

## Goals of Physics 1112

The **first goal** of this physics course is to develop conceptual understanding. In physics 1112, electric and magnetic fields are by far the most important concepts.

The course textbook contains a number of non-quantitative, conceptual problems at the end of each chapter. To meet this first goal it is strongly recommended that you try to work these problems. Solutions to many of these conceptual problems are available on this site. In addition, there will be several take-home quizzes, with problems that concentrate mainly on developing conceptual understanding.

The **second goal** is to use this conceptual understanding in problem solving. This is more than taking an equation and trying to solve the problem. Reasoning is the cornerstone to problem solving and develops from a strong conceptual understanding. With this in mind it is generally desired that you write down your reasoning prior to solving a problem. This philosophy is used routinely in the textbook.

A **third goal** is to develop quantitative preciseness. It is important that students have solid basic math skills.

The written problems and exams will test all of the above three goals.

Finally, basic physics principles are at work all around us. The **fourth goal** is to emphasize this clearly.