# PHYA11H Fall 2018

Life Sciences. It covers fundamental concepts of classical physics and its applications to macroscopic systems in one and three dimensions. It deals with a fewh

problems. Physics is one of the oldest sciences, and in some ways it is the most simple. Physicists start with a big, messy problem and they first simplify it as much as they possibly can. Only then do they try to analyze the situation. They then gradually introduce more complications, one at a time, until they eventually end up with a very complicated model.

By the end of this course you will be able to use basic concepts from physics to explain and predict simple situations. You will also be able to incorporate several concepts in order to explain and predict what will happen to messy problems which approximate real life situations. Finally, you will be able to describe basic concepts from physics and explain how and when they are useful.

## **COREQUISITE:**

MATA29 is a corequisite for PHYA11. If you registered in or have not passed MATA29 your registration in PHYA11 will be cancelled.

## **LECTURES:**

Lectures will be videotaped. Recordings should be available until after the final exam. However, I encourage in-class participation (using Clickers, see below).

Please respect others, including the professor, in the classroom. Turn your cell phones to silent mode. Do not play '

Lectures will be structured assuming that you have read the textbook before coming to lecture.

## **LECTURE NOTES:**

Lecture notes (i.e., slides) will be posted on Quercus. I will do my best to get them posted by the night before each lecture.

#### **COURSE MATERIAL:**

( ) by Knight. Copies are available at the UTSC bookstore. There are a variety of formats (including an e-book). As we will not be using Mastering Physics in PHYA11, you do not need to get a package which includes it. If you get the third edition that should su ce, though page numbers and back of the chapter questions may di er. I will be posting numbers based on the fourth edition.

You do NOT need to purchase a lab manual for this course.

## **OFFICE HOURS:**

TBD. If you cannot make them it will be possible to schedule o ce hours at di erent times. Please setup an appointment via e-mail, and expect it to take a few days (so don't wait until the day before a test to try to visit).

#### E-MAIL:

Medical and other personal issues should be done via e-mail. If I do not reply within 48 hours, you should send me a reminder e-mail as my inbox can get rather full.

## **ASSESSMENT:**

FINAL EXAM: 40% TERM TEST 1: 15% TERM TEST 2: 15%

PRACTICAL OUIZZES: 8% in total

There will be no make-up tests. If you miss the first test for an excusable reason (usually medical) that grade will be added to second term test mark. So if you miss the second term test, that grade will be added to the exam mark