

## BCS 230 Lab4

CRN 23798, 23322, 20108    Spring 2015

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**Objective:** To learn to define structs and to manipulate data using structs.

**Task:**

a. Write the definition of a struct named `courseType` which has four members: `courseName` of type string, `courseID` of type int, and `credit` of type int.

b. In the function main, create a struct variable `course1` of type `courseType`, and initialize it with the following values:

```
courseName:    "Programming II"
courseID:      71200
credit:        3
```

c. Write the definition of function `printCourse` to print the contents of a `courseType` variable.

d. In the function main, create a struct variable `course2`, and copy the contents of `course1` to `course2`.

e. Change the member `courseName` of `course2` to "Web Database Development" and change `courseID` of `course2` by adding 100 to it.

f. Call function `printCourse` to output the values of `course1` and `course2`.

g. Write the definition of a struct named `studentType` that has three members: `studentName` of type string, `firstCourse` of type `courseType`, and `secondCourse` of type `courseType`.

h. In the function main, create variable `student1` of type `studentType`, and initialize it with:

```
studentName:    "Alice Brown"
firstCourse:    course1
secondCourse:   course2
```

i. Output the following information of `student1`:

```
studentName
courseName of student1's firstCourse
courseName, courseID and credit of student1's secondCourse.
```