REVIEW FOR EXAMINATION NO. 3

Examination No. 3 will be given during class on Monday, April 18, 2005 from 9:05am to 9:55am. It will last for 55 minutes and is closed book. One page of 8.5x11 notes is permitted, front and back. The exam will consist of 3-4 problems. Below is a list of the material for which you are responsible.

Feedback

Recognize feedback loops and the differences between positive and negative feedback Identify and classify the four types of amplifiers and their associated feedback topologies Determine the effect of negative feedback upon amplifier performance Calculate the loop gain while accounting for the loading of the feedback network Be able to use the return ratio method to calculate the closed loop gain of a feedback circuit

Use Blackman's formula to determine resistance at a port Understand the limitations of negative feedback

High Performance Op Amps

Low output resistance op amps - MOS with and without feedback, BJTs High speed/frequency op amps Differential output op amps - common mode output voltage stabilization

Alan Hasting's Lecture

The may be a problem concerning the material Alan Hastings presented. His lecture notes are on the web site.