

## **MECH 4110: Course Syllabus**

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### **Course Information**

<i>Course Title</i>	<b>Systems Laboratory</b>
<i>Term</i>	Fall 2016
<i>Days &amp; Times</i>	MECH4110.201.16F (Lecture): Mondays 1:00 pm-1:50 pm (GR 3.302) MECH4110.101.16F: Tuesdays 10:00 am – 12:45 pm (ML2 1.214) MECH4110.102.16F: Tuesdays 4:00 pm – 6:45 pm (ML2 1.214) MECH4110.103.16F: Mondays 4:00 pm – 6:45 pm (ML2 1.214) MECH4110.104.16F: Tuesdays 1:00 pm – 3:45 pm (ML2 1.214)

### **Instructor Information**

<i>Instructor</i>	Prof. Yaoyu Li
<i>Office Phone</i>	(972) 883-4698
<i>Email Address</i>	yaoyu.li@utdallas.edu
<i>Office Location</i>	ECS.N 3.210
<i>Office Hours</i>	Tuesdays and Thursdays 11:00 a.m. – 12:30 p.m.

### **Teaching Assistant Information**

<i>Teaching Assistant</i>	Mr. Sai Pradyoth Lakshmane Gowda
<i>Email Address</i>	sx1144130@utdallas.edu
<i>Office Location</i>	ECSN 2.124
<i>Office Hours</i>	Wednesdays 3:00 p.m. ~ 5:00 p.m.
<i>Teaching Assistant</i>	Mr. Fenglin Zhou
<i>Email Address</i>	fxz160030@utdallas.edu
<i>Office Location</i>	ECSN 2.124
<i>Office Hours</i>	Mondays 10:00 a.m. ~ noon.

### **Course Pre-requisites, Co-requisites, and/or Other Restrictions**

*Pre-requisite:* MECH 4310.

### **Course Description**

Laboratory-based course associated with MECH 4310 focused on the modeling and parameter estimation of dynamical systems, and the design and testing of control systems.

### **Student Learning Objectives/Outcomes**

1. Derive lumped-parameter models of mechanical and thermal systems.
2. Calibrate lumped-parameter models using test data.
3. Analyze, design and test control laws.
4. Collaborate on experiments and report the results.

### **Required Textbooks and Materials**

A laboratory manual is available from the bookstore. Supplemental material will be handed out throughout the semester. The textbook used in MECH 4310 is strongly recommended.

### **Grading Policy**

Final grades will be evaluated as follows (there is no final exam):  
 Lecture Attendance 10%  
 Pre-Labs (Individual) 40%  
 Lab Performance (Individual) 50%

### **Course and Instructor Policy**

**Email:** Email must be sent from your UTD email account to UTD email address of the instructor or TA. Email will be answered within two working days.

**Pre-labs and Lab Reports:** Pre-labs and Lab reports must be submitted to the TA at the beginning of lab section on the day it is due. Late reports will not receive a grade. Failure to turn in pre-lab on the due date will result in no opportunity to conduct experiments. No credit is given for certain lab exercise with only lab report but not lab attendance. The work for prelab reports is individual, while that for lab reports is group based; there are no exceptions to this rule.

### **UT Dallas Syllabus Policies and Procedures**

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

***The descriptions and timelines contained in this syllabus are subject to change at the discretion of the instructor.***