

PHYS 111 HOME PAGE: <http://web.njit.edu/~opyrchal>

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COREQUISITE: Math 111.

COURSE MATERIAL:

Physics for Scientists and Engineers, NJIT PHYS 111, Seventh Edition, by Serway and Jewett.

Physics Laboratory Manual

"I-Clicker Classroom Response System"

NOTE: THE ASSOCIATED LABORATORY COURSE PHYS 111A AND PHYSICS WORKSHOP PHYS 111 W (45 MIN PER WEEK) ARE TO BE TAKEN CONCURRENTLY. YOU MUST REGISTER FOR THE LECTURE/RECITATION COURSE, THE PHYSICS WORKSHOP, AND THE LAB COURSE. WITHDRAWAL FROM EITHER PHYSICS COURSE WILL CAUSE A SIMULTANEOUS WITHDRAWAL FROM ALL OTHER PHYSICS COURSES.

ATTENDANCE: ATTENDANCE AT LECTURES, RECITATION, AND WORKSHOP CLASSES IS MANDATORY.

GRADING: Your final grade in Phys 111 will be composed of the following items:

1) Common Exams Three common exams will be given during the semester. The exam schedule is:

Common Quiz	Friday, October 2	8:30-9:45 a.m.
Schedule	Friday, October 30	8:30-9:45 a.m.
	Friday, November 20	8:30-9:45 a.m.

2) Lecture Quizzes A short quiz will be given during each lecture period.

3) Homework Homework assignments will be posted on-line by University of Texas Homework System (<http://quest.cns.utexas.edu/student/>). The registration procedure will be announced.

4) Final Exam A comprehensive examination of the entire semester's work will be given during Final Exam Period.

Here are the approximate weights to be used for calculating the final grade and the final grade scale:

51 % for all three common exams (17% each)	80% and more - A
30 % for the final exam	70% - 79 % - B, B+
10 % for the total homework grade	55% - 69% - C, C+
9 % for the total lecture quiz grade	50% - 54% - D
	49% and less - F

PHYSICS LEARNING CENTER: The Physics Learning Center, located in 401T, is staffed by faculty and specially trained Teaching Assistants. All Physics students are invited. The time it is open will be announced.

HONOR CODE STATEMENT: As a student at New Jersey Institute of Technology, you are obliged to comply with the provisions of the NJIT Academic Honor Code. Any violations of NJIT Honor Code will be brought to the attention of the Dean of Students.

Any changes to the syllabus will be consulted with students.

November 24 – Classes Follow Thursday Schedule

November 25 – Classes Follow Friday Schedule

November 26 – 29 – Thanksgiving Recess, no classes scheduled

December 10 - Reading Days

December 11 – 17 - Final Exam Period

TOPIC	TEXT STUDIES	RECOMMENDED PROBLEMS	LAB
Week 1 Physics and Measurements Vectors	August 31 – September 6 Chapt.1 Sect.1-6 Chapt. 3 Sect. 1 - 4	pg. 14 - 12, 15, 31 pg. 65 – 18, 24, 27, 43, 61	INTRODUC.
Week 2 Motion in One Dimension	September 7 – September 13 Chapt. 2 Sect. 4-7	pg. 45 – 13, 15, 20, 23, 38, 41, 45	LAB 104
Week 3 Motion in Two Dimensions	September 14 – September 20 Chapt. 4 Sect. 1 - 4	pg. 92 – 8, 13, 15, 18, 57, 59	LAB 109
Week 4 The Laws of Motion	September 21 – September 27 Chapt. 5 Sect. 1-7	pg. 128 – 3, 26, 28, 33, 53, 69	LAB 111
Week 5 Forces of Friction Circular Motion	September 28 – October 4 Chapt. 5 Sect. 8 Chapt. 6 Sect. 1 - 2	pg. 128 - 35, 37, 39, 40 pg. 155 – 1, 5, 8, 11, 14, 15	LAB 112
Week 6 Work, Kinetic Energy	October 5 – October 11 Chapt. 7 Sect 1-5	pg. 189 - 2, 7, 8, 17, 31, 33	LAB 113
Week 7 Conservation of Energy	October 12 – October 18 Chapt. 7 Sect. 6 – 8 Chapt. 8 Sect. 1 - 5	pg. 189 – 38, 51 pg. 218 - 4, 14, 15, 17, 21, 23, 28, 43	LAB 105
Week 8 Linear Momentum and Collision	October 19 – October 25 Chapt. 9 Sect. 1 - 6	pg. 260 - 27, 28, 29, 32, 37, 61	LAB 128
Week 9 Rotation	October 26 – November 1 Chapt. 10 Sect. 1 - 5	pg. 299 - 4, 16, 21, 33	LAB 125
Week 10 Torque, Energy, Rolling	November 2 – November 8 Chapt. 10 Sec. 6 - 9	pg. 299 -34, 38, 44, 47, 48, 53, 55, 61, 65	LAB 126
Week 11 Angular Momentum	November 9 – November 15 Chapt. 11 Sect. 1 - 4	pg. 330 – 3, 12, 22, 25, 33, 37, 50	LAB 127
Week 12 Static Equilibrium	November 16 - November 22 Chap.12 Sec.1-3	pg. 353- 2, 11, 19, 37, 40, 43	LAB 119
Week 13 Universal Gravitation	November 23 – November 25 Chap. 13 Sec.1-6	pg. 382 - 5, 9, 11, 15, 17, 20, 31, 32, 33	LAB 120
Week 14/15 Oscillatory Motion	November 30 – December 9 Chap. 15 Sec. 1 – 5	pg. 441- 2, 3, 7, 9, 11, 17, 19, 24, 29, 56	LAB 121