## **Spring 2022**

## **MENG 3123 Measurements and Instrumentation Lab**

**Instructor**: Dr. Pranaya Pokharel

Lab Assistant: Mr. Ernuel Tonge

Office No.: McCoy Engineering Hall 219C

**Tel.**: (940) 397-4854

E-mail: pranaya.pokharel@msutexas.edu

Office Hours: MWF 9:00 AM -9:50 AM; T 10:00 AM-11:50 AM; Other days and times by

appointment.

**Lab Hours**: R 1:30-3:20 PM (21A)

**Lab Location**: MY 116 (McCoy Engineering Hall 116)

## Lab Schedule:

**Lab 1**: NI Elvis Workspace Environment (*Week 1*)

**Lab 2:** Impedance and AC Response (*Week 2*)

**Lab 3**: Operational Amplifiers and Filters (Part I) (*Week 3*)

**Lab 4**: Operational Amplifiers and Filters (Part II) (Week 4)

**Lab 5**: Visualization of Digital Byte Patterns Using Diodes (*Week 5*)

**Lab 6**: Strain Measurement and Displacement Calibration (*Week 6*)

**Lab 7**: Rotational Motion Measurement (*Week 7*)

**Lab 8**: Temperature Measurement (*Week 8*)

**Lab 9**: Measurement of Vibration (*Week 9*)

**Lab 10**: Calibration of Load Cell and Torque Transducer (*Week 10*)

**Lab 11**: Strain Rosette, Rotational Speed, and Displacement (*Week 11*)

Make-Up Lab (Week 12)