

PHY2061

HONORS MODERN PHYSICS - SPRING 2018

CLASS TIME & PLACE: T & R 2 - 3 Period (8:30– 10:25 AM) in NPB #1002

Instructor: [Yoonseok Lee](#)

Office: NPB #2233

Email: ysl@ufl.edu

Office Hours:

M 3rd P, W 7th P, T&R 4th P. But feel free to knock on my door when you need to see me.

TEXTBOOK: [Physics Vol. 2, 5th ed.](#) by Resnick, Halliday, and Krane (Wiley)

REFERENCES:

PREQUISITES: PHY 2060 or equivalent

CoREQUISITES: MAC 2313 or equivalent

DESCRIPTION:

This is the second course of the enriched sequence. The objective of the course is to obtain a thorough understanding of electricity and magnetism. Emphasis is placed on applying these concepts to the explanation of real world phenomena and modern technology development. Covered topics include electrostatics, Gauss's Law, potential, vector analysis, Laplace equation, circuits, magnetism, Maxwell's equations, and electromagnetic fields in matter.

EXPECTATION:

It is expected that students are comfortable with calculus I and II: vector calculus, differentiation, integration, and trigonometry. Students should also be able to solve ordinary differential equations and be gaining knowledge on geometry of space, multivariable calculus, partial derivatives, line and surface integral. It is also

expected that students read textbook chapters thoroughly at least once preferably before the class and review lecture notes timely. Students should work on HW problems diligently. On average 4 - 6 hours per week of full attention on this course (outside of the classes) would be required.

CANVAS: All the material and announcements for this course will be posted on the course's Canvas website. This includes the syllabus, a course calendar, and HW's. You can log directly into this course at <http://ufl.instructure.com/courses/>.

GRADING:

Homework HW will be assigned in this course but will not be graded. However, students will be asked to discuss and solve selected HW problems during the classes after the HW due. Selected HW problems will be tested in the exams.

In-class Quiz There will be 6 in-class quizzes. 30 mins will be given for each quiz. Quiz should be considered as a small exam.

Exams There will be **two Midterm Exams (in-class)** and **one comprehensive Final Exam**. Please check the [Course Calendar](#) for the exam time and date.

Policy on missed Exam or Quiz:

Consistent with university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Composition of Grade (Total 100)

Quiz	30
Homework	0
Mid Term	40 (20 each)
Final	30

Projected Grading Scale*

Grade	A	A-	B+	B	B-	C+	C	C-	D+	E
G. Pt.	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	0
Score	>= 90	>= 80	>=70	>= 65	>= 60	>= 55	>= 50	>= 45	>= 40	

*The passing grade for Physics majors is C and above. The actual grading scale may vary depending on numerous factors within +/- 2.5 points out of 100.

STUDENTS with DISABILITIES: Students who require accommodation for disabilities must first contact the Dean of Students Office. That office will provide documentation, which the student must bring to his/her instructors *during the first week of the semester*. Contact the [Disability Resources Center](#) for information about available resources for students with disabilities.

COUNSELING and MENTAL HEALTH RESOURCES: Student facing difficulties completing the course or in need of counseling should call the on-campus Counseling and Wellness Center at (352) 392 1575.

ACADEMIC HONESTY: Each student is expected to hold himself/herself to a high standard of academic honesty. Under the UF academic honesty policy, unauthorized assistance or the use of unauthorized resources is strictly forbidden on work-for-credit. Although discussions among the students are highly encouraged, you are to work alone on all homework assignments unless specified differently. Fabrication or falsification of excuses or related documentation is also a violation of the UF academic honesty policy. *Violations of this policy will be dealt with severely. There will be no warnings or exceptions.*

ONLINE COURSE EVALUATION: Students are expected to participate in course/instructor evaluations. These evaluations are conducted [online](#) typically during the last 3 weeks of the semester. Summary results of these assessments are available.