LECTURES: MW 10:00-11:50 am  
Room: ALS 4001

INSTRUCTOR: Gabor C. Temes, Professor  
3091 Kelley Eng. Ctr.  
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OFFICE HOUR: MW 14:00-15:00 pm

CLASS WEBSITE http://classes.engr.oregonstate.edu/eecs/fall2018/ece580/

PREREQUISITE: Graduate standing in ECE

TEXT: Lecture notes will be posted on the Web. Parts of the following books will be used:


(Note: It is not necessary to acquire these books. Most are out of print. Lecture notes will be posted on the class website.)

MATERIAL TO BE COVERED (if time permits):

Definitions useful in all discussions involving circuits.

  Networks components: R, L, C elements; ideal/perfect/real transformers; op-amps; gyrators; independent/dependent sources.  
Definitions useful in all discussions involving circuits.

  Network analysis: the incidence matrix; branch relations; nodal analysis; two-port parameters; multiport networks; multiport parameters; scattering relations and parameters; transfer functions; sensitivity analysis.  
The basis of computer-aided and paper-and-pencil circuit analysis.

- Network synthesis: approximation theory for continuous-time and sampled-data filters; the design of passive, active R-C, Gm-C and switched-capacitor filters.  
The basics of active, passive and sampled-data analog filters.

MIDTERM EXAMINATION: Friday, October 26, 2018, 10 – 11:10 am
FINAL EXAMINATION: Wednesday, Dec. 5, 2 – 3:50 pm.