B. Grinstein

DEPARTMENT OF PHYSICS

Physics 2B Physics — Electricity and Magnetism Section A, ID 653673

WEB: http://physics.ucsd.edu/students/courses/spring2009/physics2ba/ **INSTRUCTOR:** Benjamín Grinstein Office: Mayer Hall 5541 Phone: x4-5229 Web: http://einstein.ucsd.edu/~ben email: bgrinstein@ucsd.edu Office Hours: Thursday, 2:30 p.m. – 3:30 p.m. COURSE COORDINATOR: Patti Hey 118 Urev Hall Annex email: plhey@ucsd.edu **TEACHING ASSISTANT:** Kitran Colwell Physics Tutorail Center, MHA2702 email: arbiter_colwell@hotmail.com Office Hours: Wed 3:30 - 4:30 pm, at MHA 2702 COURSE SCHEDULE: Lectures MW 11:00–11:50am WLH 2001 Tu 8:00-8:50am PRICE THEATER Quizzes F 11:00–11:50am WLH 2001 Discussion/Problems W 5:00-5:50pm **YORK 2622** Th 8:00-9:50pm CENTER 119 Final Exam (3 hrs) F (6/12)11:30am – 2:30 pm WLH2001

TEXTBOOK: Physics for Scientists and Engineers: A Strategic Approach, Vol 4 (Chs 26-37), 2nd Edition, by Randall Knight, Addison-Wesley

PHONES, WATCHES, PAGERS: I request the courtesy of turning your phones/pagers to silent mode and turning off the alarms in your watches. I request that you do not engage in phone conversations during class time. During quiz/final exam all cell phones must be turned off.

EMAIL COMMUNICATION: e-mail is sanctioned by the University as the official form of communication. Last minute news and notices will be emailed (and, as time permits, a copy posted on the "announcements" link of the course's web site). FINAL EXAM: The final exam will be Friday, June 12, at 11:30am. Location, tentatively, WLH 2001, to be confirmed. There will be no make-up final. It will not be possible to take the exam at any other time for any reason.

GRADING: Grade is absolute (no curve). A: 0.90 - 1.00, A-: 0.80 - 0.90, B+: 0.75 - 0.80, B: 0.70 - 0.75, B-: 0.65 - 0.70, C+: 0.62 - 0.65, C: 0.58 - 0.62, C-: 0.54 - 0.58. D and F are awarded after more individual scrutiny (the lower end of the range for C- *may* be extended downward).

The grade is the combination of class participation (5%), homework (10%), weekly quizzes (50%) and final exam (35%), OR the final exam (100%), whichever is higher.

REGISTRATION: There are several electronic registration requirements that the student must complete in order to get credit for class participation, homework, quizzes and the final exam. The student is expected to complete all registrations before the second meeting of the course (Tuesday, March 31, 2009). Failure to register properly and on time may result in loss of credit.

First you need a "Quiz ID." This is a three digit number that you will use to identify your work. To this end follow the link "Get a Quiz ID" on the course web-site. Keep this three digit Quiz ID in a safe place, you will need it for quizzes and to register for homework and participation. The next step is to register for MasteringPhsyics, the electronic homework system. Again from the course web-site, follow the link "Instructions for registering for homework." These directions are long so you may want to print them out first. Make sure you enter the "Quiz ID" on the field call "Student ID," DO NOT use your UCSD PID. Finally, set the "ID" field on your transmitter to the "Quiz ID" (directions will be given the first monday class).

QUIZZES: Weekly closed-book quizzes will be given in accordance with the posted "daily planner" (normally every Friday; exceptions will be announced in class and posted under "announcements" on the course web-site). Quizzes will be multiple choice. Answer keys and solutions will be posted on the course web site.

- 1. Get a "Quiz ID" (see "REGISTRATION" above). You will need this number to identify your work. Memorize it or write it down and bring it on quiz/exam day.
- 2. You will have to provide your own scantron card, scantron form No. X101864-PAR (they can be green or red). These are sold at the bookstore for about \$0.15 each. You will need a No.2 pencil to fill in the scantron card. No scantron card or no pencil, no credit for the quiz. You should write you code number, course number and quarter on the space provided. Detailed instructions will be given by the proctor.
- 3. You must have a current, valid picture ID. Proctors will randomly check IDs to verify the name on scantron cards.
- 4. You may bring a calculator to the quiz (but not a laptop computer). You may bring a cheat-card: must be a 5×8 (maximum size) handwritten card (both sides OK). You may bring a couple of pieces of blank paper on which to work out the problems.
- 5. Recorded grades will be posted by "Quiz ID" on the course web site.

