Literature:

Frequency response: p 679-706 p716-740

Nonlinearity: the book does not adequately support this topic, which is why the notes, accessible from the course page, are the only literature.

Assignments:

9.1:

Use the short-circuit time constant method to determine the capacitor values of C_1, C_2 and C_3, so that $f_L = 100$ Hz can be achieved for the circuit in Fig. 1. Where $g_m = 3.82 \cdot 10^{-2}$, $\beta = 301$.

Hint: $r_\pi = \beta / g_m$, $r_e = 1/g_m$.

(1) C_1, C_2 and C_3 = ?
(2) Run the LTspice simulation to check your calculation by comparing with the simulated f_L.
(3) Run the LTspice simulation to find the f_H.
(4) Run the LTspice simulation to observe harmonic distortion.

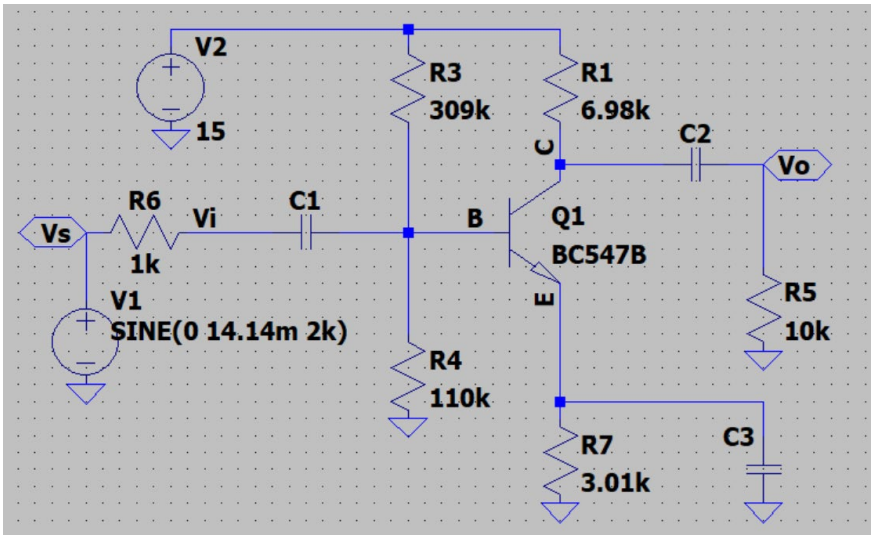

Fig. 1 A CE stage