

PHY 102
(Atoms to Galaxies)

Instructor: Dr. Namrata Tripathi
Office: 301 B, Moulton Hall (MLT)
Office hours: MWF- 9- 11:30 AM, T Th – 11AM-12:30 PM, or by appointment
Email: ntripat@ilstu.edu
Telephone: 309-438-2026
Class Meetings: Room 210 MLT, 12-12:50 PM, each Monday, Wednesday, and Friday
Lab Meetings: Rooms 202 and 204

Course Description: Concepts, history, and methodology of physical ideas such and Objectives: as motion, thermodynamics, electromagnetism, quanta and relativity with interrelationships and applications.

Textbook: The Sciences: An Integrated Approach, Trefil and Hazen, Wiley Publishing, ISBN: 978-1-118-18526-1

Lab Manual: Hands on-Activities for Physics 102 by Ansher & Goderya

Recommended Materials: A calculator that can use scientific notation, and has trigonometric functions and logarithmic functions is needed for classroom.

Attendance: Attendance is important part of educational success. We will cover a lot of material during each class period and some materials will not be the part of textbook. Students who miss class are responsible for the material covered that day. Attendance will not be a calculated part of your grade, but you are responsible for all announcements made in class.

Participation/ Group Work: Every other Friday I will assign each student to a group of 5. Your group will have 30 minutes to solve 15-20 multiple choice questions. Your group will turn in your answers at the end of the time. You will be graded equally on the correctness of your answers. The lowest 2 group- work scores will be dropped

Homework: There are total twelve homework problems in this course. Each one is assigned in each week on Friday on ReggieNet and due on Friday the following week. The homework will be graded automatically on ReggieNet and immediately you will know your score. Late assignment will not be accepted. The lowest 2 homework scores will be dropped

Lab: There are ten required lab activities throughout the semester that account for 20 % of your course grade. Each lab activities must be completed in the computer lab rooms ((MLT 202 and MLT 204) during the week they are scheduled (Given below). You can do the activity anytime during the week when the computer lab is open. Lab hours are 10 AM - 4 PM on Tuesdays, Wednesdays, Thursdays, and Fridays. Lab worksheets should be turned in to the lab monitor on

duty, in the correct tray for your section. After the grader finishes grading them, you may pick them up from the monitor in the lab room. Since lab hours are subject to availability of monitors, be sure to check the notice board outside of room 204 MLT for updates or changes. No makeup labs will be offered, but your 2 lowest lab score will be dropped.

Exams: There will be two exams which will be held on Monday Oct 15th and Friday Nov 9th from 12: 12:50 PM. The format will be 20-25 questions in 50 minutes. Each exam will use the OPSCAN forms and may consist of a combination of some simple math problems, multiple choice, true-false, matching, short answer, or fill in the blank. Exam questions may be similar the homework questions or what was covered in class lecture. I will provide formula sheet for the exam and you have to bring a calculator, and a pencil. Exams will be closed book and notes. No iPads, smartphones or devices will be allowed during exams.

Final Exam: It will be of the same format as the in class exams. The test will be in Moulton Hall 210. The exam will cover all material presented in the course. The test will be close notes. Cheating will result in a zero grade for the exam.

Make-up of Exams: Students will be allowed to make up a missed exam provided the student may provide a valid (to be determined by the instructor), verifiable, pre-approved (by instructor) reason for missing the exam. Students not meeting these criteria will receive a zero for the missed exam.

Examinations and Grading: The course grade will be based on the approximate weighting:

Participation/Group work	15 %
Homework	25%
Laboratory:	20%
Exams:	20%
Final Exam:	20%

If you know you will be absent on exam day, please arrange in advance to take the Exams.

Grading Scale:

The grading scale is as follows:

89% and above	A
75% - 89%	B
60% - 74.9%	C
50% - 59.9%	D
Below 50%	F

Physics 102: Tentative Schedule Spring 2018

Dates		Exams	Lab Activities
Aug 20 – Aug 24	Mechanics		No Lab this Week
Aug 27 – Aug 31	Mechanics		No Lab this Week
Sep 3 – Sep 7	Mechanics		A2-GA -Graphical Analysis
Sep 10 – Sep 14	Waves		A5-CI -Computer Interface
Sep 17 – Sep 21	Waves		A3 FF- Free Fall
Sep 24 – Sep 28	Electricity		No Lab this Week
Oct 1-Oct 5	Electromagnetism		A4-PM-Projectile Motion
Oct 8-Oct 12	Electronics		A6-NSL- Newton's Second Law
Oct 15-Oct 19	Optics		A7- CE- Conservation of Energy
Oct 22-Oct 26	Optics		No Lab this Week
Oct 29-Nov 2	Thermodynamics		B3-CLE -Coulomb's Law of Electrostatics
Nov 5-Nov 9	Thermodynamics		B4-EOL- Electricity and Ohm's Law
Nov 12-Nov 16	Modern Physics		B2-WNL- Wave Nature of Light
Nov 19-Nov 23 (Thanksgiving)	No class		No Lab this Week
Nov 26-Nov 30	Revision		D1-LFA-Light from Atoms
Dec 3- Dec 7	Revision		No Lab this Week
Dec 10- Dec 14	Final Exam		No Laboratory Activities- Final Exam

Academic Integrity. Any incidence of academic dishonesty will be dealt with in accordance with ISU policies.

Students with Disabilities: Any student needing to arrange a reasonable accommodation for a documented disability should contact Disability Concerns at 350 Fell Hall, 309-438-5853, www.disabilityconcerns.ilstu.edu.