Chbe 4400 Project Phase I

Mass Balance:

Linearization:

At steady state:

Finally:

If Steady State:

Since outflow mass must equal to inflow mass, we have:

Energy balance:

Linearization:

At steady state:

Finally:

Third balance:

At stead state:

Finally:

For h:

[]=][+[][]

Operating temperature plot:

Use mass balance to substitute C2:

Plug C2 in the Qreaction: