

PHY370, Spring '14, Course Syllabus

Instructor: Dr. Matthew M. Waite, Merion 133, 610-436-2573, mwaite@wcupa.edu

Class Meeting: MWF 10:00 am

Office Hours: MWF 9:00 -10:00, TTh 11:00-12:00, 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!!

Text: Mathematical Methods in the Physical Sciences, by Mary L. Boas, J. Wiley & Sons, Inc. (New York, 2006) ISBN: 0-471-19826-9

| | | |
|------------------------|---------------------|-----|
| <u>Grading:</u> | 3 Exams (15%@) | 45% |
| | Cumulative Final | 25% |
| | Homework | 25% |
| | Class Participation | 5% |

Attendance:

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.)

Homework:

Homework is due by 4:00 pm on the due date. At 4:00 pm, the solutions will be posted on the web page. No homework will be accepted late, no exceptions. At the end of the semester, one homework grade will be dropped, so, if you miss one assignment, it's no big deal. But you don't want to make a habit of it, or it could be very damaging to your grade at the end of the semester.

I encourage you to discuss the homework problems together, and to work and learn together, but when you are ready to sit down and write out your solutions, make sure that they are your own solutions.

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.

Exams:

There will be three hourly exams throughout the semester. These hourly exams will focus on the most recently covered lecture and class material, but they should be considered cumulative in the sense that we will be building upon what we have already learned throughout the semester. I DO NOT give make up exams. If you miss an exam, you will receive a ZERO for that exam and it will be recorded as a zero. Only under very special circumstances will there be any change to this policy, and in those cases, exceptions will be made ONLY when I am notified prior to the scheduled exam time of a conflict. If you have ANY questions or concerns about this particular point, please come talk to me and get clarification BEFORE it's too late!

Schedule: (This schedule is tentative, I will try to follow it as closely as possible! But it is likely to change some as the semester proceeds!!)

| Month | Day | Date | Reading | Topic | Hmwk |
|-------|-----|------|---------|----------------------------|---------------|
| Jan. | W | 22 | | Snow Day! | |
| | F | 24 | Ch. 3 | Intro. | |
| | M | 27 | Ch. 3 | Linear Algebra | |
| | W | 29 | Ch. 3 | Linear Algebra | #1 (Th. 4 pm) |
| | F | 31 | Ch. 6 | Linear Algebra | |
| | M | 3 | Ch. 6 | Vector Analysis | |
| | W | 5 | Ch. 6 | Vector Analysis | #2 (Th. 4 pm) |
| | F | 7 | Ch. 6 | Vector Analysis | |
| | M | 10 | Ch. 6 | Vector Analysis | |
| | W | 12 | Ch. 2 | Complex Variables (Basics) | #3 (Th. 4 pm) |
| | F | 14 | Ch. 2 | Complex Variables (Basics) | |
| | M | 17 | Ch. 2 | Complex Variables (Basics) | |
| | W | 19 | Ch. 2 | Complex Variables (Basics) | #4 |
| | F | 21 | EXAM I | Ch. 3, 6 | |
| | M | 24 | Ch. 14 | Complex Functions | |
| | W | 26 | Ch. 14 | Complex Functions | #5 |
| | F | 28 | Ch. 14 | Complex Functions | |
| Mar. | M | 3 | Ch. 14 | Complex Functions | |
| | W | 5 | Ch. 7 | Fourier Series | #6 |
| | F | 7 | Ch. 7 | Fourier Series | |

UPDATED: January 22, 2014

| | | | | | |
|------|---|----|-----------------|----------------------------|-----|
| | M | 10 | Ch. 7 | Fourier Series | |
| | W | 12 | Ch. 7 | Fourier Series | #7 |
| | F | 14 | Ch. 7 | Fourier Series | |
| | M | 17 | Spring Break | We Ain't Got No Class! | |
| | W | 19 | Spring Break | We Ain't Got No Class! | |
| | F | 21 | Spring Break | We Ain't Got No Class! | |
| | M | 24 | Ch. 7 | Fourier Series | |
| | W | 26 | Ch. 11 | Special Functions | #8 |
| | F | 28 | Ch. 11 | Special Functions | |
| | M | 31 | EXAM II | Ch. 2, 14, 7 | |
| Apr. | W | 2 | Ch. 11 | Special Functions | |
| | F | 4 | Ch. 11 | Special Functions | |
| | M | 7 | Ch. 12 | Series Solutions to DiffEq | #9 |
| | W | 9 | Ch. 12 | Series Solutions to DiffEq | |
| | F | 11 | Ch. 12 | Series Solutions to DiffEq | |
| | M | 14 | Ch. 12 | Series Solutions to DiffEq | #10 |
| | W | 16 | Ch. 12 | Series Solutions to DiffEq | |
| | F | 18 | Ch. 12 | Series Solutions to DiffEq | |
| | M | 21 | Ch. 13 | Partial Diff. Equations | #11 |
| | W | 23 | Ch. 13 | Partial Diff. Equations | |
| | F | 25 | Ch. 13 | Partial Diff. Equations | |
| | M | 28 | Ch. 13 | Partial Diff. Equations | #12 |
| | W | 30 | Ch. 13 | Partial Diff. Equations | |
| May | F | 2 | EXAM III | Ch. 11, 12, 13 | |
| | M | 5 | Review (All!!!) | Last Day of Classes | |