## Physics 215 – "Introductory Quantum Physics" MR 8:30-9:50 Ell 162



Professor: Office hours:	Chris Pritchet (Elliott 215) - pritchet@uvic.ca  TBD by doodle poll – you can also email me to make an appointment.
Textbook:	Thornton and Rex – "Modern Physics" [any edition, but 4th best]
Web site:	http://www.astro.uvic.ca/~pritchet/Phys215
Lecture Notes:	On the above web site: print and bring to class.
Course Level:	Prerequisites: Phys 112; or 120 and 130; or 122 and 125. Pre- or co-requisite: Math 200, 201
Course Content:	Chapters 1 and 3-6 of Thornton and Rex; also parts of Ch 2 will be referred to.
Marks:	Assignments a 15% Midterm Exam(s) b 20% Labs c 20% Final 45%  a There will "normally" be one assignment per week, due anytime Monday. Late assignments are not accepted.  B A Midterm exam will be held on Feb 23rd. An additional midterm may be scheduled.  You cannot pass the course without also passing the lab (department regulation; cannot be waived). Labs start week of Jan 5th.  Note: 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)
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	<ol> <li>Access the web site above, and print notes.</li> <li>Fill in doodle poll for office hours (by Fri Jan 9th).</li> </ol>

## 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 2<sup>nd</sup> edition of Thornton and Rex as a text, provided that you realize that the problems and examples are different from the 3<sup>rd</sup> and 4<sup>th</sup> 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.
- You will receive (by email) a "doodle poll" to be used to select office hours for this course. Please fill it in asap (before Jan 9th).
- will be available for this course.