ECE 3030 Spring 2025 HW 6 Hints

1. Use S&B Eq. 5-8 or Lecture 19, slide 4.
2. Use Eqs. 3-25a and 3-25b to calculate $E_F - E_i$ for the n-side and p-side, respectively. Add as with Problem 1.
3. Also Lecture 19, slide 8.
4. Lecture 21, slide 5 diode equation.
5. Plot $I_p(x_n)$ and $I_n(x_p)$ taking exponential diffusion length decay into account.
6. Lecture 21, slide 2.