

**Department of Mechanical Engineering
Louisiana State University**

ME 3701

Materials Science Laboratory

Spring 2001

Schedule: 6:10 - 9:00pm Mon (1220 CEBA, Materials Laboratory).

Textbook: None Prescribed.

Reference Material: On-line Laboratory Reference Manual, <http://compfab.me.lsu.edu>
ASM Metals Handbook
Annual Book of ASTM Standards
Textbooks from the ME 2733 Materials of Engineering Course.

Teaching Assistant: Dr. Honglai Tan, 2504 CEBA. Phone: 388-6488.
Email: tan@me.lsu.edu

Office Hours: 3:00 – 5:00pm Tuesday. Other times by appointment.

Course Supervisor: Dr. E.Woldesenbet, 1419 CEBA Building. Phone: 578-5900.
Email: woldesen@me.lsu.edu

Office Hours: 9:00 - 11:30 am, 2:30 – 4:00 pm T, Th. Other times by appointment.

Date	Experiment Title	Reports
Jan. 28	Crystal Structure: X - Ray Diffraction	(1-Week)
Feb. 04	Mechanical Testing (Hardness & Impact)	*
Feb. 11	No Class	
Feb. 18	Mechanical Testing (Tensile Testing)	*
Feb. 25	Heat Treatment: Aluminum Alloys - Age Hardening.	**
Mar. 04	Heat Treatment: Steel - Quenching, Tempering, etc.	**
Mar. 11	Fatigue Testing	(In Lab)
Mar. 18	Polymers and Composites: Mechanical Properties	(1-Week)
Mar. 25	Metallography Specimen Preparation and Examination	(In Lab)
Apr. 01	No Class	
Apr. 08	Ceramics: Mechanical Properties	(1-Week)
Apr. 15	Corrosion	(In Lab)
Apr. 22	No Class	
	Final Exam (Week of Apr. 29 – May 01)	

Note: * Formal lab report 1 due on March 04
** Formal lab report 2 due on March 18

Grading:

Attendance/ Class Participation	15 %
Weekly Quizzes	20 %
In Class Reports (3 Sessions)	10 %
1-Week Lab Reports (3 Sessions)	15 %
Formal Lab Reports (4 Sessions, 2 reports)	20 %
Final Exam	<u>20 %</u>
Total	100%

A grade 90 – 100

B grade 80 – 89

C grade 70 – 79

D grade 60- 69

F grade < 60