

FOR 240 Homework – Assignment 3
Using MS Access to Create a Database
Introduction to Computing in Natural Resources

In this assignment, you are required to create a database – dbStudentCourse. In this database, you should do the following work:

- (1) Create three tables: tblStudent, tblCourse, and tblStudentCourse,
- (2) Build the relationship between tblStudent and tblCourse,
- (3) Create a query, and
- (4) Generate a report based on the query results.

You can follow the following procedures to accomplish your homework. You can also find the detailed information about the database design structure and data entries on pages 147-156 of our teaching packet. Please provide me a summary report with few screen shots of your database design view and data of three tables, the query results, and the generated report based on the query by the beginning of the class next week.

1. Database design

This database contains three tables: tblStudent, tblCourse, and tblStudentCourse.

tblStudent(StudentID, Sname, GPA)

tblCourse(CourseID, CourseTitle, CreditHour, Description)

tblStudentCourse(StudentID, CourseID, DateTaken, Status)

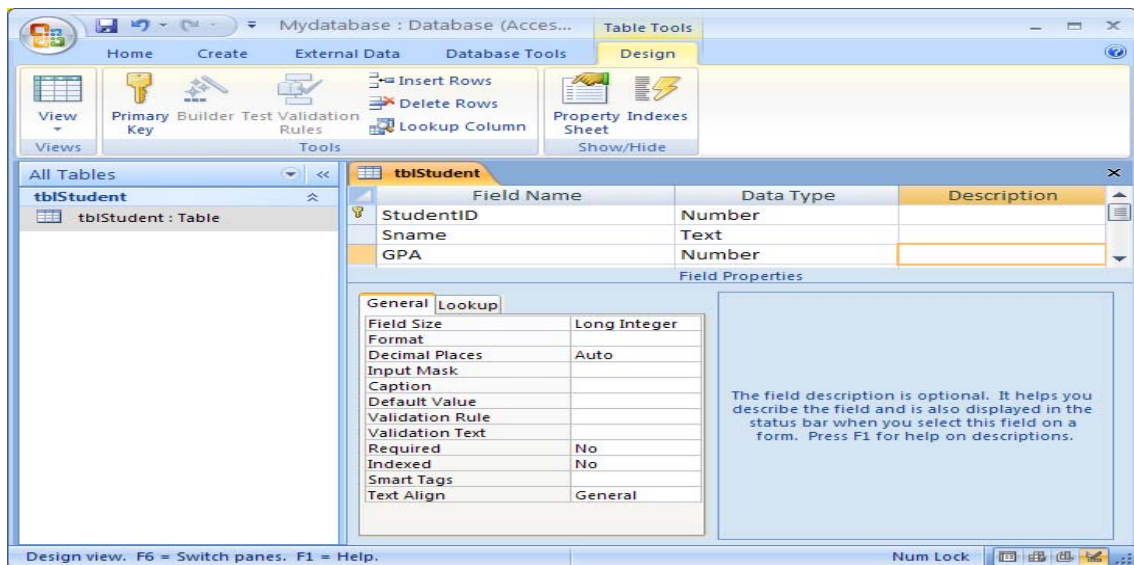


Figure 1. The frame of tblStudent

Steps:

- a) Open Microsoft Access 2007, and click “Blank Database”. You need to name your database as “dbStudent.accdB” and save it into a specified folder. Click “Create”.
- b) In the database, you will see “Table1”, which is the default name created by Access. The datasheet view of “Table1” is on the right hand side of the database. Right click “Table1” on the top of the datasheet view and choose “Design View”. In the pop up window, rename the table as “tblStudent”.
- c) Input the field name and choose the data type as shown in Figure 1.
- d) Set the first field “StudentID” as the “primary key” by right clicking the very beginning of the first row. Now, the design of the table “tblStudent” is completed.
- e) To create other two tables “tblCourse” and “tblStudentCourse”, go to the top menu and click “Create” and then “Table”, you will see a new table named “Table1”. Repeat the procedures of b) and input the field names and data types as indicated in Figure 2 and 3.
- f) Input the data as indicated in Figure 4a, 4b, and 4c.

