

PHY370, Spring '20, Course Syllabus

Instructor: Dr. Matthew M. Waite, Merion 108, 610-436-2573, mwaite@wcupa.edu

Class Meeting: MWF 12:00 PM

Office Hours: By appointment via Zoom. E-mail or text me for appointment.

<https://wcupa.zoom.us/j/845113288?pwd=cmx2enJoSEFtVIZlUmxtM0hIYU5YQT09>

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

Grading:	3 Exams (15%@)	45%
	Cumulative Final	25%
	Homework	25%
	Class Participation	5%

Schedule: (See the schedule on D2L)

Zoom Meeting: This course will meet via Zoom at the times listed above for lecture. Office hours and other meetings can be conducted through Zoom as well. The Zoom link for the is course is as follows:

<https://wcupa.zoom.us/j/93859436993?pwd=SWWhPL2JmTExYcFp2b2FTaEVtVWhZZz09>

Meeting ID: 938 5943 6993

Password: 434659

It is a violation of state and federal law to record, photograph or screenshot these Zoom meetings and lectures. I, and the University, will prosecute violations.

Attendance:

You are expected to attend every class period, period. **This semester it will all be remote, so we will meet on Zoom at the regularly scheduled meeting time as indicated in MyWCU.**

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.)

When we are meeting on Zoom, please ensure that you are in a quiet location, and you will not be disturbed by roommates, family members, or pets. These distractions may interfere with both your, and your classmates, learning experience. Taking classes online can be stressful and extra attention must be paid to the class in order to really follow along. Minimization of distraction is necessary.

Homework:

Homework is due by 5:00 pm on the due date. At 5:00 pm, the solutions will be posted on D2L and/or OneNote. 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**.

Homework is to be scanned and uploaded to the appropriate Submissions Folder on D2L. **See D2L for scanner options.**

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!

Exams - Fall 2020: PDF files will be provided on exam day. Since I would like to offer you up to two hours to complete the exam *(again, I am OFFERING this... it is NOT a requirement. If you do not want the extra time to allow for printing, scanning, contacting me for questions, etc, you do not have to take it. You can complete the exam between 12:00 PM and 12:50 PM and submit.)* I will email the exam to you depending on your availability before, after, or during another 2-hour time block on that day. You will let me know before exam day the time (11 am, 12 pm or "other") that you want the exam e-mailed to you.

The exam will be open book, open notes. But no access to online D2L materials. I will not provide an equation sheet. Since it will be open notes, you should have all your notes from lecture and will not need my equation sheet.

You can do one of the three options:

- 1) Download the exam on a tablet or iPad and complete it.
- 2) Print the exam, complete it and scan it. **See D2L for scanner options.**

3) If you have no tablet and no printer, then read the problems online, complete the problems on a separate piece of paper and scan it. **See D2L for scanner options.**

Upload it to the D2L submissions folder as a PDF. (Make sure it is saved correctly and that the annotations and markings you added are viewable.)

You will have 2 hours to complete exams to account for the extra time needed to ask me questions via email and Zoom, print and scan. It MUST be back in the D2L submission box within 2 hours of the time I sent it. **A zero will be record as the exam grade if I do not receive it with 2 hours of the time I sent it.**

Common University Syllabus Content: (See Document on D2L)

COVID-19 STATEMENT

Part of West Chester University's response to the COVID-19 pandemic was to switch the vast majority of instruction to remote. This decision was made out of an abundance of caution to protect the health of all members of the WCU community. Faculty have been asked to make every effort to adapt their courses to this novel situation while still meeting the critical learning outcomes of the course. Students are asked to discuss any problems with the new course format and schedule directly with their instructors. Patience and flexibility on everyone's behalf are critical to our community's navigation of this public health crisis.

For this particular course, the following alternative modalities are being utilized:

- 1) Class meetings will be synchronous on Zoom. (See Zoom link on page 1)
- 2) Exams will be administered remotely. (See details on page 2)

ACADEMIC & PERSONAL INTEGRITY

It is the responsibility of each student to adhere to the university's standards for academic integrity. Violations of academic integrity include any act that violates the rights of another student in academic work, that involves misrepresentation of your own work, or that disrupts the instruction of the course. Other violations include (but are not limited to): cheating on assignments or examinations; plagiarizing, which means copying any part of another's work and/or using ideas of another and presenting them as one's own without giving proper credit to the source; selling, purchasing, or exchanging of term papers; falsifying of information; and using your own work from one class to fulfill the assignment for another class without significant modification. Proof of academic misconduct can result in the automatic failure and removal from this course. For questions regarding Academic Integrity, the No-Grade Policy, Sexual Harassment, or the Student Code of Conduct, students are encouraged to refer to the Department Undergraduate Handbook, the Undergraduate Catalog, the Ram's Eye View, and the University website at **www.wcupa.edu** .

STUDENTS WITH DISABILITIES

If you have a disability that requires accommodations under the Americans with Disabilities Act (ADA), please present your letter of accommodations and meet with me as soon as possible so that I can support your success in an informed manner. Accommodations cannot be granted retroactively. If you would like to know more about West Chester University's Services for Students with Disabilities (OSSD), please visit them at 223 Lawrence Center. Their phone number is 610-436-2564, their fax number is

610-436-2600, their email address is ossd@wcupa.edu, and their website is at <https://www.wcupa.edu/universityCollege/ossd/>. In an effort to assist students who either receive or may believe they are entitled to receive accommodations under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, the University has appointed a student advocate to be a contact for students who have questions regarding the provision of their accommodations or their right to accommodations. The advocate will assist any student who may have questions regarding these rights. The Director for Equity and Compliance/Title IX Coordinator has been designated in this role. Students who need assistance with their rights to accommodations should contact them at 610-436-2433.

