Syllabus of Nuclei, Fields and Particles

Phys4263 - Fall 2010

Contact Information

Ignacio Taboada
Office: Boggs 1-62
Phone: (404) 385-7679
Email: ignacio _dot_ taboada _at_ physics _dot_ gatech _dot_ edu

Text

Particle Physics, 3rd Edition. Martin B. and Shaw G.
ISBN 978-0-470-03294-7

Tests and Grading

- Homeworks: 50% of the final grade
- Quiz 1: 15% of the final grade
- Quiz 2: 15% of the final grade
- Final Exam: 20% of the final grade

The quizzes will last 80 minutes and will cover the material presented since the previous test. The final exam will cover all the material studied in the course.

Grading Scale: 90 - 100 = A; 80 - 89 = B; 70 - 79 = C; 60 - 69 = D; 0 - 59 = F. For those taking the course pass/fail, a C or better is considered passing.

Homework grading

Each homework will (typically) be 2 problems. Each homework will be graded over 10 points. So typically each problem will be worth 5 points. Here's my criteria for grading: Minor error -10%. One major error -30%. Two major errors -60%. Better than nothing -80%. Irrelevant answer or no answer -100%. I reserved the authority to deviate from this criteria as the situation merits. The total of 130 points of Homework over the term will be rescaled to match the 50% on the course.

Office Hours

I can meet you at any time. Just email me in advance.

Course Policy

This course will be taught by conventional lecture methods. Lectures will not necessarily cover all of the material on which the student will be tested. The student is responsible for the material indicated by the instructor. Objectives: The objective of this course is for the student to acquire a working knowledge of particle and nuclear physics.

Attendance: Each student should be aware of the regulations that are listed in the student handbook. The class attendance policy, which the Georgia Tech regulations say shall be at the discretion of the instructor, will be as follows: There will be no prescribed maximum number of unexcused absences for this class. However, if it is apparent that lack of attendance at class may be impairing a student's performance in the course, the instructor may require that the student not miss more classes, under the penalty of failing the course.

Problems: Physics is based on math and physics; physics is a problem-solving subject, so to be able to apply the principles of physics, you should work as many problems as possible. Some problems will be turned in for grading. Solutions to the suggested problems will be made available to you after the problems have been turned in. If you have difficulty with problems, ask about them in class and pay attention to the method used by the instructor in solving them.

Homeworks are always due on a class day. Homeworks will not be accepted after the class has begun.

If you miss a test, contact me by telephone or email as soon as possible so that arrangements can be made to take the test prior to the next lecture. If you know in advance of a conflict, the test can usually be given prior to the scheduled time. If you miss a test for a valid reason (i.e., you were too ill to take the test, had a serious family illness, etc.), then you must submit a written statement from the Dean of Students, with supporting documentation, as to the cause of the absence to the instructor on the first day you return to class. If the reason is acceptable, your grade will be determined at the instructors discretion. If you do not submit an acceptable excuse for missing a test, you will receive a 0 for that test. If you miss two tests for any reason whatsoever, you must initiate a conference with the instructor. Failure to do so will result in a 0 for the second test regardless of the reason for the absence. Regulations regarding cheating and general classroom dishonesty will be strictly enforced.

Unexpected Problems: If a snow and/or ice storm (or any other cause for the Institute to close) occurs on a day scheduled for a test, the test will be given on the first day that the class resumes. Check the web pages for information.