

ESE 330 – Integrated Electronics
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Fall 2004

Homework 1
Due date: October 1 2004

Exercise 1: In the four-level MOSFET processing flow discussed in class, what is field oxide used for?

Exercise 2: Which process generally gives higher resolution, electron beam lithography or optical lithography? Please explain why.

Exercise 3: Which process has a better control of the doping profile, ion beam implantation or predeposition + drive-in-deposition? Please explain why.

Exercise 4: List the etching techniques you know.

Exercise 5: List the layer representation used in CMOS mask designs.