Excel for Beginners: Using Spreadsheets to Create Interactive Grade Books

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WHY A TECHTORIAL?

What will I learn today?

You will learn how to create a basic Excel spreadsheet and how to use it to record, average, graph, and print students' grades.

What hardware and/or software does the techtorial apply to?

This techtorial applies to Microsoft Excel (usually included in the Microsoft Office suite).

Which National Educational Technology Standards for Teachers does the techtorial address?

The techtorial will help teachers accomplish standard IIIa, IIIc, IIId, and Vc in particular.

The International Society for Technology in Education (ISTE) has developed a set of National Educational Technology Standards for Teachers. Standards or Performance Indicators are included for each techtorial to help teachers and administrators improve technology proficiency. For a complete description of the standards indicated, go to NETS for Teachers, click Standards in the menu bar on the left, and then click the arrow to the right of Standards and Performance Indicators for Teachers.

WHAT IS EXCEL?

Excel is a spreadsheet program that can be used to record data, to manipulate data (by calculating totals and averages, for example), and to display data (in the form of graphs, charts, tables, timelines…). Educators easily can use spreadsheets to average grades, to track projects with multiple parts or deadlines, and to gather data from classroom projects.

In this techtorial, you will create a spreadsheet in Microsoft Excel and use it to record, manipulate, and graphically display your students' grades. As you do so, you will learn how to enter data into a spreadsheet, how to use a formula to learn more about that data, how to create a chart to display the data, and how to print your data.

ENTER DATA

To make a spreadsheet of students' grades:

- Open a new spreadsheet: Click Microsoft Excel on your desktop or in your **Start** menu. (You also might find Excel in Start>Programs>Microsoft Office>Microsoft Excel.)
- The new spreadsheet is made up of many small squares; those squares are called cells. The cells are arranged in columns across the top of the spreadsheet (A, B, C…) and in rows down the left side of the spreadsheet (1, 2, 3…). The top left cell in the spreadsheet is cell A1.
- Click in cell A1 and type *Names.* Hit Enter.
- Click in cell A2, type a student's name, and then hit Enter.
- In cell A3, type another student's name, and hit Enter.
- Continue down the page until all students' names are entered.
- Click in cell B1 and type a name for the assignment you are recording (*history midterm,* for example). Hit Enter.
- In cell B2, type the first student's grade and hit Enter.
- In cell B3, type the second student's grade and hit Enter.
- Continue down the page until all students' grades are recorded.
- Click in C1 and type a name for another assignment whose scores you are recording (*history final,* for example). Hit Enter.
- In cell C2, type the first student's grade on the second assignment and hit Enter.
- In cell C3, type the second student's grade on the second test or paper and hit Enter.
- Continue down the page until all grades are recorded.

USE A FORMULA

To average each student's grades:

- Click File in the Excel menu bar and choose Save. Open the folder in which you want to save your file. Type a name for the file in the File Name blank. Click Save.
- Click in cell D1 and type *Current Average.* (Don't worry if the words "bleed" into cell E1; just double click the line between the letter D and the letter E at the top of the spreadsheet and the column will automatically resize!)
- Click in cell D2 and type *=(B2+C2)/2.* Hit Enter. The first student's average grade

will appear in cell D2. (Why? The formula =(B2+C2)/2 told Excel to add the numbers in cells B2 and C2 and then divide the sum by 2.)

- Click in cell D2. Hold down the mouse button to highlight the rest of the students' grades. Release the mouse button.
- Click Edit and choose Fill and Fill Down. (You don't have to retype the formula.) An average of each student's grades now should appear.

MAKE A CHART

To show students' grades in a chart:

- Click in cell E2. Hold down the mouse button and diagonally drag up the mouse to cell A1. All the cells with words or numbers in them should be in black/blue. (Cell E2 will be white with a black box around it to indicate your starting point.)
- Click Insert in the menu bar, and choose Chart.
- Click Next, twice.
- In Chart Title, enter a name for the chart.
- In Category (X) axis, type *Names.*
- In Value (Y) axis, type *Grades.*
- Click As New Sheet. Click Finish.
- Go to File and choose Save.

PRINT YOUR WORK

To print your spreadsheet:

- Set the print area. (Unless you set a specific print area, Excel will print pages and pages of blank cells.) Click in cell E2 and hold down the mouse button. Diagonally drag up the mouse to cell A1.
- Click File>Print Area>Set Print Area.
- Click File>Page Setup and choose the Sheet tab. Click to check the boxes next to Gridlines and Row/Column Headings. Click OK.
- Click File>Print.

Where can I find more information?

For more ways in which students can use Excel, see the Education World techtorials Create Graphs and Charts With Excel, Excelling in K-12 Classrooms, Make a Timeline With Excel, Teaching Excel, Excel With Interactive Crossword Puzzles.

If you're using Office 2000 or Office XP, Bernie Poole has free Online Books containing tutorials for Excel, as well as other components of the Microsoft Office suite.

Microsoft's Excel site also has tips and tutorials for educators.