

**Syllabus for ISP209, Fall 2002**

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Phone: 59200 Ext. 2142(3), Office hrs.: M, W, F; 1:00-4:00.

Lectures:

- Tues. and Thurs., at 10:20 - 11:40 pm, room 1410 BPS (see Course Schedule). Attendance is required; penalties for missing lecture (see grading policies below).

Required Course Pack & Tools:

- The **required Course Pack**, "To Feel a Force ...", Fall Semester 2002 (green HW pages), will be available **by Aug 28, only** at the **Student Book Store (SBS), 421 E. Grand River**; buy a 3-ring binder for it!
- A calculator with scientific notation may be needed. Algebra is required but trigonometry will be avoided. Review scientific notation in Ch. 2, and conversion of units in Ch. 4. 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 follow closely the Course Pack **Reading Assignments**. All topics, presented in the Course Pack or 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 1410 BPS on the dates (Tues., except last) shown. Homework submissions (see below) must be on **these standardized sheets (reproductions not accepted, so BUY THE COURSE PACK)**.

Exams, in-class quizzes & Grades

- At the beginning of class, you may be asked to pick up **ONE (your own)** "bubble sheet", and return it at the end of class. During class, **quiz questions** (multiple choice, 1 point each) may be asked. Questions are based on lecture, reading, or homework.
- Three, **30-minute exams** (20 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 180 points). NOTE: There is NO alternate date or time for the Final Exam. Conflicts should be resolved in your other courses.
- Documented medical (or other) excuses for **one** exam, **one** quiz, and **one late HW assignment (all HW 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. **Late HW** will not be graded. **Before the final exam, all homework assignments must be submitted, or an I-grade for the course may be given.** Homework grades are weighted to contribute a maximum of 30 points to the course point total.
- 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 announcements, HW, exam, and quiz solutions, as well as scores and grades.

**ISP209 Schedule**  
**Fall 2002**

W	D	Date	L	Title	HW Due	Read Ch.
1	T	Aug. 27	1	Introduction to forces		1
	TH	Aug. 29	2	"		
2	T	Sept. 3	3	Elastic forces	1	2
	TH	Sept. 5	4	"		
3	T	Sept. 10	5	Newton's force laws	2	3
	TH	Sept. 12	6	"		
4	T	Sept. 17	7	Hooke's law for ideal springs	3	4
	TH	Sept. 19	8	" and <b>30-min. Exam (Ch.1-3)</b>		
5	T	Sept. 24	9	"	4	
	TH	Sept. 26	10	Springs do not store force		5
6	T	Oct. 1	11	Springs and gravity	5	6
	TH	Oct. 3	12	"		
7	T	Oct. 8	13	Gravity and the body	6	7
	TH	Oct. 10	14	"		
8	T	Oct. 15	15	Static friction	7	8
	TH	Oct. 17	16	Work and energy		9
9	T	Oct. 22	17	"	8	
	TH	Oct. 24	18	" and <b>30-min. Exam (Ch.1-8)</b>		
10	T	Oct. 29	19	Transfers of energy between <i>PE</i> and <i>KE</i>	9	10
	TH	Oct. 31	20	"		
11	T	Nov. 5	21	Gravitational potential energy	10	11
	TH	Nov. 7	22	"		
12	T	Nov. 12	23	Momentum, energy, & conservation laws	11	12
	TH	Nov. 14	24	"		
13	T	Nov. 19	25	Forces changing momentum of 1 mass	12	13
	TH	Nov. 21	26	" and <b>30-min. Exam (Ch.1-12)</b>		
	T	Nov. 26	27	Forces generated by moving environments	13	14
14	TH	Nov. 28		<i>Thanksgiving Holiday</i>		
	T	Dec. 3	28	Forces generated by moving environments		
15	TH	Dec. 5	29	"	14	
16	W	Dec. 11		<b>Final Exam</b> 10:00 - 12:00 PM , 1410 BPS		
				(Lec. 1-29, Ch. 1-14, HW 1-14)		

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