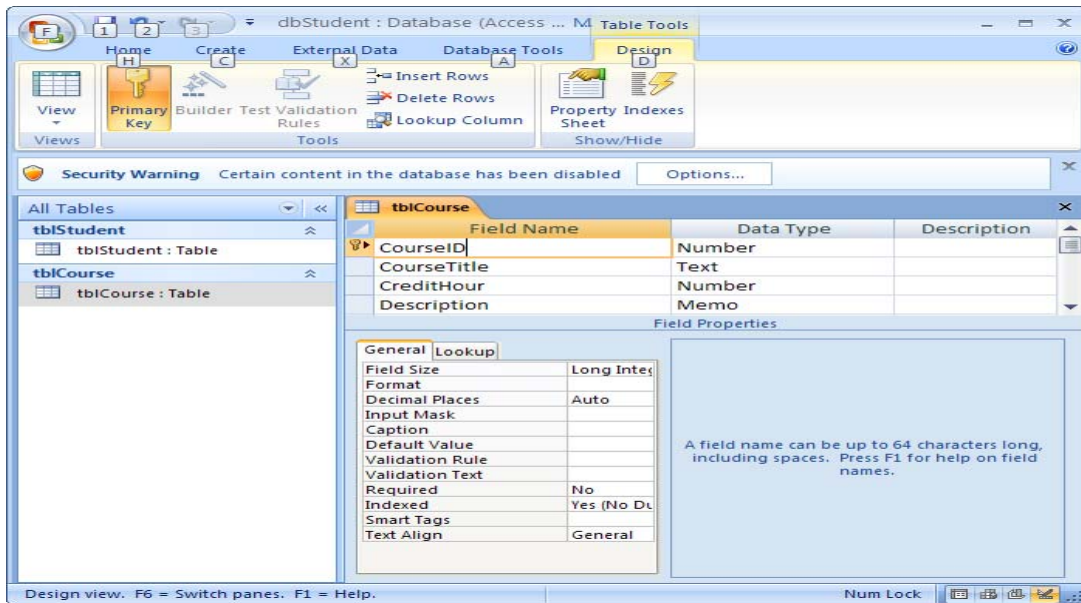


Figure 2. The frame of tblCourse

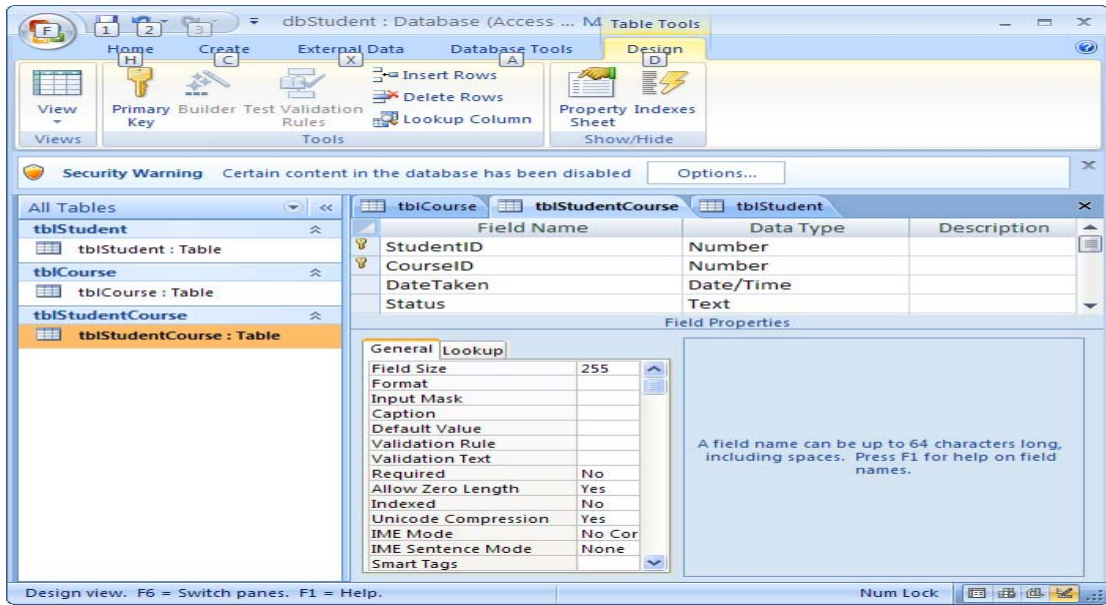


Figure 3. The frame of tblStudentCourse

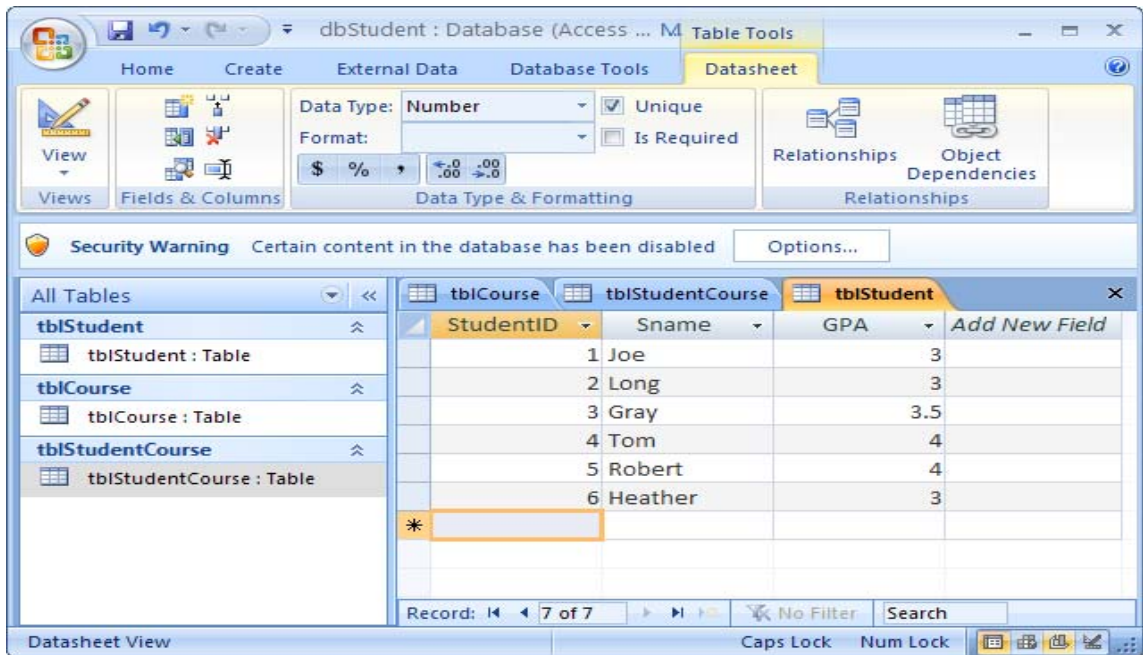


Figure 4a

