

PHYSICS 0847, SECTION 003

How Things Work: Physics of Life.

SYLLABUS

Fall 2014 Semester

Class M, W, F 11:00 – 11:50 am, Rm A130

Instructor: Professor Elena Borovitskaya
elenab@temple.edu

Office: Room BA 228

Office Hours: M, W, 9:00 – 10:30 am

Textbook: *Conceptual Physics* by Paul Hewitt, 11th edition, Pearson.

Course Policies:

Examinations there will be two fifty-minute examinations and a two-hour final examination.

- there will be up to ten homework assignments available on Blackboard
Homework - during one week each, starting second week of semester.

Written assignments: Students will carry out one simple experiment involving Physics of everyday phenomena at home or elsewhere and write reports on their results. A list of possible experiments and suggestions for preparing the report may be found at the course web site on Blackboard. All reports should demonstrate not only description of performed experiment and conclusions made, but also the ability of students to perform literacy search. The list of possible experiments is posted on Blackboard. Students are welcome to offer their own experiments, but should first consult with Instructor. Both experimental and writing skills will be evaluated by Instructor. To help students with literacy search, an experienced Librarian will provide a mini-workshop during one of first class meetings. The due date for this Assignment is **October, 15.**

Examination the fifty-minute examinations will be given during the *Wednesday* class meeting of the designated week.

Dates - The final examination will be given during final exam week in accordance with the University's schedule.

Course Grade Final grades will be determined as follows: homework (12%), written assignment (13%); exam #1 (20%), exam #2 (20%) and final exam (30%).

- The minimum overall course grade required for a given letter grade is as follows:

A - 85% A- 75% B+ - 79% B - 70% C+ - 65% C - 60% D+ - 54% D - 50%

Composition of examinations Questions will be not only multiple choice. The final examination will not be cumulative.

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<u>THE WEEK OF</u>	<u>ASSIGNMENTS</u> <u>(Paul Hewitt Conceptual Physics)</u>
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August	25	Scientific World View. Describing Motion: Kinematics
September	2	Explaining Motion: Newton's Laws Homework #1
September	8	Motions in Space: Projectile and Satellite Motion
September	15	Gravity. Homework #2
September	22	Gravity., EXAM #1 Sept. 24
September	29	Momentum. Homework #3
October	6	Energy. Homework #4
October	13	Rotation. Homework #5 Due date for Experiment October, 15.
October	20	Properties of Matter Homework #6
October	27	States of Matter.
November	3	Heat: Thermal Energy. EXAM #2 November 5; Homework #7
November	10	Heat: Available Energy and Entropy Homework #8
November	17	Vibrations and Waves: Sound. Homework #9
November	24	Properties of Light
December	1	Review for Final Exam Homework #10

FINAL EXAM Monday, December 15
10 :30 am – 12:30 pm

Make-up Exam will not be given except for unforeseen situation (illness, emergency etc). Please, notify me prior to the exam and provide me with official note (from a doctor or other officer).

Policy on Cell Phones: Cell phones, pagers and beepers **must be turned off** during class. **No texting** is permitted during the class session.