

## Plan of the Lecture

- ▶ **Review:** transient response specs (rise time, overshoot, settling time)
- ▶ **Today's topic:** effect of zeros and extra poles; Routh–Hurwitz stability criterion

*Goal:* understand the effect of zeros and high-order poles on the shape of transient response; discuss relation with stability; formulate and learn how to apply the Routh–Hurwitz stability criterion.

*Reading:* FPE, Sections 3.5–3.6