

**CIS280 Project #1  
(Chapters 1 and 2)**

Name(s): \_\_\_\_\_ Due: \_\_\_\_\_

**Personalization and Commenting Requirements:**

- *All source code must contain a comment with the source file name, programmer(s) names(s) and date created*
- *Commenting at top should include the purpose of the program*
- *Appropriate, clear commenting must be used throughout the code; be professional and pay attention to spelling*
- *All applications should start with an output to the screen that contains the name of the application and the programmer(s)*
- *Name the programs as shown on this project sheet*

1. *Output.java* – Console application – This program utilizes the Scanner Class to ask the user for two Strings and an integer and then uses System.out.println to display three lines of output.
  - a. Ask user for their name, which is to be a String
  - b. Ask the user for their major, which is to be a String
  - c. Ask the user for expected graduation year, which is to be an integer
  - d. Output the data on three separate lines using System.out.println
2. *Output2.java* – Console application – modify #1 to use System.out.print to display the same three separate lines of output.
3. *Output3.java* – Console application – modify to use ONE System.out.println statement to output the data as such: (Where the X's represent the data inputted by the user)  
*Hello, my name is XXXXXXXXXXXXX, my major is XXXXXXXXXXXXXXXXXXXX and I expect to graduate in XXXX!*
4. *Study.java* -- Console application --- This program asks the user for the number of credits in a course and the name of the course, calculates study hours, and displays the results.
  - a. Use the Scanner class to input the following data, in this order:
    - i. Ask user for the number of credits for a course they are taking, which is an integer
    - ii. Then, ask for the name of the course, which is to be a String
  - b. Calculate the study hours, which is the number of credits multiplied by 3
  - c. Use System.out.println to display the study hours along with the number of credits and course name on one line of output, such as: (Where X's represent the calculated study hours and name of the course)  
*You should expect to spend XX hours each week studying for XXXXXXXXX, plan ahead.*

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5. *StudyDialog.java* – modify *Study.java* into *StudyDialog.java* which is a GUI application
  - a. Use an input dialog box to gather the inputs (number of credits and name of course)
  - b. Use a message dialog box to display the results – include all three items in the dialog box
  
6. *Tuition.java* – Console application – this program asks the user for the total number of credits they have registered for, calculates the tuition, adds the necessary fees, and displays the total owed for the semester.
  - a. Use Named Constants for:
    - i. Tuition Rate, which is 503.95 (per credit)
    - ii. Facility Fee, which is 10.00 (per credit)
    - iii. Parking Fee, which is 60.75 (per semester)
    - iv. Registration Fee, which is 45.00 (per semester)
  - b. Use the Scanner class to gather the input, which is the total number of credits the student has registered for, this should be an integer.
  - c. Calculate the tuition.
  - d. Calculate the total owed, which should be a float.
  - e. Display the total number of credits, tuition amount, facility fee, parking fee, registration fee, and the total owed. Demonstrate the use of *both* System.out.printf and String.format in your solution.
    - i. Displayed amounts should include commas where appropriate, and be displayed with two places behind the decimal, output should be presented in an easy to read fashion.
    - ii. Total owed should include a dollar sign.

**Submission Requirements:**

- Zip your .java source files into a folder labeled with your name(s) and project number. Submit this zipped folder in Blackboard. Please use the onboard zip utility in Windows rather than a third-party product.