EE331 — Homework #12 / Due Wednesday, Apr. 15, 2020 **at the beginning of class**

1. Ch. 5, (a) Prob. 38(b) and (b) Prob. 43(a).

2. (a) Ch. 6, Prob. 6.36 and (b) calculate the capacitance per unit length of a cylindrical capacitor with a dielectric constant of $\varepsilon_r = 2$, an inner radius of 5 mm, and an outer radius of 10 mm.

3. Redo Example #24 but with $b = 10$ mm (i.e., a smaller outer radius). Compare your answer with the result in part (b) of Problem #2. Hmm.

4. Ch. 6, Prob. 6.7.

5. Ch. 6, Prob. 6.16.

6. Redo Example #26, but let $a = 3$ m, $b = 6$ m, and $V_0 = 5$ V.