

# CENG4480

# Operational Amplifiers Lab 2:

# Tutorial Session

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# Outline

- **Introduction & Overview**
- **Objectives & Expected Outcome**
- **Assignments & Guidelines**
- **Demonstrations**

# Intro. & Overview

- **Recap the Contents:**
  - **Operational Amplifiers** [Lec. 2 & Lec. 1]
- **Hence, the Main Focus would be**
  - **Hands-on Experiments on Operational Amplifiers**
- **We would cover FIVE major designs**
  - **Through the TINA Simulator** as well
- **These FIVE designs are more advanced:**
  - **So we would hopefully DEMO all of them**
  - **A Good Option** is to follow the demonstrations

# Obj. & Exp. Outcome

- **The Purpose of Labs:**
  - **Getting Your Hands Dirty**
- **Hence, I won't help you beyond the detailed guidelines**
  - **Take a Deep Breadth & Follow the Report**
  - **I would show you a way through one concrete example.**
- **Expected Deliverables**
  - **U have 10 days to finish this (DDL: 23:59, Oct. 18)**
  - **A Report, which consists of**
    - **FIVE** Operational Amplifiers Simulations
    - **In total, we have SIX tasks.**

# Assignments & Guides

- **FIVE Experiments:**
  - **Differential Amplifier (Sec. 2)**
  - **Summing Amplifier (Sec. 3)**
  - **Integrator (Sec. 4)**
  - **Differentiator (Sec. 5)**
  - **Non-inverting Schmitt Trigger (Sec. 6)**
- **All Materials have been Covered**
- **Guidelines:**
  - **Use Lab 1 Materials for these Assignments**
    - **Similar Procedure, with Different Configurations**

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