

Guidelines for the Physics Department Comprehensive Exam

August 2007

For those students who started taking exams *after* the summer of 2007 the following guidelines apply.

1. The physics department comprehensive exam will consist of 5 multiple choice exams covering the topics presented in Physics 105, 110, 120, 240 and 250.
2. The exams will be given twice a semester at roughly 2 month intervals during the semesters in which Physics 390 and Physics 391 are offered and at no other times.
3. You must be registered in Physics 390 or Physics 391, have passed both courses, or have explicit written approval from the chair in order to take the exams.
4. Each exam period will be 3 hours long. You may work on any number of the 5 topical exams you want during the exam period. Each of the 5 topical exams will consist of 15 multiple choice questions.
5. You will be given a list of physical constants but you will need to memorize all of the relevant equations needed to take this exam.
6. Please bring something to write with when you take the exam.
7. No calculators are allowed.
8. The exams will be graded in the following way. You get one point for each correctly answered question and no points for questions which are not answered. One quarter of a point will be subtracted for each wrong answer. Since each question has 5 possible answers, statistically speaking, it is worth your while to guess if you can eliminate at least two of the five possible choices.
9. Passing score for a given topic is 7.5. Topical exams may be passed individually in any order you choose. You must pass all 5 topical exams to pass the comprehensive exam.

10. One requirement for obtaining distinction, see *Physics Department Distinction Policy* for details, requires passing all 5 parts of the exam with combined score of at least 50 of the best of the 5 different topical exams while enrolled in Physics 390 and 391. You may retake the exams in order to improve your combined score.

For those students who started taking exams *before* the summer of 2007 the following guidelines apply.

1. The physics department comprehensive exam will be a multiple choice exam covering the topics presented in Physics 105, 110, 120, and 240.
2. The exam will be given at roughly 2 month intervals during the semesters in which Physics 390 and Physics 391 are offered and at no other times.
3. You must be registered in Physics 390, have passed the course, or have explicit written approval from the chair in order to take the exam.
4. The exam will have 60 questions on it and you will have 3 hours to do it. The questions will be evenly distributed among the four courses covered in this exam.
5. You will be given a list of physical constants but you will need to memorize all of the relevant equations needed to take this exam.
6. Please bring something to write with when you take the exam.
7. No calculators are allowed.
8. The exam will be graded in the following way. You get one point for each correctly answered question and no points for questions which are not answered. One quarter of a point will be subtracted for each wrong answer. Since each question has 5 possible answers, statistically speaking, it is worth your while to guess if you can eliminate at least two of the five possible choices.
9. Passing score is 30