**PURDUE UNIVERSITY NORTHWEST DEPARTMENTS OF ENGINEERING**

**ENGR15100: SOFTWARE TOOLS FOR ENGINEERS**

**Laboratory 11**

**PURPOSE: To simulate an egg drop trajectory using Simulink**

**STEP 1:**

1. Create the Simulink diagram for .
2. Set the simulation time from 0 to 30 seconds with the step size 0.1 and verify the final altitude is -1415.

**STEP 2:**

Modify the above diagram to automatically stop when the altitude reaches less than or equal to a desired preset value. **HINT:** You will need to add a constant block for the preset value, a relational operator block for the inequality test, a stop simulation block, and a second display labeled time to accomplish this step.

Set the desired altitude value to zero in the constant block and run the simulation to determine the impact time. This value of time should be shown in a second display labeled time.

**SUBMITTING YOUR LAB:**

Submit your lab by uploading .slx file using the Blackboard Assignment feature no later than the date specified.