Introduction: This is the first quarter of a four-quarter introductory calculus based physics sequence. This course is aimed at students majoring in science and engineering. This course will explore concepts in classical mechanics.

**Prerequisites:** Math 20A and concurrent enrollment in Math 20B. No exceptions.

**Course web site:** [http://2a.ucsd.edu](http://2a.ucsd.edu) You will need to access this website throughout the course so bookmark it. It is your responsibility to check it often, certainly the day before quiz. Important announcement and clarifications will be posted here.

**Course email address:** phys2a@physics.ucsd.edu. Pl. use this email address if you have a question for the professor or the TA. Pl. always include your section or class code number in the subject line. Email is checked at least twice a day by the instructor or the TA. If you wish a timely reply, pl. do not send email to vsharma@ucsd.edu

**Instructor:** Vivek Sharma, 3314 Mayer Hall (see [http://maps.ucsd.edu](http://maps.ucsd.edu) for location)
Phone: (858) 534 1943, Office Hours: Mon, Wed 14:00-16:00 hrs, other times and weekend by prior appointment.

**Teaching Assistant:** Matthew Lebourgeois, 2102 Mayer Hall, Email: mlebourgeois@physics.ucsd.edu
Phone: (858) 822 4155, Office hours: Tue: 2 – 3, Thu 11 – 12

**Course Coordinator:** Sharmila Poddar, 116 Urey Hall Annex, email:spoddar@ucsd.edu

**Schedule of Events**

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>Time</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Lecture</td>
<td>11:00-11:50 hrs</td>
<td>WLH2001</td>
<td>Prof. Sharma</td>
</tr>
<tr>
<td>Monday</td>
<td>Problem Solving</td>
<td>15:00-15:50 hrs</td>
<td>PSYNH106</td>
<td>Matthew L.</td>
</tr>
<tr>
<td>Monday</td>
<td>Prof. Office Hour</td>
<td>14:00-16:00 hrs</td>
<td>MH3314</td>
<td>Prof. Sharma</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Weekly Quiz</td>
<td>19:00-19:50 hrs</td>
<td>SOLIS107</td>
<td>Starts Jan 17</td>
</tr>
<tr>
<td>Tuesday</td>
<td>TA Office Hour</td>
<td>14:00-15:00 hrs</td>
<td>MH2101</td>
<td>Matthew L.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Lecture</td>
<td>11:00-11:50 hrs</td>
<td>WLH2001</td>
<td>Prof. Sharma</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Prof. Office Hour</td>
<td>14:00-16:00 hrs</td>
<td>MH3314</td>
<td>Prof. Sharma</td>
</tr>
<tr>
<td>Thursday</td>
<td>TA Office Hour</td>
<td>11:00-12:00 hrs</td>
<td>MH 2101</td>
<td>Matthew L.</td>
</tr>
<tr>
<td>Friday</td>
<td>Lecture</td>
<td>11:00-11:50 hrs</td>
<td>WLH2001</td>
<td>Prof. Sharma</td>
</tr>
<tr>
<td>Friday</td>
<td>Discussion</td>
<td>15:00-15:50 hrs</td>
<td>CENTR212</td>
<td>Matthew L.</td>
</tr>
<tr>
<td>Weekend</td>
<td>Prof. Office Hour</td>
<td>by prior appointment</td>
<td>MH3314</td>
<td>Prof. Sharma</td>
</tr>
</tbody>
</table>
**Textbook:** Custom package for UCSD of University Physics by Young & Freedman available at the bookstore ISBN 0-536-12971-1. You will need to use the (included) access code number to register for “Mastering Physics” homework assignment system.

**Registering for your Course Code #:**

You will need to get yourself a course code number for this class. This, not your UCSD ID #, will be the way we will identify your work in this course. It is your responsibility to ensure that this course code number is displayed in every online homework, quiz and final exam that you take. Failure to include course code number along with any of your work will lead to full loss of the associated score. So the first thing you should enter/write in your homework/quiz or final is your course code number. The last thing you should do before submitting your work is to make sure at least your course code is entered correctly.

Following is the two-step process to obtain your course code number. You will need to be online in order to access the url below and read you incoming email.

1. Submit the required information at the registration page: http://physicscourses.ucsd.edu/course_registrations/winter2006/registration.php?sectionid=552638. You will be sent an email by the server (noreply.physics.ucsd.edu).
2. Click on the URL in the email to authenticate your login. In response the server will send you a final email containing your course ID and the password. Use the password to visit the url indicated in the message. You will see a summary of your course information. Registration will open on Tuesday 10th Jan. You must register and obtain your course code by Monday 16th Jan. You will need this code for the first quiz on Tuesday 17th.

**Registering at the Mastering Physics Website:**

1. Write down your three digit course code on a piece of paper. The “course ID” for this section is PHYS2AB.
2. Using your unique masteringphysics access code (that came with your book), register at http://session.masteringphysics.com/myct?productID=22377 At the end of this process you will get a login ID and password to masteringphysics system.
3. Now that you have registered, click on the yellow “log in now” button on the “confirmation and summary” page to log back at the same web location. The first time you login you will need to input two fields: (i) your three digit course code number and (ii) PHYS2AB which is the course ID. You should be in the system now!

