# Physics 330, Fall 2014, Course Schedule

<u>Instructor:</u> <u>Dr. Matthew M. Waite</u>, Merion 133, ext: 2573, <u>mwaite@wcupa.edu</u>

The best way to contact me is via e-mail. But, be aware that I will only read and respond to e-mails written in <u>proper English</u>, with correct <u>pronunciation</u>, <u>grammar</u>, <u>spelling</u>, and <u>etiquette</u>. Do not send me any e-mails addressed to "hey" written in text-speak like you're talking to your roommate about meeting up at Barnaby's tonight... I might meet up for happy hour, but I won't answer any questions about class or homework!

<u>Class Meeting:</u> Lecture MW 10-11 am (SSN 191); Lab Tu 9-11 am or Th 9-11 am (MER 118)

Office Hours: TBA, or by appointment.

Course Web Page: D2L

Course information can be found here throughout the semester. The syllabus, homework problem solutions, and other interesting stuff can be found here. Check it periodically!!

The textbook publisher has a CourseSmart e-book version:

 $\underline{http://www.mypearsonstore.com/bookstore/electrical-engineering-principles-applications-9780133116649?xid=PSED}$ 

<u>Text:</u> <u>Electrical Engineering</u>, (6th Ed.) by Allan R. Hambley, Prentice Hall (New Jersey, 2013)

Grading: 3 tests (15% each) 45%
Cumulative Final 20%
Homework 15%
Laboratory 20%



#### Attendance:

You are expected to attend every class period. For unforeseen circumstances, each student will be allowed three (3) unexcused absences.

Excused absences are limited to University-Sanctioned Events (which follow the Excused Absence Policy for University-Sanctioned Events as described in the West Chester University Undergraduate Catalog), and absences due to serious illness or injury (verified by a practicing MD, you must provide me with a phone number), or the death of family members (also to be verified.)

Cell phones and texting are NOT ALLOWED during class. Cell phone use is disruptive to your classmates and to your instructors. Please turn off your phones or put them on <u>silence</u>, tuck them away in your bookbag, purse or European carry-all, and forget about them until after class. If I see anyone texting or using their cell phones during class, I will take 5 points off of the nearest exam grade (that's 5 full points out of 100), and you will be considered "absent" for that day, since you are obviously not mentally present.

#### Exams:

There will be three exams over the course of the semester. These will be given at alternative times during the week in order to allow for extra time. The first will be given after completion of chapters 1-3. This material covers many of the basics and a few new things. The second will be given after completion of chapters 4, 5, 6, and 10. The third will be given after completion of chapters 11, 14, 12 and 13. The final exam will be cumulative, and will include all the digital logic.

### Laboratory:

Just about each week, on either Monday or Thursday afternoon, you will have a laboratory exercise. You will have 2 hours of class period during which you are to get started on the experiment. I will be present during this time to answer any questions you might have and to make sure you get started correctly. If you do not finish the exercise in the allotted time, you are to complete the lab exercise by the following class period. Again, you may come ask me questions during my office hours throughout the week, but you are EXPECTED to stay during your scheduled lab time. If you finish the lab early (which won't happen often) you may spend the rest of the time experimenting with the electronics simulation software. The schedule of labs is included on the schedule that follows at the end of this syllabus.

# **University Policies:**

For questions regarding Academic Dishonesty, the No-Grade Policy, Sexual Harassment, or the Student Code of Conduct, students are encouraged to refer to their major department's handbook, the Undergraduate Course Catalogue, the Rams Eye View, or the University Web Site. Please understand that improper conduct in any of these areas will not be tolerated and may result in immediate ejection from the class.

## **Disability:**

We at West Chester University wish to make accommodations for persons with disabilities. Please make your needs known by contacting the Office of Services for Students with Disabilities at ext. 3217 **and** me at the above listed contact information. Sufficient notice is needed in order to make the accommodations possible. The University and I desire to comply with the ADA of 1990.

## Miscellaneous:

Please make any restroom visits before the class starts, or wait until it ends, the class is only 50 minutes. It is distracting to both the instructor as well as your fellow students when someone gets up and walks out of the classroom during lecture. Only in very rare circumstances will permanent physical damage be done by waiting a few more minutes for class to end... In fact, many doctors claim that waiting up to 2-3 hours is no problem (except for a bit of discomfort) at all. If I go off on a tangent and babble on and on for 2-3 hours, I'll let you get up and take a break... promise.

<u>Schedule:</u> (This schedule is tentative, I will try to follow it as closely as possible!)

Month		Reading	Topic (Lab)	Hmwk	Problems
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Aug.	25	Ch. 1	Intro. & Intro Lab (Intro. Equip. & Techniques)		
	27	Ch. 2	Resistive Circuits		
Sept.	1	Labor Day	No Classes (No Lab)		
	3	Ch. 2	Node-Voltage & Mesh-Loop Methods	1	12, 25, 37, 41, 50, 56, 65, 66, 77
	8	Ch. 3	Thevenin & Norton Circuits (R's & Kirchoff's Laws Lab)		
	10	Ch. 3	Inductors & Capacitors		
	12	(Friday)		2	5, 6, 30, 36, 37, 39, 53, 68, 69, 83
	15	Ch. 4	Transients (Thévenin & Norton Circuits Lab)		
	17	Ch. 4	Transients		
	19	(Friday)		3	10, 26, 27, 36, 44, 49, 62, 67
	21	Ch. 5	Steady-State Sinusoidal Analysis (No		
	24	1, 2, 3	EXAM I (Ch. 1, 2, 3)		
	29	Ch. 5	Steady-State Sinusoidal Analysis (RC Circuits)		
Oct.	1	Ch. 6	Frequency Response, etc.	4	3, 11, 18, 26, 29, 38, 50, 54
	6	None	Fall BREAK (No Lab)		
	8	Ch. 6	Frequency & Bode Plots		
	13	Ch. 10	Diodes (LCR & Resonance)		
	15	Ch. 10	Diodes		
	17	(Friday)		5	4, 16, 22, 28, 40, 47, 51, 53, 85, 86
	20	Ch. 11	Amplifiers (No Lab)		
	22	Ch. 11	Amplifiers		
	24	(Friday)		6	5, 8, 27, 34, 53, 65, 77, 81
	27	Ch. 14	Op. Amps. (Passive Filters)		
	29	4, 5, 6, 10	EXAM II (Ch. 4, 5, 6, 10)		
Nov.	3	Ch. 14	Op. Amps. (Intro. to Op. Amp. Circuits)		
	5	Ch. 14	Op. Amps.	11	5, 11, 13, 67, 74, 75
	10	Ch. 12	FET Transistors (Op. Amp. Circuits- Integrators)		
	12	Ch. 13	BJT Transistors	14	2, 5, 10, 11, 22, 23, 24, 35, 75
	17	Ch. 13	BJT Transistors (Active Filters)		
	19	Ch. 7	Digital Logic		
	24	Ch. 7	Digital Logic	13	7, 10, 42, 51, 62
	26	None	Thanksgiving Break		
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Dec.	1	Ch. 7	Digital Logic (Intro. to Digital Logic)		
	3	11, 14, 12, 13	EXAM III (Ch. 11, 14, 12, 13)		
	8	Ch. 7	Digital Logic (Finish up)	7	15, 16, 29, 34, 36, 47, 59, 66, 84
	<b>33</b>	All of it!!	Final Exam		