## OSU ECEN 4303 Digital Integrated Circuits, Fall 2023 HW 3: MOS Capacitors and Solving Non-Linear Equations

Instructor: James E. Stine, Jr. TAs: tbd

Assigned: Monday, 9/18, 2023 Due **Monday 10/2, 2023** (midnight) Handin: http://online.okstate.edu

Please complete the following assigned problems:

- 1. Problem 2.2
- 2. Problem 2.3
- 3. Problem 2.6
- 4. Problem 2.7

Note: Many of the problems in the text do not specify the value for the intrinsic concentration of silicon atoms. You should use the footnote at the bottom of page 4 in your textbook and also assume  $T=300~\rm K$ . Also, for any of the textbook problems, please use an adequate plotting program to get full credit. Deductions will be made for poor plots (e.g., from Excel).

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