"***Course Schedule***", also known as "***Course Offering***", is a list of courses offered at the university for a given semester.
Design a simplified "Course schedule" by creating the following classes:

1. Create class **Course** with the following data members:
   - **`CrsNbr`** – The course number (ex: CSC213).
     A valid course number is 6 characters long that starts with 3 alpha characters and ends with 3 numeric characters. (ex: CSC213)
     (String of 6 characters. Defaults to **Empty String**)
   - **`Credits`** – Number of credits of the course
     (Between 3 and 15 inclusively. Defaults to **3**)

   and the following **member functions**:
   - A **constructor** with default arguments.
   - All needed **"set"** functions with the ***integrity checks***.
   - All needed **"get"** functions.

2. Create class **Offered** with the following data members:
   - **`Year`** – The year of the offered course.
     (Between 2000 and 2100 inclusively. Defaults to **2007**)
   - **`Semester`** – The semester of the offered course.
     The valid values are: "**Fall**" and "**Spring**" .
     (Defaults to " **Fall** ")
   - **`Course`** – An object of class **Course**. It will hold the data of the offered course.
   - **`Section`** – The section identifier of the offered course.
     The valid value is any letter between '**A**' and '**T**' inclusively.
     (Defaults to '**A**'.)
   - **`nbrCrs`** – To track the number of created objects of this class. **This data member should be common to all object of the class**.

   and the following **member functions**:
   - A **constructor** with default arguments.
   - All needed **"set"** functions with the ***integrity checks***.
   - All needed **"get"** functions.
   - A **print** function that displays on the screen all the data regarding an object of this class.

Note: To earn full grades the following should be observed:
a) *All member function of this class should be created with* ***cascading capability.***
b) *You should apply the* ***"Principle of least privilege".***

3. Write a program to test your classes by:
   a) **Dynamically** create an array of 3 "**Offered**" objects.
   b) Fill the objects with your favorite courses.
   c) Using a **pointer**, print on the screen the created course offering.
   d) Test the **cascading** ability of your functions by calling different member functions using objects from the created array.

Due date: Monday, November 12th, 2007