Conceptual Physics II – Spring 2018

Course: Physics 102N 4 credits
Lecture: T, Th 9:30-10:45 Oceanography and Physics (OCNPS) Room 200

Lecturer
Prof L. Weinstein
Office: PSB 2100H
Phone: 683–5803
Email: weinstein@odu.edu
Office Hours: Tuesday and Thursday 11:00–12:00 in PSB 2100H or in the Physics Learning Center, and by appointment (or just drop by)

If you are confused or don’t understand something, get help immediately. You can avoid large problems by getting help early.

Web Page: Blackboard plus some useful information at
http://www.lions.odu.edu/~lweinste/courses/102s06.html

Required: Conceptual Physics, 12th ed (or earlier), by P. Hewitt, Addison Wesley, 2014.
Physics 102 Lab Manual, ODU Physics Dept.
Turning Point ResponseCard RF or RF-LCD (“clicker”) from the bookstore or elsewhere, or the ResponseWare app for your laptop, smartphone or tablet.
Mastering Physics.

Optional: The Cartoon Guide to Physics, by Gonick and Huffman.
Guesstimation, by Weinstein and Adam.
Fear of Physics (or any other book) by Lawrence Krauss.
How Things Work (and other books) by Louis Bloomfield.

Grading: This course is uncurved. Everyone can get an A.
5% – Clicker quizzes and class participation
10% – Homework
15% – Laboratory
32% – 2 Exams, 16% each
38% – Final Exam
Expected grade requirements: A: 90–100, B: 75–89, C: 60–74, D: 50-59. Plusses and minuses will be awarded.

Exams
Tentative dates: Feb 20 and Mar 29
Make-up exams will be given if necessary. If you have to miss a test, contact me as soon as possible.
Closed book exams. Bring a calculator and a one page formula sheet
Final Exam 8:30–11:30 AM, Thursday April 26, 2018, Room 200 OCNPS

Homework: You need to practice to learn anything, from painting to basketball to physics. Doing the homework problems **yourself** helps you learn the material and incidentally helps your grade!

Homework must be turned in masteringphysics.com. Check Mastering Physics frequently for new postings and deadlines.

Mastering Physics course name: Physics102Weinstein2018

Numerical and multiple-choice answers will be graded immediately by Mastering Physics. Exercises with written answers will be graded later by a human. You will be informed when the final homework grades are posted.

Homework is not a test. You are encouraged to work together. However, you may not copy another student’s final or almost-final answers and all explanations must be in your own words.

**Using someone else’s (e.g., published or online) homework solutions is considered cheating. Do NOT google the answers.**

Homework Advice:

Don’t wait until the last day! Do it early if you know you won’t have time close to the deadline. There will be a penalty for homework extensions. Your lowest homework grade will be dropped.

Work out the problem on paper first, before putting answers into Mastering Physics. Check your results to see if the magnitude makes sense. Check your units – no answer is complete without the proper units. Enter all answers with 2–3 significant digits. Mastering Physics will automatically randomize some input values given, so no two students will have the same answer.

Solutions will be available after the assignment is due. Check the solutions to make sure that a) you understand the problem and the solution and b) the grader did not make a mistake.

Laboratory: Oceanography and Physics, Room 140. See Laboratory Schedule for details. Labs start the third week of class.

**Students who fail the laboratory will fail the entire course.**

**Attendance is mandatory.** You will be allowed one (1) unexcused absence or missed lab report during the semester. If you have two or more unexcused absences or missed lab reports, you will fail the entire course.

It is your responsibility to inform your instructor of any absence and to arrange to make up the missed work.

Read the assigned experiment before the lab begins and bring the lab manual and graph paper.

Laboratory reports should be prepared according to the instructions in the Physics 102 Laboratory Manual. Your lab instructor will also discuss the format for your lab reports and the grading procedure.
Extra Credit

There will probably be one or two extra credit projects this semester.
1: The Tidewater Physics Olympics will be held on a Saturday morning from 8:30 to 12:30, date and place TBA. Hundreds of Middle and High School students will compete in fun events like the Penny Barge or the Constant Acceleration Race. Come help judge and earn 6 points on a midterm exam.
2: (if possible) Tour of the Thomas Jefferson National Accelerator Facility in Newport News, VA. Visit the world’s best Nuclear Physics research lab. Time and date TBA. Worth 4 points on a midterm exam.

Physics Learning Center

The Physics Learning Center, located in the second floor lobby of the Physical Sciences Building (over the bridge from OCNPS 200) is a place for you to get together to work on your homework and get help, if needed, from physics faculty and graduate students. No appointment is necessary. It will be staffed all week 9–5.

COURSE SYLLABUS

subject to change

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