

Study Points for ENEE 303H Midterm, Fall 2009  
Scheduled for Th 11/05/09; open book open notes but not open computers

Almost definite:

1. Biasing and load lines for MOS amplifiers
2. MOS differential pair characteristics
3. 2-port Y matrix from a given equivalent circuit
4. MOS as a switch and resulting (1<sup>st</sup> order) differential equation and solution

Possibly:

5. MOS & BJT current mirrors
6. Small signal equivalent circuits for MOS circuits
7. Gain transfer functions for small signals in s, poles & zeros
8. Choice of components for BJT Colpitts/Hartley oscillators