**Week 1:**

* **The Course**
  + Read the syllabus for the course.
  + Familiarize yourself with this web site.
  + Locate a computer system on which you can complete the labs for the course. You can use the CIT Main Lab or a machine of your own. You'll need a Windows machine and Visual Studio 2015. Visual Studio 2015 can be obtained through MSDNAA.
* **Read Quiz 1**
  + Read or skim chapters 8 - 13 in the 233 text.
  + Complete Read Quiz 1. The first reading quiz covers all of the content from CS 133 and 233 N.  Each reading quiz consists of 10 multiple choice questions taken from the topic. Generally, you may take a reading quiz 4 times and the highest of your scores will be used in the calculation of your grade. Each quiz is open book but because you only have 40 minutes to complete each attempt, you won't complete the quiz if you haven't read the materials prior to attempting the quiz.  BECAUSE THIS FIRST QUIZ IS REVIEW, you may take it an unlimited number of times, the highest of your scores will be used in the calculation of your grade and there is no time limit on each attempt.
* **Lab 0**
  + Download the starting files - Mexican Train Dominos.
  + I have provided you with a Domino and a BoneYard class as well as unit tests for each class.
  + Complete the Train class according to the specification provided in class.  Use nUnit to build and run unit tests for each method in the class.
  + Participate in the forum - Lab 0 Questions as necessary.
  + Complete a peer evaluation for your work in lab 0.  Make any corrections necessary based on your peer evaluation.
  + Submit lab 0

**Lab 0 - MTD Train Class**

The objective of this lab is review the Object Oriented Programming concepts and skills you developed in CS 233N.  This information is covered in chapters 12 and 13 of the text.

Complete the programming problems described below.  For each of the problems, use the starting files provided.

Assume that you've been asked to write a series of object oriented Mexican Train Dominos.

Design a class (or set of classes) that can be used to play Mexican Train Dominos. Document your class by creating a class diagram in Visio or Visual Studio or by listing the name of the class, the attributes or characteristics of the class and the methods of behaviors of the class. Don't forget things like getters and setters or properties, constructors and ToString.

Add the Domino and BoneYard classes that I created to an appropriately structured Visual Studio solution.  Add the nUnit unit tests for the Domino class to your solution.  Verify that all of the tests run.  Implement a set of unit tests for the BoneYard class.  Verify that you have written tests for every property/method and that all of the tests run.

Write a set of unit tests for the Train class given the specification provided in class.  Implement the Train class in C#, one method at a time, testing as you complete each method.

A maximum of 20 points will be awarded for the lab.

In class section students should:

* Complete the implementation and testing of the Domino, BoneYard and Train classes  in Visual Studio.  Add a class diagram
* Download the peer evaluation form for lab 0.  Complete the peer evaluation with a classmate using the form as a guide.  Include with the peer evaluation document:
  + screen shots illustrating that all tests pass
  + the source code for the classes and test programs that you wrote in each problem
  + class diagram for each class you wrote.
* Upload the peer evaluation document you created in moodle.