Assignment 9
Art of Compact Modeling
E3 225

1. Plot Surface Potential as a function of X (along the channel, from source to drain) at a given V_G, for $V_{DS} \geq 0$.

2. Plot Terminal Charges (Q_G, Q_D, Q_S, Q_B) as function of V_G, at high and low V_D.

3. Plot Transcapacitances ($C_{gg}, C_{dg}, C_{sg}, C_{bg}$) as function of V_G, at high and low V_D.

4. Plot Inversion Charge Density as a function of V_G, using EKV and Surface Potential Based model and compare.