EEL 4890 Class Demo #1 Fall 2011





% class\_demo\_1\_call.m

% class demo of Transfer fcn, XY Graph and Stop Simulation blocks

clc, clear all, close all

K=2; wn=0.5; zeta=0.25;

% K=2; wn=0.5; zeta=0.05;

% K=2; wn=0.5; zeta=1.5;

T=0.1;

tfinal=500;

if zeta>1 % Case 1

 s1=-zeta\*wn+sqrt((zeta^2)-1)\*wn;

 tau=-1/s1;

else % Case 2 or Case 3

 tau=1/(zeta\*wn);

end

tstop=5\*tau; % stop simulation when t>= tstop

estop=0.005; % stop simulation when |ydot|<=estp

sim('class\_demo\_1')

