

Table 1: ECE 230L Laboratory 6 Grading Rubric

Criteria	Points Possible
Diode OR Gate	10
Circuit Diagram	2
Truth Table Verified	2
Variable diode drop values given for different diodes	3
Justification of whether circuit is “better”	3
Diode AND Gate	8
Circuit Diagram	2
Truth Table Verified	3
Diode Drop Value Noted	3
Discrete MOS Inverter Circuit	49
Circuit Diagram	2
Truth Table Verified	2
Voltage Lost Across Circuit	3
V_{OL} from V-V singleloop.vi graph	5
V_{OH} from V-V singleloop.vi graph	5
$I_{DD}(V_{in} = V_{OL})$	3
$I_{DD}(V_{in} = V_{OH})$	3
$P(V_{in} = V_{OL})$	2
$P(V_{in} = V_{OH})$	2
Image of V_{out} when square wave is applied	3
Degraded image of V_{out} when square wave is applied	3
High-to-Low Transition Time (t_{p-HL})	3
Low-to-high transition time (t_{p-LH})	3
Degradation frequency with explanation	3
Discrete NAND gate circuit diagram	3
NAND Truth Table verified	4
Exploration: Discrete NAND Gate w/ Applications	12
NAND Gate Truth Table Verified	3
Ring Oscillator Circuit Diagram	3
Period of oscillator for N inverters	3
Period of oscillator for 1 inverter	3
Quality of thought/analysis	5
Total	84