EXCUSED ABSENCES POLICY

Students are advised to carefully read and comply with the excused absences policy, including absences for university-sanctioned events, contained in the WCU Undergraduate Catalog. In particular, please note that the “responsibility for meeting academic requirements rests with the student,” that this policy does not excuse students from completing required academic work, and that professors can require a “fair alternative” to attendance on those days that students must be absent from class in order to participate in a University-Sanctioned Event.

REPORTING INCIDENTS OF SEXUAL VIOLENCE

West Chester University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to comply with the requirements of Title IX of the Education Amendments of 1972 and the University’s commitment to offering supportive measures in accordance with the new regulations issued under Title IX, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. **Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the person designated in the University Protection of Minors Policy.** Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: https://www.wcupa.edu/_admin/diversityEquityInclusion/sexualMisconduct/default.aspx

EMERGENCY PREPAREDNESS

All students are encouraged to sign up for the University’s free WCU ALERT service, which delivers official WCU emergency text messages directly to your cell phone. For more information, visit www.wcupa.edu/wcualert. To report an emergency, call the Department of Public Safety at 610-436-3311.

ELECTRONIC MAIL POLICY

It is expected that faculty, staff, and students activate and maintain regular access to University provided e-mail accounts. Official university communications, including those from your instructor, will be sent through your university e-mail account. You are responsible for accessing that mail to be sure to obtain official University communications. Failure to access will not exempt individuals from the responsibilities associated with this course.

UPDATED: July 30, 2020

PHY370, Fall '20, Course Schedule

#	Day	Date	Reading	Topic	Hmwk	
1	M	8/24		Intro.		2.4%
2	W	8/26	Ch. 3	Linear Algebra		4.8%
3	F	8/28	Ch. 3	Linear Algebra		7.1%
4	M	8/31	Ch. 3	Linear Algebra	#1	9.5%
5	W	9/2	Ch. 6	Vector Analysis		11.9%
6	F	9/4	Ch. 6	Vector Analysis		14.3%
	M	9/7	Labor Day	No Class		0.0%
7	W	9/9	Ch. 6	Vector Analysis	#2	16.7%
8	F	9/11	Ch. 6	Vector Analysis		19.0%
9	M	9/14	Ch. 6	Vector Analysis	#3	21.4%
10	W	9/16	Ch. 2	Complex Variables (Basics)		23.8%
11	F	9/18	Ch. 2	Complex Variables (Basics)		26.2%
12	M	9/21	Ch. 2	Complex Variables (Basics)	#4	28.6%
13	W	9/23	EXAM I	Ch. 3, 6		31.0%
14	F	9/25	Ch. 14	Complex Functions		33.3%
15	M	9/28	Ch. 14	Complex Functions		35.7%
16	W	9/30	Ch. 14	Complex Functions	#5	38.1%
17	F	10/2	Ch. 14	Complex Functions		40.5%
18	M	10/5	Ch. 14	Complex Functions		42.9%
19	W	10/7	Ch. 7	Complex Functions	#6	45.2%
20	F	10/9	Ch. 7	Fourier Series		47.6%
21	M	10/12	Ch. 7	Fourier Series		50.0%
22	W	10/14	Ch. 7	Fourier Series	#7	52.4%
23	F	10/16	Ch. 7	Fourier Series		54.8%
24	M	10/19	Ch. 7	Fourier Series		57.1%
25	W	10/21	Ch. 7	Fourier Series/Special Functions	#8	59.5%
26	F	10/23	Ch. 11	Special Functions		61.9%
27	M	10/26	EXAM II	Ch. 2, 14, 7		64.3%
28	W	10/28	Ch. 11	Special Functions		66.7%
29	F	10/30	Ch. 11	Special Functions		69.0%
30	M	11/2	Ch. 11	Special Functions	#9	71.4%
31	W	11/4	Ch. 12	Series Solutions to DiffEq		73.8%
32	F	11/6	Ch. 12	Series Solutions to DiffEq		76.2%
33	M	11/9	Ch. 12	Series Solutions to DiffEq	#10	78.6%
34	W	11/11	Ch. 12	Series Solutions to DiffEq		81.0%
35	F	11/13	Ch. 12	Series Solutions to DiffEq		83.3%
36	M	11/16	Ch. 13	Partial Diff. Equations	#11	85.7%
37	W	11/18	Ch. 13	Partial Diff. Equations		88.1%
38	F	11/20	Ch. 13	Partial Diff. Equations		90.5%
	M	11/23	Break	Thanksgiving Break		
	W	11/25	Break	Thanksgiving Break		
	F	11/27	Break	Thanksgiving Break		
39	M	11/30	Ch. 13	Partial Diff. Equations		92.9%
40	W	12/2	Ch. 13	Partial Diff. Equations	#12	95.2%
41	F	12/4	EXAM III	Ch. 11, 12, 13		97.6%
42	M	12/7	Review (All!!)	Last Day of Classes		100.0%