

PHYSICS 309L, SPRING 2021

Instructor:

Willy Fischler

email: fischler@zippy.ph.utexas.edu

Office Hours: Mondays noon-1pm on Zoom

Announcements posted on Canvas: <http://canvas.utexas.edu/>

Homework assignments and solutions will be regularly posted on Quest: <https://quest.cns.utexas.edu/>

TA:

Tyler Guglielmo

email: tylerguglielmo@gmail.com

Office Hours: Wednesdays noon-1pm on Zoom

Textbook:

W.Thomas Griffiths and Juliet W. Brosing: "The Physics of Everyday Phenomena, A Conceptual Introduction to Physics" Mc Graw Hill.

Physics 309L will cover concepts in electromagnetism, quantum mechanics, relativity and cosmology. Physics 309K or an equivalent course is a prerequisite. No prior math course is required beyond the usual high school math and science. This course is conceptual and is designed for non-technical students. There are demonstrations and occasional films.

In Physics 309K you learned mostly concepts familiar with your day to day experience. In the present class we will depart gradually from the familiar covering electromagnetism to the more peculiar realms of Quantum Physics and if time permits Cosmology, the physics describing the history of the Universe.

The organization of the chapters is as follows:

- 1) Electrostatic phenomena
- 2) Electric Circuits
- 3) Magnetism
- 4) Electromagnetism
- 5) Waves
- 6) Electromagnetic waves
- 7) Special Relativity, General Relativity, Cosmology
- 8) Quantum Mechanics

The order of subject matter will roughly follow the book but may deviate at times and additional material not covered in the book might be presented. The students will be notified in class what the subject matter for the next class will be so that they can read in advance relevant material.

Attendance:

Classes will be held online on Zoom. I will try to teach online as closely as I can to my usual way of teaching. Class attendance is not mandatory but is strongly recommended, attendance will count towards 25% of the final grade.

Grades:

The grades will be based upon homeworks (75%) and attendance (25%).

Homeworks:

Will be posted on Quest approximately weekly. You are encouraged to discuss homework with anyone you wish. Do not forget to register with Quest.

Other:

Announcements will be posted on "Canvas": <http://canvas.utexas.edu>

Last day of the official add/drop period is January 22.

Last day an undergraduate student may change registration in a class to or from the pass/fail basis. is April 5.

Please notify me of any modification/adaptation you may require to accommodate a disability-related need. You will be requested to provide documentation to the Dean of Student's Office, in order that the most appropriate accommodations can be determined. Specialized services are available on campus through Services for Students with Disabilities. 471-6259, <http://www.utexas.edu/diversity/ddce/ssd/>

- Academic dishonesty will not be tolerated. For more information see <http://registrar.utexas.edu/catalogs/g10/ch01/index.html>

- By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an exam, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

COVID 19

- Sharing of Course Materials is Prohibited: No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class unless you have my explicit, written permission. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. I am well aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.
- Class Recordings: Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.