

# Plan of the Lecture

- ▶ **Review:** coordinate transformations; conversion of any controllable system to CCF.
- ▶ **Today's topic:** pole placement by (full) state feedback.

*Goal:* learn how to assign arbitrary closed-loop poles of a controllable system  $\dot{x} = Ax + Bu$  by means of state feedback  $u = -Kx$ .

*Reading:* FPE, Chapter 7