

Physics 215 – “Introductory Quantum Physics”

MR 8:30-9:50 EII 062



Professor: Office hours:	Chris Pritchett (Elliott 215) - pritchett@uvic.ca MR 2:30-3:30pm EII215								
Textbook:	Thornton and Rex – “Modern Physics” [any edition, but 4 th best]								
Web site:	http://www.astro.uvic.ca/~pritchett/Phys215								
Lecture Notes:	On the above web site: <i>print and bring to class.</i>								
Course Level:	Prerequisites: Phys 112; or PHYS 110 and 111; or 120 and 130; or 122 and 125. Pre- or co-requisite: Math 204								
Course Content:	Chapters 1 and 3-6 of Thornton and Rex; also parts of Ch 2 will be referred to.								
Marks:	<table><tr><td>Assignments ^a</td><td>15%</td></tr><tr><td>Midterm Exam(s) ^b + Quizzes</td><td>20%</td></tr><tr><td>Labs ^c</td><td>20%</td></tr><tr><td>Final</td><td>45%</td></tr></table> <p>^a There will “normally” be one assignment per week, due anytime Monday. Late assignments are not accepted.</p> <p>^b A Midterm exam will be held on Feb 25th. Quizzes and an additional midterm <i>may also</i> be scheduled.</p> <p>^c You cannot pass the course without also passing the lab (department regulation; cannot be waived). Labs start week of Jan 4th.</p> <p><i>Note:</i> on exams you are allowed to bring in a “formula sheet” (you can write anything on it, one page, 8.5 x 11 in – one side only for midterms, both sides for final)</p>	Assignments ^a	15%	Midterm Exam(s) ^b + Quizzes	20%	Labs ^c	20%	Final	45%
Assignments ^a	15%								
Midterm Exam(s) ^b + Quizzes	20%								
Labs ^c	20%								
Final	45%								
Grade Conversion:	A+ (90-100%), A (85-89), A- (80-84), B+ (77-79), B (73-76), B- (70-72), C+ (65-69), C (60-64), D (50-59), E (40-49), F (0-39).								
Reference Materials:	Reference books may be held in the Reserve Reading Room (1st floor of the Main Library) for reference.								
Calculators:	On all examinations the only acceptable calculator is the Sharp EL-510R (~\$10 at the Bookstore). DO NOT bring any other calculator to examinations.								
Assignment 0	<i>Access the web site above, and print notes. Join facebook group.</i>								

Miscellaneous

- Content of Course:
 - Ch 1 – History
 - Ch. 2 (part) – Energy and Momentum in Relativistic Astrophysics
 - Ch. 12 (part) – Radioactive Decay
 - Ch 3 – Experimental Basis of Quantum Mechanics
 - Ch 4 – Structure of the Atom
 - Ch 5 – Quantum Mechanics I
 - Ch 6 – Quantum Mechanics II
 - (if time) Ch 7 – Hydrogen Atom


- You may use the 2nd edition of Thornton and Rex as a text, provided that you realize that the problems and examples are different from the 3rd and 4th edition.

- Notes: the online notes do not include many derivations, examples, and detailed calculations; these will be presented in class. You are responsible for adding this mathematical work into your printed notes. The notes are also quite terse, and it is your responsibility to annotate these notes based on the in-class discussion.

- All class announcements will be handled by email. I will use the address that you gave U Vic when you registered.

- On the midterm(s) and final you will be allowed a formula sheet, dimensions TBD.

- If there are quizzes, I may choose to adjust the mark distribution slightly.

-  will be available for this course. Go to U Vic groups and search for Phys 215