

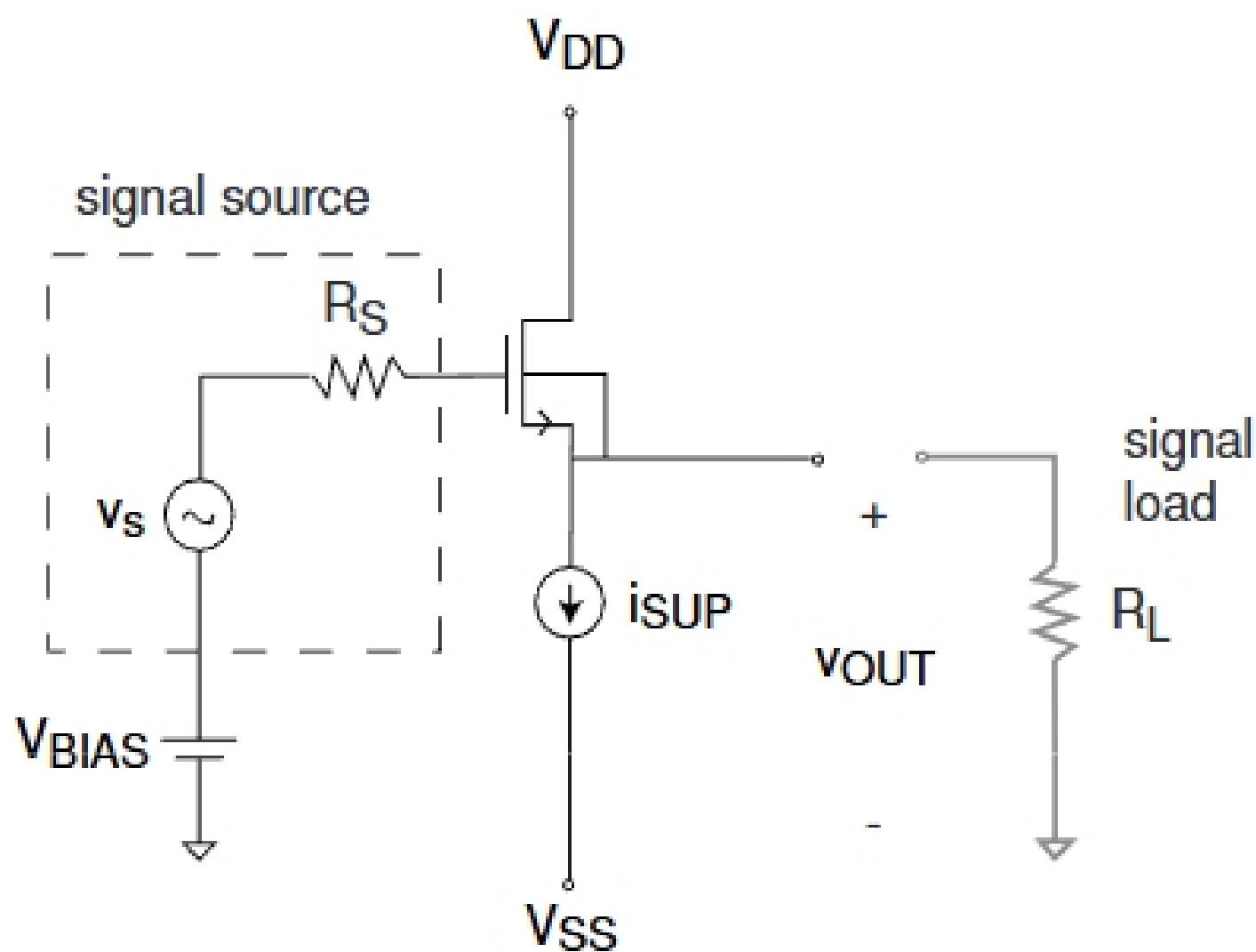
Lecture 23

Frequency Response of Amplifiers (III) OTHER AMPLIFIER STAGES

Outline

1. Frequency Response of the Common-Drain Amplifier
2. Frequency Response of the Common-Gate Amplifier

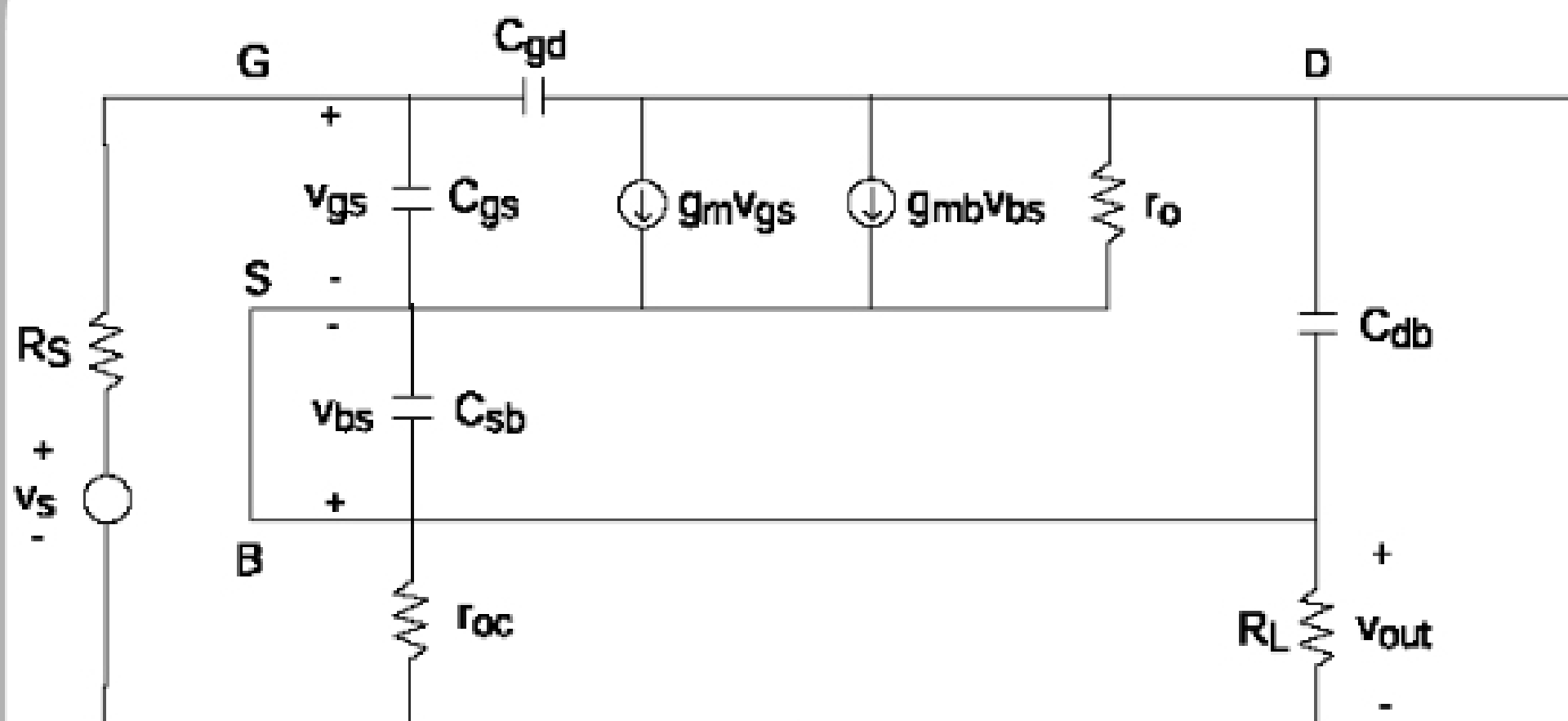
1. Frequency Response of the Common-Drain Amplifier



