Course Syllabus  
Physics 222- Section 005  
Elements of Physics  
Fall 2012

Meeting Time: Wednesday 8am-11am  

Location: Nielson Physics Building 207  

Instructors: Ronald Allen (rallen25@utk.edu)  
Steven Taylor (staylo65@tennessee.edu)  

Office Hours: Ronald Allen- 2:30-3:20 Wednesdays or by appointment.  
Steven Taylor 2:30-3:20 Mondays or by appointment.  
Office: Physics Tutoring Center, Phys. Room 201  
Questions can be sent by email and will usually be responded to within 24 hours.

Textbook: Jay Newman, Physics of the Life Sciences  
This textbook is online at the UT library.  
http://www.springerlink.com/content/978-0-387-77258-5/#section=679089&page=11&locus=0  
You can also find the chapters as PDF files at the Blackboard site of the 222 lecture section,  
under Books.

Class Expectations:

• Before each section meeting student are required to study the web-based material and read the  
  accompanying chapter in the textbook. Students then test their understanding by completing an  
  on-line pre-lab assignment. There will generally be an assessment during class to ensure reading.

• In the section meetings students will work in small groups. They will perform experiments and  
  participate in other activities to further explore the physics concepts introduced in the reading  
  assignments to gain an understanding of how these concepts apply to a wide range of real world  
  problems and situations. Students will discuss the outcomes of the experiments and activities  
  with their group members or the whole section. Students will turn in a lab record for each group  
  at the end of the lab.

Lab Groups: Labs will be performed in groups of three. Initial groups can be chosen by the students but  
may be reassigned by the instructors.

Homework assignments: Read the appropriate material before lab. There may be short quizzes assigned  
as homework, and lab records not completed during class are to be completed and turned in as by  
Midnight on Wednesday.

Extra Credit: None.

Grading:  
Lab records: 80 %  
Quizzes/Assignments: 20 %
The lab overall grade counts for 20% of your final grade in this course!

**Cell Phones/Technology:** Please be respectful. Use of electronic devices to supplement the lab is fine, but use of electronic devices for other purposes is not. While on the computers social networking is not allowed. Repeated abuse will result in being dismissed from that lab and asked to return next week. No credit will be given for such dismissal.

**University Disability Statement:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Disability Services at 865-974-6087 in Hoskins Library to coordinate reasonable accommodations for students with documented disabilities.

**Lab Schedule:**

Discussion and Laboratory:  

<table>
<thead>
<tr>
<th>Topic</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charges and fields</td>
<td>August 28/29</td>
</tr>
<tr>
<td>Equipotentials and EKG measurements</td>
<td>September 4/5</td>
</tr>
<tr>
<td>Circuit elements</td>
<td>September 11/12</td>
</tr>
<tr>
<td>Measuring the charge to mass ratio of the electron</td>
<td>September 18/19</td>
</tr>
</tbody>
</table>

More labs will be posted on the course website throughout the semester.

*Syllabus subject to change. Any changes will be posted on Blackboard and/or emailed to you.