

## **GENERAL INFORMATION**

### **Laboratory Sessions**

**(Semester 3)**

Session 2017/2018  
Department of Mechanical Engineering  
National University of Singapore

## LABORATORY SESSIONS

### 1. Purpose

Laboratory sessions provide training in practical engineering skills. With the modular system, the laboratory sessions are part and parcel of a module. The grades obtained for the laboratory sessions will contribute towards the final grade of the module.

### 2. Organisation

The attached laboratory time-table is for students taking the recommended modules for the semester. Students not taking any of the listed modules need not attend the respective attached laboratory sessions. The laboratory sessions are compulsory for students taking the modules.

### 3. Laboratory Classes

#### 3.1. Attendance

**Attendance is compulsory.** The department will not entertain requests for re-scheduling of laboratory sessions due to student negligence (e.g. forgetting or mis-reading the schedule), or personal reasons (e.g. birthday celebration, hall activities, driving test). Documentary evidence must be produced for exceptional circumstances (e.g. illness) before a re-scheduling is permitted. The students concerned have to seek permission from the laboratory co-ordinator for re-scheduling. You have to seek permission from the experimental supervisor if there is any urgent need for you to leave the lab session earlier.

You will not be permitted to attend any session if you are late by more than fifteen minutes.

Students who are absent without any valid reason **may be barred** from taking the respective examinations.

#### 3.2 Lab Report

For each module, a student will be required to write two lab reports. You can download the lab manuals from the IVLE system (<https://ivle.nus.edu.sg/>) when the semester starts. Generally, the lab reports have to be completed within the 3-hour sessions. Penalty will be imposed for late submissions.

The above guidelines are to be strictly observed, unless otherwise specified by the lecturers-in-charge. The format lab report is attached for your reference.

#### 3.3 Safety

As you will be working with electrical and mechanical equipment, you are **required to wear toe-covered shoes** and take appropriate precautions when you are in the laboratory or workshop. The workshop and some laboratories require the students to put on long pants. Students not in compliance with the safety requirement **will be barred** from the laboratory session.

4. *Copying*

Students are hereby warned that copying of lab reports is a serious offence and it may lead to **expulsion from the University**. The technologists have been instructed to confiscate all copies of lab reports not belonging to the students concerned during the lab sessions.

5. *Queries*

You may contact Dr. ONG Eng Teo (Office: EA-05-08, 6516-2556, [mpeoet@nus.edu.sg](mailto:mpeoet@nus.edu.sg)) for any problem, query or constructive suggestion regarding the lab sessions.

### **GUIDELINE FOR WRITING LAB REPORTS**

All lab reports must be completed within the duration of experiments, unless decided otherwise by the lecturers-in-charge. In general, the report should consist of:-

- 1) Title
- 2) Aim or Objective
- 3) Record(s) of data
- 4) Discussion in point forms
- 5) Conclusion

The report is to be handed in for grading at the end of the experiment.

### Laboratory Timetable for Semester 3, 2017/2018

<b>Tuesday 1400 - 1700</b>			<b>Tuesday subgroups</b>									
			2A1	2B1	2C1	2D1	2E1	2F1	2G1	2H1	2I1	2J1
<b>Thursday 1400 - 1700</b>			<b>Thursday subgroups</b>									
			2A2	2B2	2C2	2D2	2E2	2F2	2G2	2H2	2I2	2J2
<b>Friday 1400 - 1700</b>			<b>Friday subgroups</b>									
			2A3	2B3	2C3	2D3	2E3	2F3	2G3	2H3	2I3	2J3
29/08/17	31/08/17	<i>17/11/17 *</i>		L1	L8	L6	L4		L2	L7	L5	L3
05/09/17	07/09/17	08/09/17	L3		L1	L8	L6	L4		L2	L7	L5
12/09/17	14/09/17	15/09/17	L5	L3		L1	L8	L6	L4		L2	L7
19/09/17	21/09/17	22/09/17	L7	L5	L3		L1	L8	L6	L4		L2
<b>Recess Week</b>												
03/10/17	05/10/17	06/10/17	L2	L7	L5	L3		L1	L8	L6	L4	
10/10/17	12/10/17	13/10/17		L2	L7	L5	L3		L1	L8	L6	L4
17/10/17	19/10/17	20/10/17	L4		L2	L7	L5	L3		L1	L8	L6
24/10/17	26/10/17	27/10/17	L6	L4		L2	L7	L5	L3		L1	L8
31/10/17	02/11/17	03/11/17	L8	L6	L4		L2	L7	L5	L3		L1
07/11/17	09/11/17	10/11/17	L1	L8	L6	L4		L2	L7	L5	L3	

*\* Note that 01/09/17 is a public holiday. Hence, this session will be conducted in week 13. Only the students in the Friday subgroups will be affected.*

	Module Code	Topics	Venue
L1	ME2112-1	Beam Bending – Stresses & Deflection	Solid Mechanics Lab (EA-02-21)
L2	ME2112-2	Torsion of Circular Shafts	Solid Mechanics Lab (EA-02-21)
L3	ME2134-1	Stability of Floating Body	Fluid Mechanics Lab 1 (WS2-01-47)
L4	ME2134-2	Flow and Energy Loss	Fluid Mechanics Lab 2 (WS2-02-46)
L5	ME2151-1	Cooling Rate	Materials Lab (E3-04-02E)
L6	ME2151-2	Metallography	Materials Lab (E3-04-02L)
L7	ME3162-1	Milling Process	Centralised Training Workshop (E1A-01-06)
L8	ME3162-2	Turning Process	Centralised Training Workshop (E1A-01-06)