PHYS 124 LEC, TUT 0.50
Modern Physics
An introductory course in modern physics; includes relativity, quantum physics, atomic physics, nuclear physics, particle physics and gravitation.
Prereq: PHYS 111 (minimum grade 70%) or 115 or 121 or ECE 105.
Coreq: PHYS 112 or 122

2013W Session

Instructor
Dr. Robert Mann
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email: mann@astro.uwaterloo.ca
office hours: Mondays/Fridays 10:30-12:00 or as announced in class

Please include the text "phys124" in the subject of any emails

Textbook
The university bookstore stocks "University Physics" by Hugh Young and Roger Freedman, which includes "Mastering Physics" to be used for assignments. We will be working from chapter 13 and chapters 37-44.

Tutorial
Tutorials are held in AL 113 and are scheduled from 13:30-14:20 on Thursdays.

Course Content
Jan 7    Newtonian Gravitation
Jan 14   Special Relativity
Jan 21   General Relativity
Jan 28   Photons
Feb 4    Wave/Particle Duality
Feb 11   Quantum Mechanics
Feb 18   Reading Week
Feb 25   Atomic Structure
Mar 4    Condensed Matter
Mar 11   Nuclear Physics
Mar 18   Particle Physics
Mar 25   Cosmology
Apr 1    Review

Important Dates
Jan 7    Lectures Begin
Jan 28   Drop, Penalty 1 Period begins (no penalty for courses dropped before this date)
Feb 18   Reading Week begins
Mar 15   Drop, Penalty 2 Period begins (WD grade assigned for courses dropped before this date)
Apr 5    Lectures End
Apr 9    Examinations Begin
Apr 21   Examinations End

Assignments
There will be weekly assignments due on Tuesdays at Midnight (late submission will be penalized)
All assignment done electronically using "Mastering Physics", which is included in the Textbook.
You will need to create an account using your student ID and name (follow the instructions in "Mastering Physics"). You will have one week (Jan 7-11) to get it done as well as learn how to use the system.
Assignments will be posted every Friday.

Midterm Tests
There will be one term test on Feb 12, 6-8 PM. If the midterm is missed for legitimate academic reasons the grade will be shifted to the final exam.

Final Exam
There will be a final test at the end of term. There will not be a final scheduled by the registrar.

Assessment is Best of
Assignments 20%
Midterm Test 30%
Final Exam 50%
or
Assignments 15%
Midterm Test 15%
Final Exam 70%