

Course Outline

MATS2001

Physical Properties of Materials

Materials Science and

Students should work through lecture, tutorial and textbook questions
Students should complete all assessment tasks and submit them on time
Students are expected to participate in online discussions through the Moodle page

- Superconductivity
- Types of superconducting materials
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Further information about academic integrity and can be located at:

The *Current Students* site <https://student.unsw.edu.au/plagiarism>, and

The *ELISE* training site <http://subjectguides.library.unsw.edu.au/elise/presenting>

The *Conduct and Integrity Unit* provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>.

Electronic Properties of Materials, Hummel, Rolf E. 4th ed. Springer. ISBN: 978-1441981639

The Structure and Properties of Materials: Volume IV – Electronic Properties: R.M. Rose, L.A. Shepard and J. Wulff, John Wiley and Sons, 1966.

Lectures on the Electrical Properties of Materials: L. Solymar and D. Walsh, Oxford, 1988.

An Introduction to the Electron Theory of Solids: J. Stringer, Pergamon, 1967.

Introduction to the Modern Theory of Metals: A. Cottrell, Institute of Metals, London, 1988.

Physics of Solids: C.A. Wert and R.M. Thompson, McGraw-Hill, 1964.

Introduction to Solid State Physics: C. Kittel, John Wiley and Sons, 1986.

Electronic Properties of Crystalline Solids: R.H. Bube, Academic Press, New York, 1974.

Solid State Theory in Metallurgy: P. Wilkes, Cambridge University Press, 1973.

Solid State Electronic Devices: B.G. Streetman, Prentice-Hall, 1980.

Magnetic Materials: R.S. Tebble and D.J. Craik, Wiley Interscience, 1969.

School Office: Room 137, Building E10 School of Materials Science and Engineering

School Website: <http://www.materials.unsw.edu.au/>

Faculty Office: Robert Webster Building, Room 128

Faculty Website: <http://www.science.unsw.edu.au/>

The Current Students Gateway: <https://student.unsw.edu.au/>

Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>

Student Wellbeing, Health and Safety: <https://student.unsw.edu.au/wellbeing>

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