Look around and make sure you read the FAQ because it contains information critical to your performance. Next, towards the top left you will find the “assignment list button”. The first assignment there is for you to get familiar with the environment. You will like the way the Mastering Physics system helps you in solving the assigned problems and improve your quiz performance!

**Homework:** Homework will be assigned through the Mastering Physics (MP) web based homework assignment system. You must register yourself at the MP web page (see above). Home work is graded based on your input so *spend some time familiarizing*
yourself with the system. In order to truly understand the course material and do well in the quizzes you must read the book very carefully and spend some time doing the assigned home work problems.

**Quizzes:** Weekly closed book quizzes will be given every Tuesday evening except on the 10th Jan. Quizzes will be multiple-choice. There will be nine quizzes. Your overall quiz grade will be computed from the best six out of nine quizzes and will count 50% towards the final grade. There will be no makeup quiz for any reason. If you anticipate missing two or more quizzes due to unavoidable circumstances pl. take this course another time. You must take the quiz in the section you belong to. It is important to arrive on time. Quiz will not be handed out after any one student has completed her/his quiz and left. Use of cell phone/SMS during quiz is forbidden.

1. You must bring your three digit course code number, a No. 2 pencil and a scantron card (form number X101864-PAR). The scantron cards are sold at the bookstore. Remember no scantron card or pencil = No credit for the quiz!
2. You must write your course code number, course name and present quarter in the space provided. Detailed instruction will be given by the TA at the first quiz.
3. Bring your ID card. Proctors will check IDs to verify student’s identity.
4. You may bring a calculator to the quiz. You may bring a 5x7 cheat-card (writing on both sides ok). You may bring a couple of sheets of blank paper to workout the problems.
5. Recorded grades will be posted by course code number on the course website. If you did not write your course code on the scantron card, your grade will not appear.
6. Answer key to the quiz and solutions will be posted on the website. Any appeal to the grading of quiz should be made in writing to the TA, within one week of the posting of grade for that quiz. You must provide a clear written explanation of the regrade request. Frivolous regrade request will lead to loss of credit.

**Final Exam:** The final exam for this section will be on Thursday March 23, 11:30-14:30 hrs in location to be announced. There will be no make up final exam for any reason.

**Course Grade:** Course grading will be on an absolute scale. The final grade is a combination of quizzes (50%) and online homework (20%), weekly the final exam (30%). is as shown. No exceptions will be made from this scale. If you believe your grade is incorrect, pl. submit a written request detailing why your grade should be readjusted. Your request must be received within one week of the course grade posting on the web.

**Tutorial Center:** We want you to do well in this course. Additional assistance is available free of cost from a bunch of exceptionally talented and friendly physics department tutors manning the Physics tutorial center. They are available every Sunday through Thursday, 15:00-20:00 hrs. Drop by! They will make a difference in your performance. Their website is [http://physics.ucsd.edu/students/courses/tutorialcenter/](http://physics.ucsd.edu/students/courses/tutorialcenter/)
OASIS (http://Oasis.ucsd.edu) may conduct a workshop for PHYS2A course. Contact them for more information.

**Academic Dishonesty:** Pl. read the UCSD policy on integrity of Scholarship at [http://www.ucsd.edu/catalog/0506/front/AcadRegu.html](http://www.ucsd.edu/catalog/0506/front/AcadRegu.html). Do not engage in any activity that involves attempting to receive a grade by means other than your honest effort. UCSD rules will be rigidly enforced. For all quizzes/exams cheating includes, among others: submitting another person’s work as your own for grade consideration, any alteration for reconsideration, copying from another student, and the use of any unauthorized materials during the exam.

**Add/Drop procedure:** Use Tritonlink to add/change/drop, drop from waitlist.
- Last day to add a class: Friday, January 20
- Last day to drop a class w/o a W and change grade option: Friday, February 3
- Last day to drop a class w/o an F: Friday, March 10

**HOW TO DO WELL IN THIS COURSE**

1. This is a hard calculus based course and will need commitment of your time. If you are overextended this quarter, please consider taking this course another time. This course is different from an AP Physics course you might have taken. Don’t be lulled into a false sense of bliss.
2. Your textbook is outstanding. It is easy to read and understand, has excellent illustrations and has many example problems. Read the assigned sections **before** and **after** the lecture to get a good grasp for the topic. In his lecture the professor will emphasize the most important concepts in the chapter. You will need to learn the remaining material, if any, yourself.
3. TA’s have been handpicked for their excellence. Be sure to attend the discussion and problem solving sessions. Barring overcrowding you can attend any of the three discussion sessions on Friday and any of the problems solving sessions on Monday.
4. Don’t just accept a concept without understanding the logic. Ask questions during lecture or discussion session. Instructor will be happy to repeat till its clear!
5. The textbook, the lectures, the discussion and problem sessions are all integral to this course. Just following lecture is not enough since I can’t cover everything in the book.
6. Its not about just understanding the concepts. The real bottom line is **your problem solving ability**. So attempt the homework problems before Monday’s problem session. Do as many end-of-chapter problems as you can.
7. Do not memorize homework problems for the quiz. It’s a waste of time.
8. Check the class web page often and certainly before quiz day. Don’t miss the first few quizzes, they are easier.
9. The quarter goes by quickly; don’t leave everything for the last week!!
10. Don’t hesitate to show up for Instructor or TA’s office hours (they don’t bite!)

*GOOD LUCK!*