

PHZ 4404 - Spring 2021
SOLID STATE PHYSICS

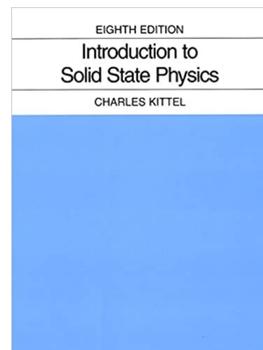
Time: MWF 4th Period (10:40-11:30 AM)
Location: Online. See WEB page for Zoom link.

Prof. Christopher J. Stanton
Office: 2170 NPB
Phone: 392-8753
stanton@ufl.edu

OFFICE HOURS: Monday, Wednesday 5th Period (11:45-12:35 pm) or by appointment. Please email if you would like to attend online office hours so I can be sure to be on Zoom. Canvas Home page has link.

WEB PAGE: <https://ufl.instructure.com/courses/421562>

TEXT BOOK: The “official” textbook, which is required, is **Introduction to Solid State Physics (8th edition)** by Charles Kittel.



REFERENCE TEXT BOOKS:

The following text books are all excellent and useful for supplemental material:

Solid State Physics by N. W. Ashcroft and N. D. Mermin.

The Oxford Solid State Basics by Steven H. Simon.

Solid-State Physics: An Introduction to Principles of Materials Science by H. Ibach and H. Luth.

All of these are excellent and well worth purchasing.

MEETING TIMES: The class lectures will be delivered at the scheduled meeting times (MWF 4th Period (10:40-11:30 AM)) via Zoom. A link to the zoom lectures is on the home page on Canvas.

DESCRIPTION: This is a one semester course on Solid State Physics designed for upper level undergraduates. We will cover subjects developed in the fields of solid state/condensed matter physics in the 20th century at an introductory level. We will also cover some more modern topics as time allows.

PREREQUISITES: PHY3323, 3513, 4604, 4802L, or instructors permission. Encouraged to take PHY4523 at least simultaneously.

GRADING: Your grade will be based on homework assignments (30%), and two open book, take-home mid-term exams (35% each). There will be *no final exam*. You are allowed to work with other students *on the homework problems*, but must acknowledge this in your write-up. You can not work with anyone on the exams. Your grade will be determined by this score. I will give you feedback after each mid-term exam that should help you determine how you are doing in the class. Final letter grades will be assigned based on the distribution of grades at the end of class. Based on prior experience, grades will be given roughly (but no lower) as follows:

Score	Grade
85-100	A
80-84.99	A-
75-79.99	B+
70-74.99	B
65-69.99	B-
60-64.99	C+
55-59.99	C
50-54.99	C-
45-49.99	D+
40-44.99	D
35-39.99	D-
0-34.99	E

COVID STATEMENT: Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded.

If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared.

As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

ACADEMIC HONESTY: All UF students are required to abide by the University's Academic Honesty Guidelines and by the Honor Code. This includes not only not cheating, but also a variety of other offenses. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Please review the University Policies on Academic Honesty, and helpful links are:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

SPECIAL ACCOMMODATIONS:

If you need special accommodations, you must first register with the Office for Students with Disabilities, located in the Dean of Students Office, P205 Peabody Hall. This office will then provide documentation to me requesting accommodations. This should be done well in advance of the exams to ensure proper accommodation. The Dean of Students Office maintains a webpage at

<https://disability.ufl.edu/>

INCOMPLETE POLICY:

A grade of incomplete is given to students who endure a situation in which they are incapable of completing the coursework. The I-grade *is not to be given* to students who are simply dissatisfied with their performance in the course. If you find you are in a situation that might qualify you for an I-grade in this course and you want to pursue this potential option, then you must contact me immediately and be sure to have the necessary documentation from a medical doctor etc. Letters from family members are not acceptable. A letter of understanding indicating when and how the incomplete grade will be made up will eventually be drafted and signed by the student and the instructor.

See <https://www.advising.ufl.edu/academicinfo/clas-policiesprocedures/incomplete-grades> for more information.

COUNSELING AND MENTAL HEALTH RESOURCES: Students facing difficulties completing the course or who are in need of counseling or urgent help should call the on-campus **Counseling and Wellness Center** (352-392-1575).

There will be **no class** on ***Martin Luther King Day***: January 18; ***Spring Break*** has been cancelled. Since there is no Spring Break, at the request of the Vice-President of Student Affairs, Wednesday, March 24 has been designated a "recharge day" and there will be no classes.