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

**Term**: Spring 2018

**CRN/Section:** 4585

**Location:** S277

**Time:** TR 9:30-10:45 am

**Text: College Physics,** Etkina, Gentile and Van Heuvelen, ISBN-13: 978-0-321-71535-7

Email: [wilsont@marshall.edu](mailto:wilsont@marshall.edu) (may not be possible to reply promptly)

**Instructor**

Thomas Wilson, Ph.D.

Office: S153

Phone: (304) 696-2752

**Office Hours**

See *HerdHours* below (MF 1-5 S179)

**Lecture**

I will lecture on the content of chapters 14-24 of the text (excluding chapters 19, 20 presumed to have been covered in PHY201) at the rate of one chapter per week. My lectures may also include include related material not explicitly described in the text. The content will include electricity and magnetism, optics and special relativity. I will typically complete an overview of the theory during the Tuesday lecture, and then finish any explaining outstanding concepts and solve a variety of related problems/applications during the Thursday lecture. Weekly online homework (due one week after being assigned) will list the relevant chapter upon which it is based. Students should read carefully the relevant textbook chapter in synchronization with lecture. This means, except for week one of the semester, students should have read the chapter prior to Tuesday’s lecture. Help yourself - sit as close to the front of class as possible to facilitate good notetaking and interaction. I will do my best to help you succeed. Don’t hesitate to ask questions.

**Online Homework**

We will use **theexpertta.com** website for weekly homework assignments.To register, visit: http://goeta.link/USX50WV-5FC2B7-1KR . Weekly homework assignments will comprise 5% of one’s cumulative grade. The price per semester is $32.50/student.

It is imperative you plan to devote three to five hours weekly on the assigned homework. If you’ve invested this amount of time in solving the homework and you find that you still score less than 60% on the first few homework, you should consider dropping the course.

You may collaborate on homework within reasonable limits (hints may be provided during HerdHours, but I caution you that 90% of the homework should be your own work, otherwise your exam scores will suffer accordingly.

**Attendance and Policy**

Attendance at all class meetings with prompt arrival is expected. 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, your average exam score on other exams (not including the final exam) will be used for the missed exam. A student who misses an examination without an excused absence will receive a 0% for that exam.

**Basic classroom etiquette:** Use the restroom before class if necessary. Unannounced departures are disruptive; if you leave, you will not be allowed to return. Cellphones and computers are not to be used during class. Disruptions during class due to loud conversations will not be tolerated and the parties involved will be asked to leave. This in no way is meant to restrict one from asking questions during lecture – they are encouraged.

**Exams**

There will be three exams scheduled on Tuesdays, and a comprehensive final examination. The exams will be closed book. One should memorize the highlighted formulas/expressions in the chapter summaries at the end of each chapter. Calculators are allowed during the exams (with no stored formula):

Exam I: Tuesday, February 6th

Exam II: Tuesday, March 6th

Exam III: Tuesday, April 3th

Comprehensive Final Exam: TBD from published exam schedule, but tentatively scheduled Tuesday, May 1, 8:00 am -10 am

Cheating on exam will result in a 0%, which in most cases will also result in a grade of F for the course.

**Grades**

Grades are as follows (thresholds given as %) for the various components:

Online homework: 5%

Exams I-III: 20% each

Cumulative Final Exam: 35%

Letter grades will correspond to the following threshold percentages:

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

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



**HERD Hours**

I will also be participating in the Physics Department’s ***‘Herd Hours’***, (developed by Professor McBride) a place where students can come individually, or especially in groups, to *Science 179 from 1-5pm on Mondays* (by me) and 1-5 pm Fridays (Dr. McBride). We can discuss questions you may have about the homework/laboratory questions together in a non-classroom and non-typical-professor-office-hour setting. Simply come by and ask some questions. As described by Professor McBride:

“At ***‘HERD Hours’***, I will always be around to help you at any time if you get stuck, but what I really want to see at ***‘HERD Hours’*** is students helping fellow students, leading each other through peer instruction. Struggling, discussing, conquering the problems, and celebrating with your friends and peers is better than being frustrated by yourself and not making progress on the homework. I encourage you all to work together. When working in groups there are more people around the table with different skill sets and different approaches and ideas to attack the problems. Working together in groups often results in getting the homework done faster with a better understanding of the material and is overall a more memorable experience than spending long frustrated isolated hours struggling on your own.

For your homework (both online and written), always try it yourself first; however, you are encouraged (but not required) to discuss it with your peers for help (‘***HERD Hours’*** provides a great place to accomplish this feat). I encourage students to discuss homework with each other if you arrive at different answers. If you think the answer you got is correct and you are confident in your solution, try and explain it to your fellow students, see what they think. Maybe they solved the problem a different way, arriving at a different answer, encouraging you to review and rethink how you solved the problem. Hopefully this encourages discussion of physics among you and your fellow students and builds your confidence in problem solving and improves your ability to explain your work to others. If you cannot get the required help from your peers, or simply have a question, come see me during office hours, drop by anytime, or make an appointment with me, and/or apply for a tutor. Remember, the number of your peers (N) can vary each semester for your class (N = 20 - 60) and significantly outnumber the number of the professors for your course (N = 1) and they may be more available than your professor to help you outside of normal office hours and ***‘HERD Hours’***.

If office hours, or ‘***HERD Hours’***, is not something you think you will benefit from, there ***are free university tutors available for almost all intro level physics classes***. In fall 2017, there were 3 students supplying a total of 40 hours per week of tutoring services for PHY 211 alone. In Spring 2017, a total of 4 students supplied over 65 hours per week of tutoring services for PHY 211 alone. These same students, in almost all cases, also tutor for 201, 202, 203, 204, and some even tutor for PHY 213. See current tutoring schedule available at: <http://www.marshall.edu/uc/tutoring-services/>. If you seek an individual tutor, stop by the Communications Building, Room 211 and submit a “[Request a Tutor](http://www.marshall.edu/uc/files/2011/04/NeedATutorForm1.pdf)” form (available at: <http://www.marshall.edu/uc/tutoring-services/>). If you have not heard from the tutoring office staff within one week of submitting your form, please call 304-696-6622 or email [tutoring@marshall.edu](mailto:tutoring@marshall.edu). Currently, I have not met these university tutors, so I cannot vouch for them (I am sure they are great); however, I also provide a list of “Dr. SPM Approved Tutors” on my Teaching Homepage that I will vouch for.

Hope to see you at ***‘HERD Hours’***!!!”