Physics 11000 (8580) Spring 2024 Syllabus - Hunter College of CUNY

Professor: Dr. Yao Chu (Email: yc904@hunter.cuny.edu, for issues of a personal nature only)

Class Time/Room: T/ F 8:30 am – 9:45 am, 01/25/2024 - 5/22/2024, Room: HW714

Office Hours: F 7:25 am – 8:25 am, HN Room 1220A by appointment

Special Dates: First Meeting Fr 01/26/2024, Last Meeting before Final Tu 05/14/2024
No Classes: Fr 03/29/2024, Tu 04/23/2024, Fr 04/26/2024, Tu 04/30/2024

Course Description

Topics include mechanics, fluids, vibration and waves, and heat and thermodynamics. Students are expected to do all the reading assignment before the lecture. Homework problems are assigned through Mastering Physics. It is required that students do all the problems. There is tutoring available at the Physical Science Learning Center in the Library

Textbook

Physics: Principles With Applications 7th Edition, Giancoli

Mathematics Pre-requisite

Algebra, geometry, and trigonometry are prerequisites of Physics 11000.

Participation

Participation is required. You have to be present to participate. In addition to lectures, important information regarding exams, homework, schedule etc. is also communicated during class. It is your responsibility to find out what information is disseminated in class if you miss classes. According to CUNY policy, more than 15% absence is considered excessive absence.

Homework

Homework assignments are assigned via Mastering Physics and are also listed in the weekly schedule

Lab

1. The lab is an essential part of the course, and no grade is given without completion of the lab.
2. The lab is 15% of the total grade.
3. Student must complete a minimum of 8 out of 10 labs to get a lab grade. If a student completes less than 8 labs, he/she will receive a zero for the missing lab(s). (It goes by Lab Policy.)
4. If a student is repeating the course and has completed the lab in a preceding semester, it is still necessary to repeat the lab.

Course grade

Three midterms and a comprehensive final exam, the grading is described in the table below.

Midterm 1*	20%
Midterm 2*	20%
Midterm 3*	20%
Homework	10%
Participation (-1% for each unexcused absence)	10%
Lab	15%
Final exam	25%
Total	100%

***There will be three midterm exams. The exam questions are problem solving and conceptual types. The lowest midterm score or missed midterm will be dropped to accommodate sickness or emergency situations including being tested positive for COVID. No make-up exam will be given under any circumstances!**

The final letter grade will be based on students' relative standing in the class. Curving may be done for the overall total final scores at the instructor's discretion. No curving will be done for individual tests.

Credit/No Credit Grading Option

Students may choose to be graded in this course on a P-NC basis. Students receiving a P will not be permitted to repeat the course, Many programs such as the pre-health programs, biology and chemistry require a letter grade to meet graduation requirements. Before selecting this option, check with your departmental or program adviser and be aware that many colleges, professional schools, and employers may look with disfavor on P-NC grades and may even convert Pass to C or D and No Credit to F for their purposes, as described in the Hunter Catalog.

Academic Integrity

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedure.

Accessibility

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the Office of AccessABILITY located in Room 1214 B East building to secure necessary academic accommodations.

Hunter College does not discriminate against any student on the basis of pregnancy or related conditions. Absences due to medical conditions relating to pregnancy will be excused for as long as deemed medically necessary by a student's doctor and students will be given the opportunity to make up missed work. Students needing assistance can seek accommodations from the Office of AccessABILITY

Sexual Harassment

It is the policy of The City University of New York and Hunter College to prohibit sexual harassment of employees and students. It is a violation of policy for any member of the college community to take action against any individual for reporting sexual harassment.

Hunter College has a sexual harassment panel, appointed by the President, which consists of faculty, staff, and students. The panel is charged with ensuring that the college community is familiar with the sexual harassment policies of Hunter College and the City University. Other responsibilities include investigating reports of sexual harassment and forwarding findings and recommendations to the college President. A member of the faculty, staff, or a student should report sexual harassment occurrences to a member of the Sexual Harassment Panel or to the Dean of Students, and, if required, to the local city police precinct. Reporting information can also be found in college catalogs and schedule of classes.

