

**STOMP ISB Semester Outline – Spring 2011**  
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**Teachers: Mr. Balter and Mr. Bolzan**

<b>Date</b>	<b>Lesson</b>
February 9, 2011	<i>Intro to engineering</i> – what is engineering? Talk about the different types of engineering and science in every-day life. <i>Intro to LEGO</i> – LEGO pieces, sturdy structures, build a chair for Mr. Bear
February 16, 2011	<i>Intro to robotics</i> – the human robot (human programming game), show students how to program, build cars (mechanical engineering)
February 23, 2011	<i>Intro to touch and light sensors</i> – Harry Potter activity – input and output, senses, extension activity – follow the line
March 2, 2011	<i>Intro to ultrasonic and sound sensors</i> – stay on the table activity (Roomba vacuum)
March 9, 2011	<i>NXT security alarm activity</i> – using one or more of the sensors we have learned about so far, make an alarm system to protect something special (i.e. candy)
March 16, 2011	<i>Maze competition</i> – set up a maze that a car controlled by two sensors can go through (remote control car with touch sensors)
March 23, 2011	NO STOMP – Spring Break
March 30, 2011	<i>Intro to gears/gear trains</i> – Reese’s peanut butter cups activity
April 6, 2011	<i>Snail car race activity</i> – see who can make a car travel the shortest distance in a certain amount of time
April 13, 2011	<i>Fan/wind turbine product design activity</i> – renewable energy sources – how do wind turbines work? Talk about windmills on Science Center roof/Cape Wind project
April 20, 2011	<i>Spin art activity</i> – use gears and motors to make markers draw in circles on a piece of paper
April 27, 2011	<i>Paper airplanes activity</i> – what is the engineering behind paper airplanes? Go outside and test the designs