

Syllabus

570 Physics: Theory of Solids (3+0) Hours

- Band theory
- Band Theory of Metals
- Semiconductors and Insulators
- Transport Theory
- Magnetic Properties of Solids
- Superconducting Materials
- Photovoltaic and Thermoelectric Effect
- Interaction of Radiation with Solids
- Elementary Excitations

Text Book: Introduction to Solid State Physics

(7th Edition)

By Charles Kittel

Additional references:

1. Solid State Physics by Ashcroft and Mermin, Holt, Rinehart and Winston Publisher
2. Elementary Solid State Physics, M. Ali Omar, Addison - Wesley Publishing

Grading:

Midterm Exams: 25 marks

Homework: 15 marks

Term Paper: 10 marks

Final Exam: 50 marks

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Total: 100 marks