Evaluation:
Database design – **Excel Spreadsheet**
Database in Blackboard

Part I
May work alone or with a partner

1. **Choose a topic (due by the end of week 13)**

2. **Design 3 tables on paper (due by the end of week 13)**
    - two of the tables will be in a 1:M relationship,
    - and there will be a 1:1 for one of the tables above (parent or child)

   Here's how to start:
   a) Brainstorm a list of all data that may be applicable to your topic – look on line for ideas if required

   b) Look at your list from a) and decide if you can group some in the same table

   Include these types of fields at least once throughout the project:

   - ✓ Short text – you'll probably have several of this type
   - ✓ Currency   ✓ Date/Time
   - ✓ Number
   - ✓ Yes/No

   When this step is done, you will have created a document as shown on next page

Part II

Sample document for your database design.

authors		
column	**data type**	**details**
authID	number	**PK**
authFName	short text(32)	
authLName	short text(32)	
authAge	number	
authIsAlive	Yes/No	

1:1

authorContact		
column	**data type**	**details**
authID	number	**PK**
authAddress	short text (64)	
authCity	short text(32)	
authProv	short text(2)	
authPhone	short text(10)	

1:M

books		
column	**data type**	**details**
bookISBN	short text(12)	**PK**
bookTitle	short text(64)	
bookPublishDate	date	short date
bookPrice	currency	
bookAuthID	number	**FK**

Typed up in Excel, must show professor by end of week 13.

You will create this after Part I, and I will go over it with your group <u>before</u> you actually create it in Access. This will be part of the evaluation for the assignment.

Part III - To be done individually

1. **Create tables** in Access

2. **Create relationships** between your tables

3. **Add data** to tables – at least **5 records in primary table**, at least **15 in related table,** and at least 3 records in the 1:1 table.

4. **Create a custom report**, see below

5. **Write queries,** see below

Custom Report

Using the database you've created, design and build a professional looking report that would be useful to the user of your database.

The report should meet the following specifications:

- ❑ A minimum of two fields from the primary table above the detail section – one of the fields will be grouped.
- ❑ A subreport of fields (minimum of 4 fields) from the related table (detail area)
- ❑ Your name(s) in the report header and a title in the page header
- ❑ Add a conditional format on one of the fields – your choice of criteria
- ❑ Include a sort in the detail area
- ❑ Hide duplicate values – **include a field that will require this**
- ❑ A **total** on one of the fields in the detail area. It can be a sum, average or any other mathematical function. Include a thick line above the calculation result, and increase its width if needed.
- ❑ Make sure no data is cut off
- ❑ View in Print Preview to ensure a professional look e.g. data is lined up under their headings

Queries

You decide which fields are to be included to satisfy the query's requirements.

1. Create a **crosstab** query between your primary and child table **(1:M).** You will create the crosstab from a query you built beforehand. **Save as Q1**

2. Display one field from each table – one of them your date field. Display only records that are between two dates of your choice. **Save as Q2.**

3. Create a query that uses the **IIF** statement to display a message based on a criteria of your choice. **Save as Q3**.

4. Use the **concatenation** operator to display two or more fields together in one column. Include a space, comma, or any other symbol that makes sense with your data. Sort concatenated field alphabetically. **Save as Q4.**