OVERVIEW:
Mondays: Meet in Engr 103. We will discuss the assigned chapter that you have READ IN ADVANCE. Your responses to questions will be graded.

Wednesday: Go to your group location. See Groups posted on March 4th of the website.
Friday: Go to your group location. See Groups posted on March 4th of the website.

Each week there will be one inclass assignment and one homework assignment. See below for the details of how you turn them in.

IMPORTANT INFORMATION: This document contains both the Inclass and the Homework for the week. The Inclass is to be demonstrated or submitted to your group leader. The Homework is to be submitted via Eagle. Both are to be individual work. You may talk to other students in the course about your design and for ideas, but you are to write the complete Alice programs by yourself. You may receive help from the Professor, CS Tutors, UTF's or TA. In your comments, identify (by name) all those who helped you. Failure to do so is considered cheating.

The term “integrated physical science” is a bit confusing. At first blush, it sounds like an integrated physical science class would talk about all the sciences and integrate them into one class. That would be overwhelming. Can you imagine? In contrast, the term is used to mean a discussion of the basic principles of scientific discovery and thought which are common to all sciences - thus, our continued discussion of scientific method, analytical thinking, and algorithms.

Some of you have wanted to learn things that will be valuable to you in the next ten minutes. Sorry. This isn't going to happen. We are looking at "big picture" skills.

A major focus of scientific thought is in problem solving and in trying to understand the world around us.

We have spent some time talking about modeling problems, testing hypotheses, and writing algorithms. As we move into the Alice phase of the course, we concentrate on algorithms and modeling. Thinking analytically is important for many day to day tasks as well as in your future work. As we work with Alice, realize we are developing the analytical skills. I am not assuming your first job (or any other subsequent job) will involve Alice programming. However, most employers are looking for people with problem-solving and analytical skills. Most any job I can think of requires you to recognize a problem, figure out what is going on, and analyze how to fix it.

Learning Alice is NOT the goal. Analytical thinking is the goal. Learning Alice is NOT the goal. Ability to express an algorithm is the goal. Alice is the vehicle.

Some of you will be naturals at programming. You will read the book, experiment, and be totally content to teach yourself. That is wonderful! We want to encourage that, if that is the way you learn best. Others will want more instruction, more demonstration, more intervention. We are happy to provide that level of support as well. However, you need to decide from the outset which option is better for you.

So there are two options:
1. If you choose to learn at your own rate, you must inform us immediately of your decision. This class becomes an “online class” for you. Check the website for assignments. Email your section leader your inclass projects. Submit the “homework” assignments via Eagle. Check your email and the website for any announcements.

2. Those who learn best by more formal instruction will have regular lecture on Mondays (in Engr 103) and will have labs (in smaller groups) on Wednesdays and Fridays (at an assigned location). You are expected to come to class ready for a discussion of what you have read.

In class (5 points)
Must be demonstrated or submitted by the end of class on Friday

Reading ahead in chapter 10 will be helpful.

Objects: Add into the world a magnet (from the Objects folder), four small magnetic objects such as an alarm clock in the Objects folder and one large magnetic object such as a car.

Setup: (2 points) Place the magnet in the center of the world and place the other objects in a circle around the magnet. Use the quad view to check their placement.

Story: (2 points) For each small object, the object will come to and attach to the magnet. You can have the item then either stick to the magnet or drop and fall to the ground.

(1 points) Then the magnet will turn and face the large object and say something (like "yikes") and slowly be drawn to the large item.

Homework (15 points) Due Friday, midnight

The purpose of this assignment is for you to create an Alice World that is a very simple animated greeting card (any occasion you choose - birthday, get well, etc.). (For examples of electronic greeting cards see BlueMountain or egreetings.) The program must be in good taste. If it doubt, don't do it.

It is to include the following features:
1. You must have at least 4 objects.
2. The objects must interact with each other in the following ways. There must be at least one occurrence of each of the following between some pair of objects.
   a. (2 points) Two objects should face each other.
   b. (2 points) One object should move toward another object.
   c. (2 points) One object should say something.
3. (4 points) You must use the DoTogether and Do In Order blocks, including some nesting of these blocks.
4. (2 points) You should have at least three camera views and change between them.
5. (1 points) Use comments (//) in order to credit any help-people and identify you as the author.
6. (3 points) Overall design should be well thought out.