

Portland State University - Department of Physics

Physics 211 – General Physics Part I: Mechanics

SYLLABUS – Fall 2006

Instructor: Bjoern Seipel
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Office hours: **Tuesday and Thursday from 11.30-12.30 at SB2 314**
Text book: *Halliday / Resnick / Walker - 7th edition*, Wiley, ISBN: 0-470-103388 (+ includes **Wiley Plus Access**)
Plus Access) **Also: You can buy Wiley Plus with online textbook access at www.wileyplus.com**
Web: <http://www.physics.pdx.edu/~bseipel/>
Class: **Monday and Wednesday, 4.40pm-6.30pm in SB1 #107**

The course covers the basic concepts of mechanics. **We will cover most of the first 13 chapters of the textbook**

Homework

The homework is meant to **help the students** apply the concepts from the lecture and to review the covered theory. Homework problems will be assigned but will not be graded. The homework should help the students to **prepare for the exams**. Some of the homework problems might also appear in a slightly changed form in the exams. The solutions will be available at PSU's library.

Ch-1: 1, 3, 5, 7, 10, 12, 16, 19, 23, 29, 40, 52 SP 1-4 (p. 7)

Ch-2: Q1 to Q9; 3, 6, 11, 12, 13, 14, 17, 21, 31, 33, 35, 36, 38, 42, 43, 45 46, 48,54, 58, 60, 61, 62, 65, 69, 78, 82, 88, 99, 115. SP 2-1, 2-2.

Ch-3: Q2 to Q8, Q10; 4, 6, 8,15, 19, 20, 25, 26, 27, 35, 37, 39, 42, 43, 48, 59, 61, 66, 70, 71, 74.

Ch-4: Q1 to Q13; 1, 3, 6, 7, 9, 11, 15, 16, 17, 19, 20, 22, 23, 24, 28, 30, 31, 32, 33, 34, 35, 36, 38, 40, 43, 44, 46, 50, 51, 52, 55, 56, 58, 59, 60, 64, 68, 69, 70, 71, 72, 74, 75, 77, 78, 80, 85, 86, 96, 106, 111, 119, 123, 132.

Ch-5: Q1 to Q12; 1, 3, 4, 5, 8, 9, 11, 12, 13, 15, 16, 24, 26, 30, 37, 39, 40, 41, 42, 43, 44, 45, 47, 49, 50, 51, 52, 54, 55, 56, 60, 63, 66, 67, 70, 74, 75, 76, 77, 88, 99, 100.

Ch-6: Q1 to Q11; 1, 4, 7, 8, 10, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 26, 28, 29, 30, 32, 33, 36, 37, 41, 43, 47, 48, 49, 51, 52, 57, 58, 59, 61, 62, 66, 67, 68, 69, 71, 74, 82, 89, 90, 97, 102, 105.

Ch-7: Q1 to Q10; 1, 3, 4, 9, 10, 12, 13, 14, 18, 20, 21, 27, 28, 31, 32, 37, 39, 40, 41, 44, 47, 47, 50, 54, 55,57, 61, 63, 70, 71, 74, 78.

Ch-8: Q1 to Q9; 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 16, 18, 20, 21, 22, 23, 25, 27, 28, 29, 30, 31, 32,33, 34, 36, 37, 40, 41, 44, 45, 49, 50, 51, 51, 57, 59, 60, 61, 62, 63, 64, 66, 67, 71, 82, 89, 95.

Ch-9: Q1 to Q12; , 1, 3, 4, 5, 7, 8, 9, 10, 13, 15, 17, 20, 21, 23, 24, 25, 28, 29, 30, 31, 32, 33, 38, 42, 48, 49, 50, 53, 54, 56, 58, 60, 62, 63, 64, 74, 75, 76, 81, 82, 89, 97, 109, 113, 124, 126, 128, 130, 134.

Ch-10: Q1 to Q10; 1, 2, 7, 8, 13, 14, 18, 19, 22, 27, 28, 29, 34, 36, 38, 39, 40, 41, 47, 48, 51, 52, 53, 55, 56, 58, 59, 60, 62, 65, 67, 69, 71, 72, 76, 77, 78, 81, 83, 84,85, 86, 88, 89, 90, 92, 94, 98, 101, 104, 111, 116, 120.

Ch-11: Q1 to Q10; 1, 3, 4, 6,7, 8, 9, 10, 11, 12, 13, 14, 24, 25, 28, 30, 31, 34, 36, 37, 38, 39, 40, 41, 44, 45, 47, 50, 51, 53, 56, 57, 58, 59, 60, 64, 66, 69, 76, 83, 85, 86, 88, 100.

Ch-12: Q1 to Q10; 1, 2, 5, 7, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 57, 59, 60, 61, 62, 66, 67, 69, 73, 74, 75, 77, 79, 80, 81, 82.

Ch-13: Q1 to Q10; 1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 14, 15, 17, 20, 23, 28, 29, 31, 36, 48, 52, 58, 63, 72, 75, 79, 89, 94, 96, 97, 98, 102, 103.

Quizzes

Besides the homework additional (online) quizzes will be given occasionally. These quizzes can consist of both conceptual questions and problems and will be graded. The quizzes count are worth 30% of your final grade.

Exams

The course grade is based on the quizzes (30%) three exams (70%). **The best exam of each student is worth 40%, and the two other are worth 35% (2nd best) and 25% of the total grade.** The exams can have both conceptual questions and problems. The exams are **non-comprehensive**, but exam 2 and 3 **may include** general concepts already covered in previous exam.

Exam1 Monday October 16th 2006 **4.40pm-6.30pm**

Exam2 Wednesday November 2006 **4.40pm-6.30pm**

Exam3 Monday December 4th 2006 **5.30pm-7.20pm**

Make-up exams will be only given in case of emergencies or illness (with proof) at the end of the term.

One piece of paper is allowed with anything **YOU** want to write on it. Handwritten on both sides. Format: Letter 8.5" x 11"

[Calculator is required!!](#)

Grading Scale

$\geq 90\%$ **A**, 80%-89% **B**, 70%-79% **C**, 60%-69% **D**, $< 59\%$ **F**

Lowest in the range will be a MINUS, highest will be a PLUS

(E.g. 90% = A- and 89% = B+)

For a low scoring exam a curve might be applied