

Physics 121 Challenge Exam

Physics 121 challenge exam comes in two parts

It is available in the testing center during the first four weeks of each fall and winter semester. Students may be able to schedule the exam at a different time by contacting the challenge exam administrator using the link below. The test may be attempted only once.

You sign up to take the challenge exam online at challengeexam.byu.edu. You will need to pay a fee. You should receive a Y-message when you are approved to take the test. The test is available in the [testing center](#).

The first part is called the Physics 121 “Pretest”

It is a 50-question multiple-choice test. It takes about 3 hours to complete. There is no time limit for the test. It is comprehensive, meaning that it covers all of the material included in Physics 121. There is a mix of conceptual questions and questions that require a calculator to complete. If you get more than 60% on the first part, you will be allowed to take the second part.

The second part is called the Physics 121 “Challenge Exam”

It is a 5-question long-answer written test. It also takes about 3 hours to complete. There is no time limit for this test. It covers major concepts in the Physics 121 course in depth, with each question having several parts. When you are finished, [email the challenge exam administrator](#) when you have finished the test so your test can be graded.

Your grade

Your grade will be the average of your scores on parts one and two. You can take the two parts on different days, but the first part must be taken before the second one. For processing your grade, you have four options.

1. If you don't like your grade, do nothing and the test will not show up on your transcript and will not influence your grade in PHSCS 121.
2. If you like your grade, you may accept the grade through the official BYU process. The class and grade will appear on your transcript as “Grade by exemption” or something like that and will count in your regular BYU GPA.
3. If you like your grade AND you are currently enrolled in the course, you can have the challenge exam grade count as your semester grade in the class. This will be coordinated by the challenge exam administrator.

Some details

Multiple-choice part: The 50 problems are graded with equal weights. You will need to enter your answers on the “bubble-sheet” provided by the testing center. Some of the questions have clearly labeled answers, like A, B, C, and so forth. But some of the questions need numerical answers from your

calculator. In that case, you will enter just the first significant figure of the numerical answers in SI units. Do not round off. Answer '0' if an answer is exactly zero. Here are a few possible answers with the proper number to be coded:

3265 → 3

69532 → 6 (do not round)

0.00473 → 4 (first significant figure is the first non-zero digit reading from left to right)

Exactly zero → 0

Long-answer part: The long-answer part has 5 questions. They are equally weighted in calculating your score. The first problem is a set of multiple-choice questions. You will need to record your answers and then explain why you think that answer is correct. If you get the right answer, you will get half-credit. If you provide the right explanation, you will get the rest of the credit. Showing your work helps us understand what you are thinking so that we can award partial credit if appropriate. The difficulty level is similar to the difficult multiple-part homework problems in the textbook.

What resources do I have?

The exams (both parts) are closed book except for the information printed on the exam. However, we will provide you with a Physics 121 Math Reference and also a Physics 121 Exam Cover. The two-page math reference contains formulas from algebra, geometry, trigonometry, calculus, mathematical notation, metric prefixes, vectors, physical constants, physical quantities and their units, and conversion factors. The physics 121 exam cover contains the major equations from each chapter in the textbook. These pages are stapled to the back of the exams.

You will find links to the math reference and cover sheet on the Department of Physics and Astronomy website. [Contact the test administrator if you have further questions.](#)