

### Syllabus for ISP209, Spring 2000

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Office hrs: Wed. 3:00 - 5:00; Rm. 224PA anteroom, or by appointment.

#### Lectures:

- Tues. and Thurs., at 2:40-4:00 pm, room 118PA (see Course Schedule). Attendance is required. There are penalties for not attending lecture (see grading policies below).

#### Required Course Pack & Tools:

- The **required Course Pack** will be available **only** the **Student Book Store (SBS) (421 E. Grand River)**: "The Elastic Universe", Spring Semester 2000 (yellow cover); buy a 3-ring binder for it! If the SBS is out, order one at SBS(short wait).
- A calculator with scientific notation may be needed. Algebra is required and trigonometry may be used. Review scientific notation in Ch. 1, and algebra of units in Ch. 3. Metric units of length (m) and mass (kg), are used in most cases.

#### Course Topics:

- Course covers the topics shown in the **Course Schedule** (on the next page).
- Lecture topics are Course Pack chapter titles and **Reading Assignments**. All topics, presented in the Course Pack and lecture, may appear on an exam.

#### Homework (HW):

- There are 14 homework assignments as indicated in the **Course Schedule**.
- Standardized **Homework Answer Sheets** are included at the back of the Course Pack and are due at 2:40 pm in 118PA on the dates shown. Homework (see below) submissions must be on **these standardized sheets (reproductions not accepted)**.

#### Exams, in-class quiz & Grades

- At the beginning of class, students must pick up **ONE (your own)** "bubble sheet", and return it at the end of class. Based on lecture, reading, or homework, at any time during class, quiz questions (multiple choice, 1 point each) may be asked.
- Three **30-minute exams** (30 points each) will be given in lecture on the dates indicated in the Course Schedule. Each exam covers the chapters indicated.
- There is a 2 hr. final exam (for a total of 150 points); see Course Schedule.
- Documented medical (or other) excuses for **ONLY one exam, one quiz, and one late HW assignment** (must be submitted), will be accepted up to one week following the absence; the final exam score will be used to compensate for an *excused* absence.
- HW and grades: HW submitted on time will be graded (unless approved, late HW will not be graded). Homework grades are weighted to contribute a maximum of 30 points to point total. Before final exam on May 2, all homework assignments must be submitted, or an I-grade for the course may be given.
- Grades are "curved" with the mean point score (out of ~300) receiving a 3.0 grade.
- Check the **WEB** site, <http://www.pa.msu.edu/courses/isp209>, for HW, exam, and quiz solutions, scores, and grades.

## ISP209 Schedule Spring 2000

W	D	Date	L	Title	HW Due	Read Ch.
1	T	Jan. 11	1	Introduction to forces		1
	TH	Jan. 13	2	"		
2	T	Jan. 18	3	Spring forces		2
	TH	Jan. 20	4	"	1	
3	T	Jan. 25	5	"		
	TH	Jan. 27	6	Hooke's law	2	3
4	T	Feb. 1	7	"		
	TH	Feb. 3	8	Springs generate forces and store energy	3	4
5	T	Feb. 8	9	" <b>30-min. Exam (Ch.1-3)</b>		
	TH	Feb. 10	10	Springs and gravity	4	5
6	T	Feb. 15	11	"		
	TH	Feb. 17	12	Gravity and the body	5	6
7	T	Feb. 22	13	"		
	TH	Feb. 24	14	Vector forces and torque	6	7
8	T	Feb. 29	15	"		
	TH	Mar. 2	16	Work and energy	7	8
				<b>Spring Break</b>		
9	T	Mar. 14	17	Work and energy (continued)		
	TH	Mar. 16	18	Transfers of energy between $PE$ and $KE$	8	9
10	T	Mar. 21	19	" <b>30-min. Exam (Ch.1-8)</b>		
	TH	Mar. 23	20	Gravitational potential energy	9	10
11	T	Mar. 28	21	"		
	TH	Mar. 30	22	Momentum and energy	10	11
12	T	Apr. 4	23	"		
	TH	Apr. 6	24	Velocity and acceleration	11	12
13	T	Apr. 11	25	"		
	TH	Apr. 13	26	Accelerated environments	12	13
14	T	Apr. 18	27	" <b>30-min. Exam (Ch.1-13)</b>		
	TH	Apr. 20	28	Fundamental forces	13	14
15	T	Apr. 25	29	"		
	TH	Apr. 27	30	Review and Questions	14	
	T	May. 2		<b>Final Exam</b> 3:00 - 5:00 PM , 118PA		
				(Lec. 1-30, Ch. 1-14, HW 1-14)		