PHY373,  
MWF 9-10 AM, Fall 2013  
Unique Number: 59250

- **Instructor:** Dr. Sonia Paban  
  - **Office:** RLM 9.208A, 471-7773  
  - **e-mail:** paban@physics.utexas.edu  
  - **Class Website:** Blackboard or [http://zippy.ph.utexas.edu/~paban/PHY373-Fall2013](http://zippy.ph.utexas.edu/~paban/PHY373-Fall2013)  
  - **Office Hours:** Tuesday: 11:00 AM -12:15 PM or by appointment.

- **T.A.:**  
  - **Office:**  
  - **e-mail:**  
  - **Office Hours:**

- **Prerequisite:** PHY336K and PHY453. In addition, M340L (Linear Algebra) is highly recommended. Take the online self-assessment test.

- **Text:** *Introduction to Quantum Mechanics*, Second Edition by David J. Griffiths will be the main reference. Other useful references are:
  
  - *Quantum Physics*, Michel Le Bellac  
  - *Quantum Mechanics* by C. Cohen-Tannoudji, B. Diu and F. Laloe  
  - *Quantum Mechanics, 2nd Edition* Richard Robinett  
  - *Principles of Quantum Mechanics* by R. Shankar  
  - *An Introduction to Quantum Physics*, A.P. French and E.F. Taylor

- **Class Etiquette:** I strongly advise you to read the chapter to be covered in class before the lecture. Identifying your questions ahead of the lecture will make this a more productive experience for you. I want to encourage you to ask me questions during the lecture. In turn, I will ask questions as well. These will be mainly conceptual questions to test your understanding.

- This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

- **Homework:** There will be a total of 9 homework assignments.

  - **Problem set distribution:** Problem sets should be downloaded each week from the class web-page or Blackboard.
– **Due Date/Time:** Homework should be turned in each Wednesday at the beginning of class, except on the weeks there is a quiz.

– **Late Homework:** No credit will be given to solutions submitted after the weekly deadline.

– **Solutions:** Solutions to the homework problems will be available on the class web-page after the due date.

– **Thoughts about homework:** Doing homework is very important for developing an understanding of the material and for developing problem solving skills. I strongly encourage collaboration because the best way to test your understanding is to try to explain a concept to others. The best ideas often occur to scientists in discussions with others and being able to collaborate is important almost for any job. However, you have to own the material, so I will ask that everyone turn in a copy of the homework. Construct your own solutions and learn how to write down a good answer. This is part of your training.

• **Quizzes and Final Exam:** There will be midterms during class time on:
  – Friday 10/4
  – Wednesday 10/30
  – Wednesday 12/4

A comprehensive final exam will be given on Monday, December 16, 9:00-12:00 noon. A makeup final examination will be given only in documented cases of illness or emergency. *No make up midterms will be given.*

• **Grading:** The grading policy is intended to compensate for the no make-up policy. The lowest midterm grade will be dropped as will the two lowest homework grades. If you miss a midterm, this will be the grade that is dropped. The same principle applies to homework.

The class-grade will be as follows:

Homework (the seven best grades out of the nine grades) (18%)
Class participation (4%)
Midterms (the two best grades out of three) (48%)
Final (30%)

Final grades will be determined by a class curve. Independent of the class curve, you are assured of getting the following grades if you score at least as high as these cut-offs:
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<thead>
<tr>
<th>Letter Grade</th>
<th>Point Grade</th>
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<tbody>
<tr>
<td>A</td>
<td>94-100</td>
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<tr>
<td>A−</td>
<td>90-93</td>
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<td>B+</td>
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<td>B</td>
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<td>C+</td>
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- **Notice to Students with Disabilities:** You may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Service for Students with Disabilities, 471-6259.

- **Use of e-mail for Official Correspondence with Students:** Changes will be posted on the class website and/or communicated through e-mail, following the University’s official e-mail student notification policy. Students are responsible for keeping the University informed as to changes in their e-mail address. Instructions for updating your e-mail address are available at [http://www.utexas.edu/its/policies/emailnotify.html](http://www.utexas.edu/its/policies/emailnotify.html)

- **Religious Holy Days:** By UT Austin Policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you miss a class, an examination or a homework in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

- **Final Comment:** I hope this class is inspiring and rewarding for you. If during the semester you have any suggestion for how I can improve the course, please let me know.