

Syllabus  
Atoms to Galaxies, PHY 102  
MWF 8:00-8:50am  
Spring 2017

Instructor:	Dr. Allison Harris Office: Moulton Hall 312C Telephone: 309-438-5246 Email: alharri@ilstu.edu Office Hours: Monday, Wednesday 10-11am Tuesday, Thursday 2:30-3:30pm, or by appointment
Course Description and Objectives:	Concepts, history, and methodology of physical ideas such as motion, thermodynamics, electromagnetism, quanta and relativity with interrelationships and applications.
Textbook: (suggested)	<u>The Sciences: An Integrated Approach</u> , Trefil and Hazen, Wiley Publishing, ISBN: 978-1-118-18526-1
Lab Manual: (required)	<u>Hands on Activities for Physics 102</u> by Ansher & Goderya
Clickers: (required)	This course will use the Turning Point technology system, also known as clickers. Each student should have their own clicker, which can be found in the bookstore. You will need to have your clicker and bring it to class with you each day. I highly recommend you put in new batteries at the start of the semester. You may only use your own clicker; using someone else's clicker in their absence will be considered cheating (see policy below). Your clicker must be registered with the university. To do this, go to <a href="http://reggienet.illinoisstate.edu">http://reggienet.illinoisstate.edu</a> .
Course Components:	
Homework:	Will be assigned in class on a weekly basis on ReggieNet. You can access ReggieNet at <a href="http://reggienet.illinoisstate.edu">http://reggienet.illinoisstate.edu</a> . Homework will typically be assigned on Monday at the end of class and due on Friday at the beginning of class. Your homework will be graded automatically on ReggieNet and you will know your score immediately. You are allowed 2 attempts on each homework assignment. No late assignments will be accepted. The lowest 3 homework scores will be dropped to account for any unforeseen absences.

**Laboratory:** There will be approximately 10 lab activities throughout the semester (see Reggienet for schedule). Each activity must be completed in the computer lab rooms (MLT 202 and MLT 204). You may do the activity at any time during the week when the lab is open (Tuesday through Friday 10am-4pm). Each activity must be completed by the time the lab closes on Friday afternoon, and your worksheet must be turned in when you leave the lab. You must bring your lab manual with you in order to complete the lab. No makeup labs will be offered, but your lowest lab score will be dropped to account for any unforeseen absences. Your laboratory score will be included in the total class grade as shown below.

**Exams:** There will be 5 in-class exams during the semester, plus the final exam. Exams will be given using OPSCAN forms, and are closed notes and closed book. You may use a calculator on the exams, but no other devices (phones, laptops, ipods, etc.) will be allowed during the exams. A formula sheet will be provided. The lowest in-class exam score will be dropped to account for any unforeseen absences. **No early or makeup exams will be given.**

**Tentative Test Dates:**

February 3  
February 24  
March 24  
April 14  
April 28

The final exam will be given at the official time during exam week and will be comprehensive.

**Attendance/ Participation:** Regular and punctual attendance is expected during every class meeting. There will regularly be in-class clicker questions and may occasionally be in-class activities. Correct answers to clicker questions will receive full credit for the question and incorrect answers will receive half-credit. No makeups will be provided for in-class activities. You will be responsible for material missed in your absence, and lecture notes must be obtained from a classmate. The use of cell phones (talking, texting, etc.) during class will not be allowed. Cell phones must remain in your pocket or bag, and must be on silent or powered off during class.

Grading:	Homework	25%
	In-class Clicker Questions	5%
	Lab	15%
	In-Class Exams	40%
	Final Exam	15%

Final letter grades will be based on the following:

89.5 – 100	A
79.5 – 89.4	B
69.5 – 79.4	C
59.5 – 69.4	D
< 59.5	F

**Plagiarism and Cheating:** Academic integrity is an important part of this University and this course. Students are expected to be honest in all academic work, and a student's placement of his or her name on any academic exercise shall be regarded as assurance that the work is the result of the student's own thought, effort, and study. Students who have questions regarding issues of academic dishonesty should refer to the Code of Student Conduct, B1, which outlines unacceptable behaviors in academic matters. In certain circumstances (such as cheating or plagiarism), I may be required to refer a student to Community Rights and Responsibilities for a violation of Illinois State University's Code of Student Conduct.

**Students with Disabilities:** Any student needing to arrange a reasonable accommodation for a documented disability should contact Student Access and Accommodation Services at 350 Fell Hall, 309-438-5853, [StudentAccess.IllinoisState.edu](http://StudentAccess.IllinoisState.edu).

**Tentative Schedule/Topics:** Scientific process  
 Astronomy  
 Kinematics  
 Forces  
 Momentum  
 Projectiles  
 Energy  
 Thermodynamics  
 Electricity and Magnetism  
 Waves  
 Optics  
 Atoms  
 Nuclear physics