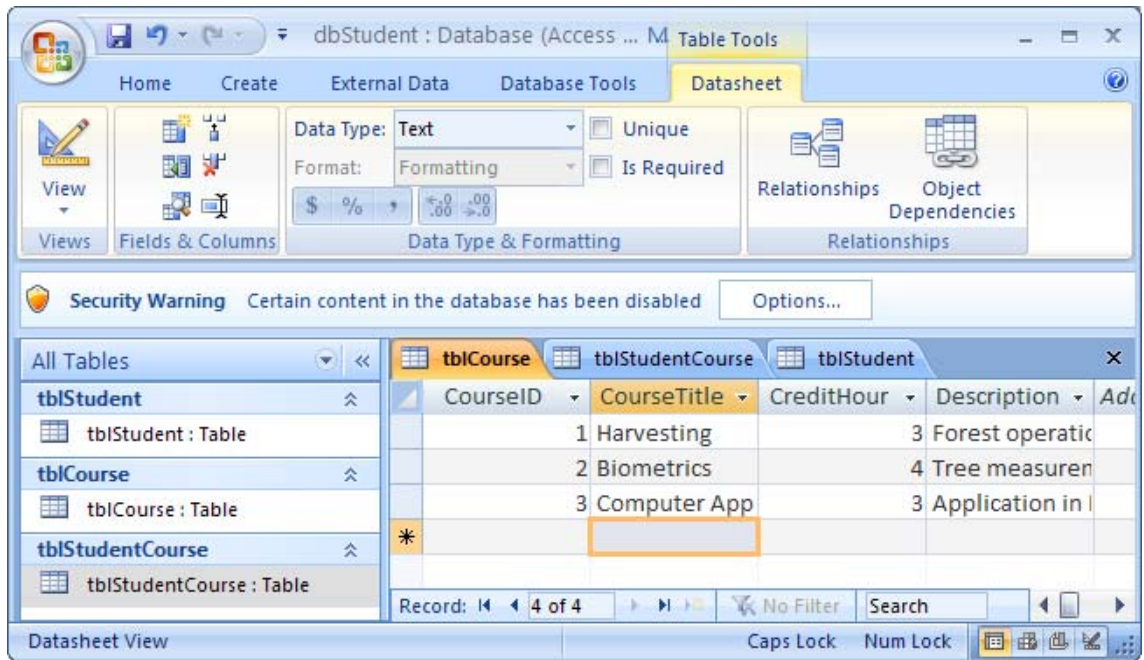


Figure 4b

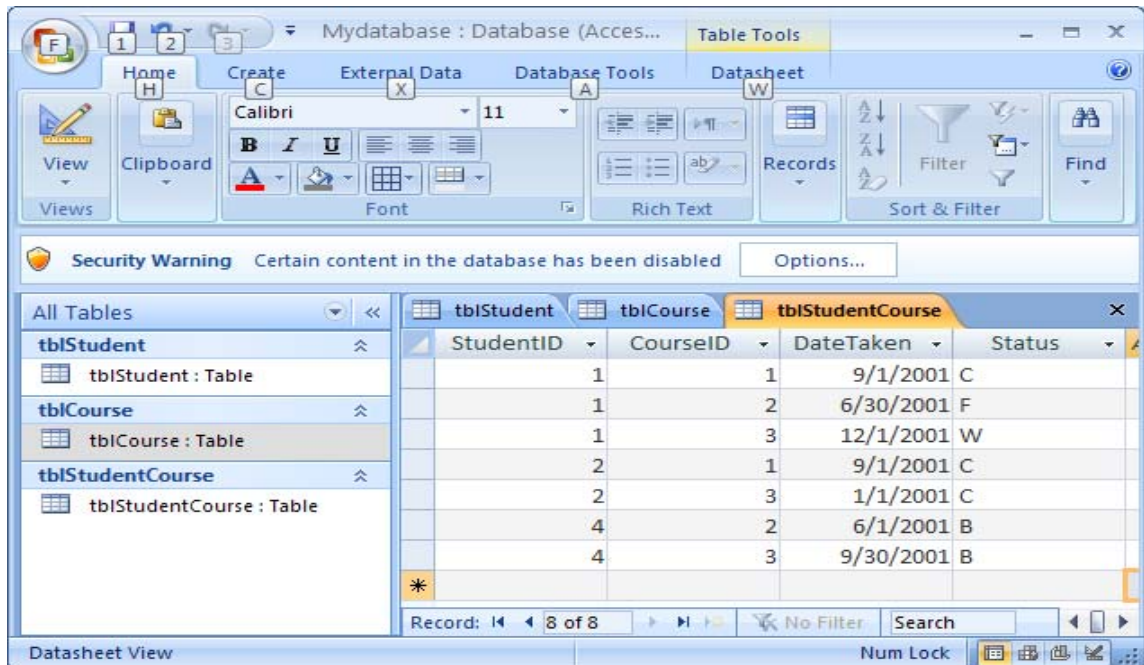


Figure 4c

2. Build relationship for Student and course database

Click Datasheet-> Relationships... from the Tool menu, you will see a dialogue box. Select all the tables and hit the button "Add". Simply drag CourseID from

tblCourse to tblStudentCourse and StudentID from tblStudent to tblStudentCourse. The relationships among the tables are built (Figure 5).

