J Charles Hicks

DEPARTMENT OF PHYSICS

Fall 07

Physics 2A – Mechanics

WEB:	http://physics.ucsd.edu/students/courses/fall2007
INSTRUCTOR:	Charles Hicks Office: 4114 Mayer Email: jchicks@physics.ucsd.edu Office Hours: Thursdays 09:00-10:00 Mayer 4114
COURSE COORDINATOR:	Patti Hey 1138 Urey Hall Addition Phone: x21468
TEACHING ASSISTANT:	Casey Conger Office: 2106 Mayer Email: caconger@physics.ucsd.edu Office Hours: Monday 1:00-2:00

LECTURES:	MW	11:00-11:50 AM	WLH 2005
	Tu	8:00-8:50 PM	LEKKN Aud (HSS 2250)
QUIZZES:	F	11:00-11:50 PM	WLH 2005
DISCUSSION SESSION:	W	4:00-4:50 PM	WLH 2005
PROBLEM SESSION:	Th	7:00-8:50	WLH 2005

Discussion sessions are informal classes intended for you to ask questions and receive answers about material covered in lectures. You are strongly encouraged to participate.

FINAL EXAM: Tuesday, December 11, 11:30AM-2:30PM (TBA)

GRADING: The quizzes will comprise 70% of your final score. The final will make up the remaining 30%. There will be a curve. Often the natural breaks in the distribution determine the final grade with a typical average being a B-.

TEXT: “Physics for Scientists and Engineers” by Richard Wolfson and Jay M. Pasachoff, ISBN 0536-17017-7

HOMEWORK: Due to the number of students, the homework will not be graded. A list of suggested problems from each chapter will be posted on the course website. Questions on the quizzes

and final exam will resemble the homework problems, I personally feel that solving problems is the only way to really learn the concepts and techniques required in physics. Hence I strongly encourage you to work through all of the assigned problems as well as additional problems if you feel you need more work in a given area. You are encouraged to address any questions you have concerning the homework problems in the discussion sessions. Additionally you should feel free to bring up these questions during office hours.

Additionally the TA will post the solutions to the assigned problems each week prior to the quizzes on the website.

QUIZZES: Weekly closed-book multiple-choice quizzes will be given each Tuesday evening in accordance with the course outline.

- Calculators are encouraged, computers are NOT allowed.
- Blank paper for calculations is encouraged.
- The best 7 out of 9 quizzes will be used to calculate the 70% of your final grade. There will be NO make up quizzes.

WHOM TO SEE: **Sharmilla Poddar**, 116 Urey Hall Addition, Physics Dept.
Student Affairs Office, if you have any difficulties 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 any problems regarding problem solving methods.
The **instructor** if you have basic questions about the subject matter or grading issues.

ADD/DROP: No add/drop cards will be signed by the instructor or TA. Use StudentLink to add/change/drop/drop from wait-lists.

DEADLINES: Add: October 12, 2007
Drop without a "W" on transcript: October 26, 2007
Drop without an "F" on transcript: November 30, 2007

COURSE OUTLINE

Charles Hicks Physics 2A Fall 2007

LECTURE NUMBER (Start Date)	TOPIC (Chapter)	QUIZ SUBJECT (Date)	ASSIGNED PROBLEMS
1-3 (Sept. 28)	Introduction (1); Linear Motion (2); Vector Description of Motion (3);	Chpts. 1,2,3 (Oct. 5)	Ch. 2:14,18,23,30,36,51,52,59,61, 78 Ch. 3:3,7,8,9,12,15,24,29,43,45, 48,53
4-6 (Oct. 5)	Motion in More Than One Dimension (4);	Chpts. 4 (Oct. 12)	Ch. 4: 4,5,9,17,18,25,28,33,49, 54,63
7-9 (Oct. 12)	Forces and Motion (5); Application of Newton's Laws (6);	Chpts. 5,6 (Oct. 19)	Ch. 5: 3,5,8,11,18,26,35,36,41, 50,67 Ch. 6: 3,7,9,11,12,16,20,25
10-12 (Oct. 19)	Application of Newton's Laws (6); Work, Energy, and Power (7);	Chpts, 6,7 (Oct. 26)	Ch. 6: 35,36,37,46,51,54,57 Ch. 7: 3,6,7,10,14,19,22,27,31, 35,42,43,48,49,56,57,74,75
13-15 (Oct. 26)	Conservation of Energy (8); Systems of Particles, Center of Mass (10)	Chpts. 8,10 (Nov. 2)	Ch. 8: 2,6,7,8,15,17,26,28, 29,30,35,36 Ch. 10: 1,3,5,8,9,19,21,22,27,29, 37,38,42,48,50,51,63,67
16-18 (Nov. 2)	Review; Impulse, Collisions, and Conservations Laws (11)	Chpts. 11 (Nov. 9)	Ch. 11: 1,3,5,9,13,22,27,30,33, 36,38,40,42,45,48,50,51,53,57,67
19-21 (Nov. 9)	Rotational Motion (12); Angular Momentum (13)	Chpts. 12,13 (Nov. 16)	Ch. 12: 2,5,6,10,14,15,17,20,22, 25,26,34,37,39,42,45,60,63,64, 67,72,74 Ch. 13: 1,4,6,7,9,11,12,18,19,25,28
22-24 (Nov. 16)	Angular Momentum (13); Static Equilibrium (14)	No Quiz, Thanksgiving	Ch. 13: 30,33,37,40,42,43, 56,65 Ch. 14: 2,3,9,11,12,13,16, 17,18,19
25-27 (Nov. 27)	Static Equilibrium (14); Oscillatory Motion (15)	Chpts. 14,15 (Nov. 26)	Ch. 14: 25,27,29,31,34,45, 49,53,60 Ch. 15: 3,5,9,13,19,33,35, 45,69
28-30 (Dec. 4)	Gravitation (9); Review	Chpts. 15, 9 (Dec. 3)	Ch. 9:11,17,45,51