

ECE2270**Lab1 – Notebook Point Breakdown**

<i>Communications (Keeping a Proper Notebook)</i>	<i>30 Points Total</i>
Written in Ink	4
Student Signed every page	4
Student Dated every page	4
TA Signature for every lab session (-3 each session missed)	6
Student's work Reproducible from notebook	12
 <i>2. System Component Measurements</i>	 <i>10 Points Total</i>
Table of Components (Measured Values).....	5
Measured Components used in Matlab	5
 <i>3. Analysis of Launcher Circuit</i>	 <i>20 Points Total</i>
Overdamped:	
Circuit Schematic	2
Derivation of I(t)	2
Matlab Plot of I(t) Expression	2
State Equations Derivations	2
Matlab Comparison of I(t) for 2 Methods.....	2
Underdamped:	
Circuit Schematic	2
Derivation of I(t)	2
Matlab Plot of I(t) Expression	2
State Equations Derivations	2
Matlab Comparison of I(t) for 2 Methods.....	2
 <i>4. Construction and Testing of Launcher</i>	 <i>10 Points Total</i>
Measured R and L of Coil.....	5
Table of Launch Measurements	5
 <i>5. Third-Order System</i>	 <i>25 Points Total</i>
Circuit Schematic	2
State Equations Derivations	6
Matlab Code for ODE45 Solver	3
Matlab Plot of ODE45 Solution	2
Measured V2 Plot.....	4
Matlab Code for Comparison	3
Matlab Comparison Plot	2
Comments on Measured vs. Calculated Comparison	3
 <i>Conclusion</i>	 <i>5 Points Total</i>
 <i>Launch (Extra Credit)</i>	 <i>2 Points Total</i>
Longest Shots (top 3) in Lab Section (more extra credit)	3