- 6. Any appeal to the grading of quizzes should be made in writing to the teaching assistant, within one week of the posting of the grades for that quiz. You must provide a written explanation as to why you are appealing the grade (be specific).
- 7. Your overall quiz grades will be computed as the average of the grades of the individual quizzes after dropping the worst two scores. Two of the quizzes can therefore be used for absences without penalty. Therefore **there will be no make-up quizzes**. If you anticipate missing more than two quizzes due to unavoidable circumstances talk to the Instructor (you may consider dropping the course).
- 8. Use of cell phones or any devices that connect wirelessly to the internet during quizzes is strictly forbidden. Cell phones and wireless devices must remain off during the quiz.
- 9. Please be on time. Quizzes will not be handed out after any one student has completed his/her quiz and left.

HOMEWORK:

- 1. Homework will be assigned through the MasteringPhysics web based system. You must register (see "REGISTRATION" above).
- 2. Assignments are normally due every Friday at 11:00am.
- 3. Assigned homework is graded. It counts for 10% of the course grade. The grading policies are spelled out in great detail on the Matering Physics web-site. Please take a moment to read them carefully.
- 4. Assigned homework problems are on average much more difficult than quiz and exam problems. This is by design. It's like medicine, you don't like it but it does you good. Don't complain.
- 5. Homework is personal. Those found to be cheating will be referred to the Office on Academic Integrity, and disciplinary actions will be requested. You can discuss a problem with other students, the TA or the instructor, but you have to complete the solution and submit the problem individually, privately.
- 6. Submitting answers on the web-based homework system on an account other than your primary account constitutes cheating.

Moreover, beyond assigned homework, answering the questions, doing the exercises and solving the problems at the end of each chapter of the textbook will be extremely useful for understanding the material assigned or covered in lecture. Solutions to the end of chapter problems can be found in the Student Solutions Manual.

PARTICIPATION: Will be determined by use of electronic interactive system, a.k.a. clickers (see cicker instructions posted on the course web site):

- 1. Credit is earned by answering each posed question. There is no penalty for giving wrong answers, but you will benefit from at least trying to give the correct answer!
- 2. Participation credit is pro-rated to 80% of the total number of participation opportunities (not to exceed 100% credit). That is, if you click, say, 60% of the possible opportunities, you get 60/80=75% of the credit, or 75%*5%=3.75% towards the course grade. This policy is designed so that you are not penalized for an occasional malfunction of your transmitter, running out of batteries, oversleeping, etc, but by the same token no adjustments to credit are made on the basis of transmitter malfunction, low batteries, oversleeping, etc.

- 3. You must set you transmitter's "ID" to your three digit "Quiz ID." Directions will be given in class (first class, Monday, Marh 30, 2009).
- 4. You cannot use more than one clicker at a time (that is, you cannot bring to class the clicker of your friend that is missing the class). You can only click with a transmitter registered on your name. You cannot have someone else click in your stead.

AUTOMATIC OPT-OUT FROM PARTICIPATION: If at the end of the course you have less than 10% participation credit your grade will be computed as above except that the final exam will be worth 40% of the grade, instead of 35%, making up for the participation credit. Keep this in mind if you do not want to come to class, or you do not want to purchase a transmitter, or you do not want to "participate" in class.

WHINING: The course grade is determined by the formula above. Frivolous appeals will be penalized. However, if you are convinced your grade is incorrect you may submit a request, in writing, detailing why your grade should be adjusted. Appeals denied on the basis that there is no basis for the appeal (a.k.a. frivolous appeals) will be penalized by 5 percentage points (off the course grade). Appeals must be received by the course instructor no later than 24 hours after the corresponding quiz/final grades are posted on the web.

ADDITIONAL HELP:

Physics Tutorial Center: Additional help can be obtained from Physics Department tutors, available every Sunday through Thursday, 3pm–8pm, at Mayer Hall Annex 2702, starting the second week of class.

OASIS: Oasis may conduct a workshop for PHY-2B. Check with OASIS for more information. See http://oasis.ucsd.edu/

Office hours: You can also get help from the Instructor or the TA. See their scheduled office hours at the top of this syllabus.

WHOM TO SEE:

Sharmila Poddar, spoddar@physics.ucsd.edu, 116 Urey Hall Annex, Physics Dept. Student Affairs Office, if you have any trouble using StudentLink/WebReg to add/change/drop, drop from wait-lists, have any questions about adding or dropping the course or to get appropriate authorization for such actions.

The *Teaching Assistant* if you have questions relating to problem solving methods or grades received.

The *Instructor* if you have basic questions about the subject matter, or if you have administrative problems.

ACADEMIC DISHONESTY: Please read the UCSD *Policy on Integrity of Scholarship*, in the section on *Academic Regulations* of the UCSD General Catalog. The summary states "Students: Complete the course in compliance with the instructor's standards. Do not engage in any activity that involves attempting to receive a grade by means other than honest effort. Complete all academic work assigned, without unauthorized aid of any kind." These 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.