

Fall 2015

PHYS 6194

Leonard Spinu
University of New Orleans

Follow this and additional works at: <https://scholarworks.uno.edu/syllabi>

This is an older syllabus and should not be used as a substitute for the syllabus for a current semester course.

Recommended Citation

Spinu, Leonard, "PHYS 6194" (2015). *University of New Orleans Syllabi*. Paper 884.
<https://scholarworks.uno.edu/syllabi/884>

This Syllabus is brought to you for free and open access by ScholarWorks@UNO. It has been accepted for inclusion in University of New Orleans Syllabi by an authorized administrator of ScholarWorks@UNO. For more information, please contact scholarworks@uno.edu.

PHYSICS 6194 – section 002, Selected Topics in Physics: *Band Theory and Electronic Properties of Solids*, Fall 2015

Course description: This individual study course will cover the important topic of band theory and electronic properties of materials. The course objective is to reveal how band theory leads to everyday properties of materials around us. In addition the course will introduce concepts, ideas and vocabulary necessary for the understanding of electronic, magnetism optical and structural properties of the materials met in science and technology.

Prerequisites: Credit in *Advanced Electricity & Magnetism* (PHYS4501 or PHYS6501) and *Quantum Mechanics* (PHYS 4401 or PHYS6401) or equivalent.

Lecture: individual study

Instructor Dr. Leonard Spinu
Office: SC 2007
Phone: 280-3218
E-mail: LSpinu@uno.edu

Text: *Band Theory and Electronic Properties of Solids* by John Singleton.

Exams: There will be one midterm exam along with a comprehensive final exam. The exam will contain both conceptual questions and quantitative problems. The problems will be comparable to questions and problems found in the required textbook.

Homework: Homework assignments will be given on a weekly basis.. Solutions to the homework problems will be posted on the Web (Moodle) after each assignment is due. Accordingly, **late homework will not be accepted**

Grading		Grading Scale (<i>subject to change</i>)
Homework	50%	A 89 – 100 %
Test I	15%	B 77 – 88
Final	35%	C 65 – 76
		D 53 – 64
		F <53

Academic dishonesty: Students who violate the standards of honest academic conduct are subject to disciplinary action. If you have any questions about the definition of academic dishonesty, you should consult the *UNO Student Handbook* available online under UNO Division of Student Affairs web page
<http://www.studentaffairs.uno.edu/pdfs/AcademicDishonestyPolicy.pdf>

Special needs: AT UNO, we make every effort to accommodate students with special needs. If you have special needs, you should contact the Office of Disability Services at 280-7284 (<http://www.ods.uno.edu/>)