University of Kurdistan

# Robust Control

(Fall 2018)

Department of Electrical & Computer Engineering

**Instructor:** H. Bevrani

## OUTLINE

1. An Introduction on Robust Control
2. New Modeling Concepts and Linear Algebra
3. Uncertainty and Modeling
4. Kharitonov Approach
5. $H_2$ and $H_\infty$ Control Approaches
6. $\mu$ and $\mu$ Synthesis
7. LMI-based Robust Control and Optimization

## GRADING

- Homework and Activities: 15%
- Presentation a Recent Work 15%
- Written Exam: 35%
- Project 35%

## REFERENCE

[1] K. Zhou, **Essentials of Robust Control**, Prentice Hall, 1999.

[2] K-Z. Liu, Y. Yao, **Robust Control: Theory and Applications**, Wiley, 2016.

[3] M. Fathi, H. Bevrani, **Optimization in Electrical Engineering**, Springer, Expected 2019.

[4] H. Bevrani, **Course Lecture Notes**, Fall 2016.