**SYLLABUS FOR *GENERAL PHYSICS - PHYS 203***

**Term**: Spring 2015

**CRN/Section:** 4731

**Location:** S277

**Time:** MWF 9:00-9:50 am

**Text: College Physics 9th ed.,** Hugh Young, ISBN: 9780321749802

**Instructor**

Thomas Wilson, Ph.D.

Office: S153

Phone: (304) 696-2752

E-mail: wilsont@marshall.edu (I generally will not respond to emails however)

**Office Hours**

MWF from 3-4 PM in S153

If you are unable to make these times, I am happy to meet with you at any time. You are free to come by my office or lab (S154), but your chances of finding me are better if you make an appointment. I will be happy to provide hints for how to proceed with the assigned homework.

**Overview**

The course covers the ideas of electromagnetism and optics. My lectures will include material not explicitly described in the text.

**Lecture, Homework, Quizzes, and Peer Instruction**

I will cover in sequence the content of chapter 17-26 with supplementary material as necessary. This is the subject of Maxwell’s Equations. You will be responsible for reading carefully the chapter material at the rate of approximately one chapter per week. Each week, you should also plan on solving 10-12, end-of-chapter problems selected equally among chapter sections. This is the most important responsibility that you will have. Failure to do so will no doubt lead to less than desirable exam scores. I will inform you weekly which Chapter you should read for the following week. In my lectures, I will make use of a small group discussions and associated responses (*Peer Instruction* (PI) to PowerPoint projected questions; the latter are designed to elicit a deeper conceptual understanding. Physics educational research during the past two decades has clearly demonstrated the benefits of this approach. I also hope, depending upon equipment availability, to perform a number of related demonstrations. There is no grade component associated with PI – thus there is no pressure to perform ‘well’, only to enjoy and benefit from this entertaining approach to learning. Some of these clicker questions may however reappear on subsequent exams.

**Required Materials**

**College Physics 9th ed.,** author: Hugh Young, ISBN: 9780321749802. For the “Peer Instruction” (see Lecture below), one will need also EITHER (1) a TurningTechnologies ***ResponseWare*** annual license, if you would like to use your own smart device (i.e., Apple® iPhone, iPad or iPod touch, BlackBerry smartphones, Windows Mobile® devices). A license can be purchased at: http://store.turningtechnologies.com (use “mar1” for the school code). In this case, you will also need to download the *ResponseWare* app onto your mobile device. All of our clicker sessions will use the same *ResponseWare* Session ID: “wilson”, OR (2): a TurningTechnologies ***ResponseCard (RF* or NXT) ‘clicker’** available at the bookstore or also directly from: <http://store.turningtechnologies.com> (use “mar1” for the school code).

**Attendance and Policy**

Attendance at all class meetings with prompt arrival is expected. Cell phones of course should be turned off, if not being used for ResponseWare Peer Instruction. Excused absences will be granted provided I receive written notification from the Office of the Dean of Students.

Excused absences and other University policies are described in detail at: <http://www.marshall.edu/academic-affairs/?page_id=802>). For university-approved excused absences on scheduled exam days, accommodations for a make-up exam can be made. A student who misses an examination without an excused absence will receive a 0% for that exam.

**Exams**

There will be three exams and a final examination, each worth 25% each in the determination of one’s course grade. The exams are closed book and only calculators are allowed during the exams (with no stored formula):

Exam I: Monday, February 9

Exam II: Monday, March 9

Exam III: Monday, April 9

Final Exam: Friday, May 8, 8 am -10 am

**Grades**

Grades are as follows (thresholds given as %):

A 90%, B 80%, C 70%, D 60%, F- below 60%

A request for an incomplete will be approved provided that one has taken two of the first three exams.