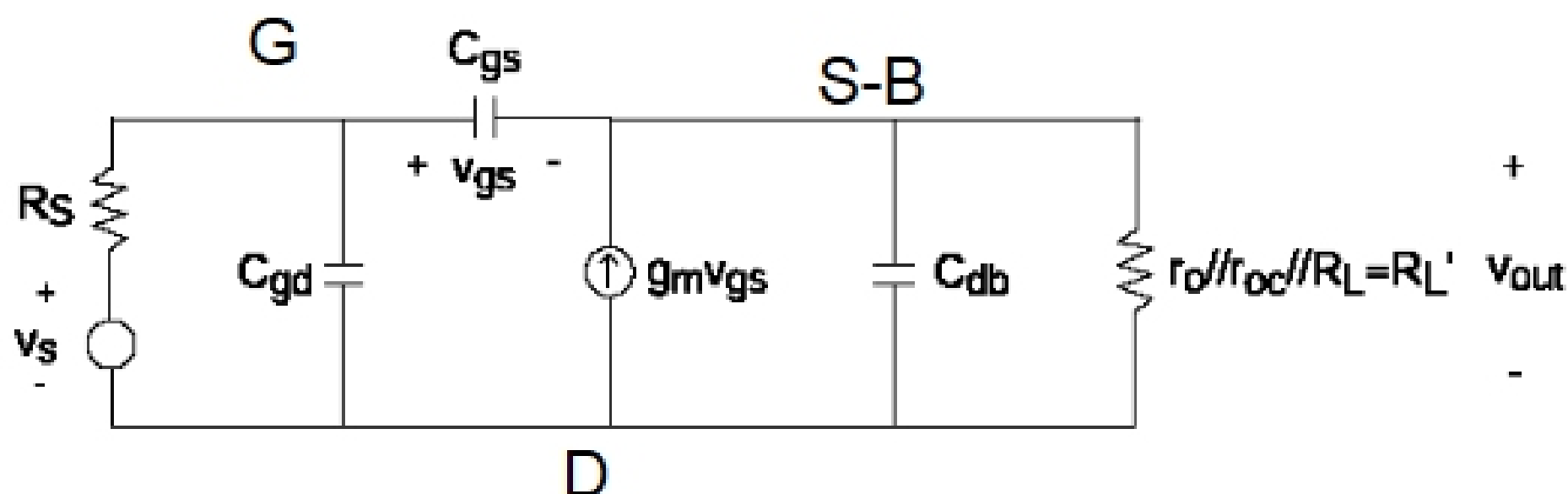
Characteristics of CD Amplifier:

- Voltage gain ≈ 1
- High input resistance
- Low output resistance
- \Rightarrow Good voltage buffer

High-frequency small-signal model



↓ $v_{bs}=0$



Could use OTC to solve for bandwidth.

To estimate bandwidth it is easier to use the 2-port models.