The entire Hunter College Sexual Harassment Policy can be found on the Human Resources website.

http://www.hunter.cuny.edu/publicsafety/repository/files/Sexual_Assault_PolicyBOTAugust20103.pdf

Materials to be covered (Homework Assignments on Mastering Physics)

Chapter	Omitted Sections	Suggested Problems
1	none	none
2	none	8,11,16,19,21,30,31,36,46 48,53,68,71
3	7	5,9,10,12,13,17,18,48
4	none	7,9,11,16,23,24,27,34,42, 47,50,65
5	4, 6-10	7,8,12,15,17,31,32,68,73
6	2	9,12,19,22,24,25,29,39,40, 41,44,48,69,90
7	7, 9-10	10,11,18,21,29,31,35,39,42, 78
8	9	5,6,8,14,20,22,23,27,29,35, 39,46
9	6,7	1,12,13,14,18,19,27,30
10	11, 13-14	13,14,18,25,26,35,40,50
11	5,6,13-15	5,8,20,22,23,25,30,40,42,52, 55
12	all	
13	10-13	2,7,17,20,25,27,31,37,53,54, 68
14	none	2,6,12,13,14,17,28,30,34,38, 47
15	3, 8-11	1,4,6,7,8,10,13,25,30,39,41

Exam Dates: First Exam (Chap. 2-5) - Friday, February 23, 2024; Second Exam (Chap. 6-9) - Friday, March 22, 2024; Third Exam (Chap. 10-11, 13-14) - Friday, May 3, 2024; Final Exam (Comprehensive, Chap. 2-11, 13-15) - Friday, May 17, 2024 9:00 am – 11:00 am.

The Test Security and Fairness Policies

These policies are designed to give you a standardized, fair, and equitable opportunity and to prevent anyone from gaining an unfair advantage in the examinations. The policies are consistent with those commonly adopted by major nation-wide testing services.

1. Bring your Hunter ID card, your own pencils or pens, erasers, and calculators. **You will not be allowed to borrow or share these tools during examination.**

2. Late arrival - You may be denied taking the text if you are more than five minutes late.

3. Your instructor may reassign or separate your seats.

4. There should be no communication with adjacent students during examination.

If you are found communicating with neighbors for whatever reasons, you will be ejected and receive a zero for the test.

5. Phone and Electronic Device - All devices must be turned off and stored away, and not easily accessible. Prohibited devices include, but are not limited to:

-Cell phones or smartphones

- Watches with internet access.

-Headphones, AirPods or earbuds

-Audio players/recorders, tablets, laptops, notebooks, Google Glass, or any other personal computing devices

-Separate timers of any type

-Cameras or any other photographic equipment

-Any devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content

If you are found in possession of prohibited devices in your hands, on your ears, in the pockets or on the wrists, whether the devices are active or not, you will be ejected and receive a zero for the test.

6. No Restroom trips

Prepare not to use the restroom during the entire length of examination. Go to the restroom right before the examination.

If you must go to the restroom for medical reasons, submit a doctor's note in advance so that a special proctor can be arranged for you.

PHYS 110/111/120/121 Laboratory Policy

(This policy supersedes previous announcements and postings.)

No food and drink is permitted in the laboratory.

The lab manuals will distribute by the instructor.

Do not start the experiment unless the instructor gives you permission to do so.

The lab grade will be based on the average of 8 best lab reports (80%) and a hands-on test (20%). This grade is then reported to your lecturer for inclusion in the final course grade (15% weight factor). If a student completes less than 8 experiments, the missing scores are counted as zero in the average. No Incomplete grade will be given.

The hands-on test will be given at the end of the semester. Each student will be asked to set up an experiment and take some data within 20 minutes to demonstrate his/her knowledge and skills. The experiment will be randomly selected from a list by the instructor at the time of the test. The list of experiments will be announced one week before the test. No partner will be allowed to be present. The test score will be based on successfully setup the experiment, quality of data, and being able to complete the test within the time limit.

For the in-person laboratory, the data sheets must be signed by the instructor at the end of each session. Reports without instructor's signature will not be accepted. The instructor may refuse to sign the data sheets if a student arrives late and misses a part of the experiments.

The list below will give you an idea of the criteria used by your lab instructor in grading your lab report:

1. Quality of measurements. Logical presentation of report contents.
2. Accuracy and correctness of calculations resulting from proper use of data and completion of calculations.
3. Orderly and logical presentation of data in tabular form, where appropriate.
4. Good-looking graphs, easiness to read, good choice of scales and labels.
5. Comparison with theory.
6. Answers to Questions; Conclusions.
7. Clarity, Neatness, Promptness.

The lab reports are due at the next session. The penalty for up to one week late submission is 20%. No report will be accepted after one week.

The schedule of experiments for the semester is posted in the laboratory.