

**Syllabus for ISP209, Fall 1999**

Lecturer: Prof. Carl Bromberg, reach me by E-mail: [bromberg@pa.msu.edu](mailto:bromberg@pa.msu.edu),

Office: Rm. 251/255PA, Phone: 353-1809,

Office hrs.: Tues. & Thurs. 12:00 - 1:00; Wed. 2:00 - 4:00 pm, or by appointment.

TA: Tim McCaskey E-mail: [mccaske1@pilot.msu.edu](mailto:mccaske1@pilot.msu.edu), Phone: 355-7033

Office hrs: Wed. 10:15 - 12:15 ; in 224PA anteroom.

Lectures:

- Tues. and Thurs., at 10:20-11:40 pm, in room 118PA (see Course Schedule). Attendance (only twice each week) is required and essential. Not attending lecture will result in penalties (see grading policies below).

Required Course Pack & Tools:

- The **required Course Pack** will be (by Aug. 30) at **only the MSU bookstore (on campus, at the International Center)**: "The Elastic Universe", Fall Semester 1999 (pink cover); buy a 3-ring binder! If the bookstore is out, Course Pack can be ordered (48hr. wait) from the Paper Image, Hanna Plaza, 4790 S. Hagadorn, 351-4321.
- 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 10:20 am in 118PA on the dates shown. Homework (see below) submissions must be on **these standardized sheets**.

Exams, in-class quiz & Grades (Please take alternate seats during a Exam)

- At the beginning of class, students must pick up **ONE** personalized "bubble sheet", and return it at the end of class. During class, based on the reading or homework, quiz questions (multiple choice, 1 point each) may be asked.
- Three **30-minute exams** (30 points each) will be given **at the end** of 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 (in writing) medical (or other) excuses for missing up to **one** exam, **one** quiz, and **one** late HW assignment, 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 assignments submitted on time will be graded (unless approved, late HW will not be graded). Homework grade total will be weighted to contribute a maximum of 30 points to the point total. All homework assignments must be completed, and submitted by Dec. 9, 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.

## ISP209 Schedule Fall 1999

W	D	Date	L	Title	HW Due	Read Ch.
1	T	Aug. 31	1	Introduction to forces		1A-E
	TH	Sept. 2	2	"		
2	T	Sept. 7	3	"		
	TH	Sept. 9	4	Spring forces	1	2A-I
3	T	Sept. 14	5	"		
	TH	Sept. 16	6	Hooke's law	2	3A-H
4	T	Sept. 21	7	"		
	TH	Sept. 23	8	Springs generate forces and store energy	3	4A-D
5	T	Sept. 28	9	" <b>30-min. Exam (Ch.1-3)</b>		
	TH	Sept. 30	10	Springs and gravity	4	5A-E
6	T	Oct. 5	11	"		
	TH	Oct. 7	12	Gravity and the body	5	6A-E
7	T	Oct. 12	13	"		
	TH	Oct. 14	14	Static torque and friction	6	7A-D
8	T	Oct. 19	15	"		
	TH	Oct. 21	16	Work and energy	7	8A-G
9	T	Oct. 26	17	"		
	TH	Oct. 28	18	Transfers of energy between $PE$ and $KE$	8	9 A-E
10	T	Nov. 2	19	" <b>30-min. Exam (Ch.1-8)</b>		
	TH	Nov. 4	20	Gravitational potential energy	9	10 A-F
11	T	Nov. 9	21	"		
	TH	Nov. 11	22	Momentum and energy	10	11 A-D
12	T	Nov. 16	23	"		
	TH	Nov. 18	24	Velocity and acceleration	11	12 A-F
13	T	Nov. 23	25	"		
	TH	Nov. 25		<b>Thanksgiving Holiday</b>		
	T	Nov. 30	26	Accelerated environments	12	13 A-D
14	TH	Dec. 2	27	" <b>30-min. Exam (Ch.1-12)</b>		
	T	Dec. 7	28	Fundamental forces	13	14 A-D
15	TH	Dec. 9	29	"	14	
16	TH	Dec. 16		<b>Final Exam</b> 10:00 - 12:00 PM , 118PA (Lec. 1-29, Ch. 1-14, HW 1-14)		