12 is Due
15	M Apr 23	Ch33: sec 5-8	36
	W Apr 25	Ch33: sec 9-11	37
	F Apr 27	Review	38 Homework 13 is Due
16	M Apr 30	Review	39?
	F May 4	8 – 10 am, Final Exam	