

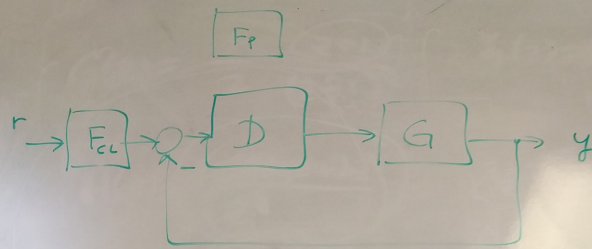
Notes in ECEN 5448

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What do we want

- analyze modes to determine rise time, **settle time**
- Analyze how sampling frequency effects performance
- figure out feedword control.
- F_{CL} inverse of closed loop. Can be acausal because you know input.
- this is genrally for reference tracking.
- assume there aren't any dynamics between teh measured and actuation.
- can use matlabs tools, but analyze why matlabs tools work.
- Then figure out how much better we can do with feedforward.

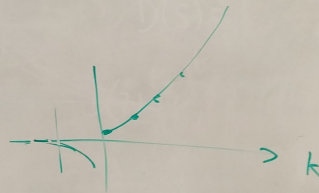


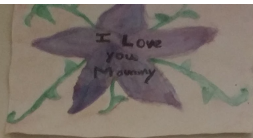
$$H_{cc} = \frac{DG}{1+DG}$$

$$F_{cc} = H_{cc}^{-1}$$

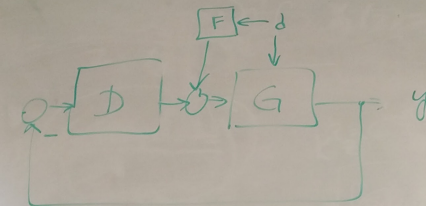
$$H_{cc} = \frac{z-5}{z}$$

$$F_{cc} = \frac{z}{z-5}$$





LUCY



$$H_{cl} = \frac{DG}{1+DG}$$

$$F_{cl} = H_{cl}^{-1}$$

$$F_p = G^{-1}$$

$$\frac{Y}{R} = \frac{F_p G + DG}{1 + DG}$$