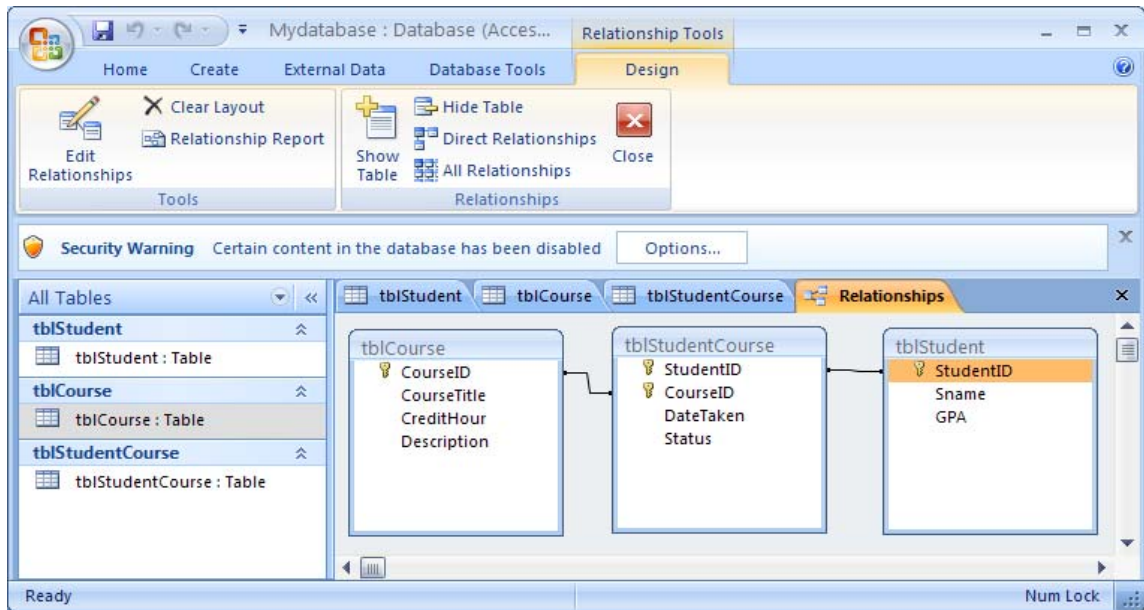


Figure 5.

3. Query tables

(1) Query manually

Click “Create” menu, you will see several options to create a query. We will use “Query design”. When the “Show Table” box is popped up, add all the tables. Drag the data fields you need from tables to the query layout area where the tables are shown. Click “Run”, you will get a query table. In your assignment, you list StudentID, SName, GPA, and CourseTitle; and name your query as qryStudentCourse.

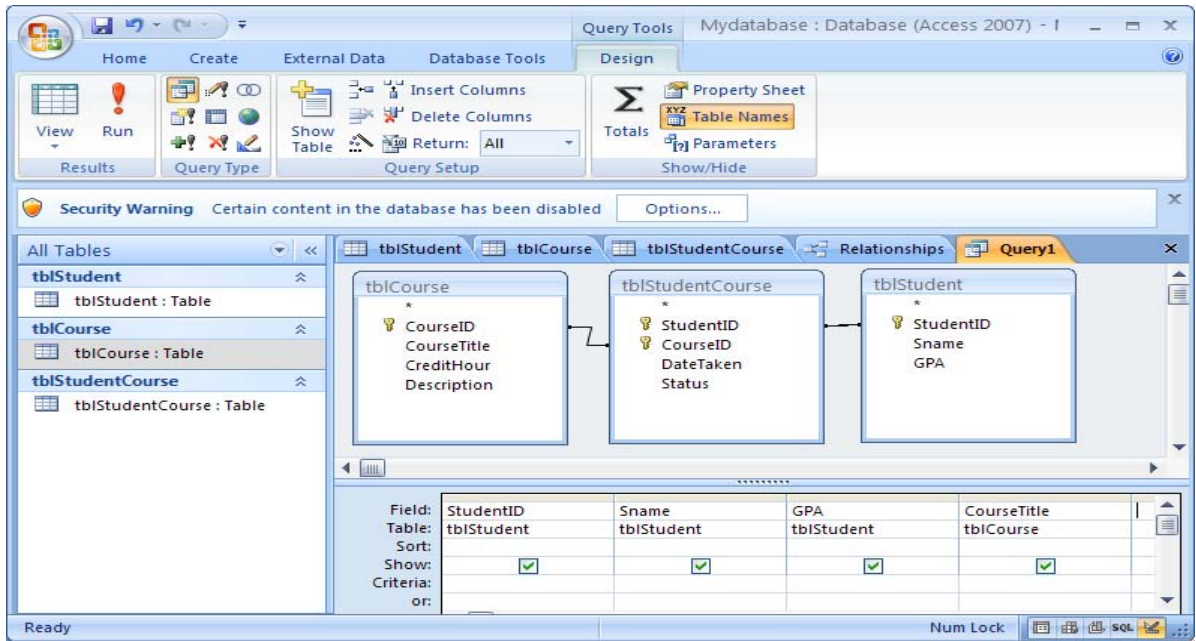


Figure 6.

4. Create reports

Click "Create" on the menu and then "Report Wizards". Select the query you just generated and select all the fields. Follow the instructions to create your own report based on the query you just created: qryStudentCourse.