



Instructor	Patricia Mullins
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Office Hours	TR 10:45 – 11:30 and by appointment
Course Web Page	http://courses.bus.wisc.edu
Lab Times	3:30 R; 5:40 R; 4:35 F
Lab Location	2290 Grainger

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Welcome

Welcome to Computer Technology for Business. This course offers a rigorous introduction to the contemporary world of computer technology and business problem solving. We will help prepare you for a rapidly changing world, one in which information technology plays an important role. We hope that you will find this course challenging and rewarding.

Why This Course is Important

Evidence of global change can be seen in the increasing importance of information in economic and social exchange. The majority of positions in business and professional services will eventually be “information jobs,” requiring sophisticated technical and analytical ability. You will need a combination of practical skills, business acumen, and hands-on experience to be competitive as a “knowledge worker” in this job market. The required knowledge—the raw material of productivity and innovation—is not a static body of information or a set of facts to be memorized; rather, it is the ability to access, assimilate, and apply information by combining critical thinking and technological skills.

What This Course Covers

This one-credit course focuses on the fundamentals of practical problem-solving skills using Excel spreadsheets. (It is a component of what will eventually be a full three-credit course covering Microsoft Access and Excel.) You will begin to develop analytical and technical problem-solving skills and be exposed to broad areas of computer technology in business. The technical skills that you will acquire are meant to extend your analytical ability, because both are critical to business success.

Course Technology Support

We put technology to good use in the delivery of course material. The subject matter is well-suited to online delivery and a full array of online resources has been developed specifically for your use. The course Web site at <http://courses.bus.wisc.edu> is customized for the semester. It is where you can download the video tutorials, one for each level of each chapter, and other course material.

Prerequisites

Before you begin this course, you must do two things: First, read through the *Online Student Handbook* found at www.courses.bus.wisc.edu to make sure you are prepared to take an online course and that you have the necessary computer resources at your disposal. Pay particular attention to the *Distance Learning Technology Requirements* and the *Troubleshooting Checklist*. Second, click on the link labeled “10 Myths About Online Learning” (also found at the course Web site) and watch the video (13 ½ minutes). You are responsible for understanding the information imparted.

If you have deficiencies in using electronic mail, Web browsers, or the Windows operating system or file management in that system, you are responsible for getting your skills up to speed as quickly as possible. No Macintosh software will be or can be used in this course.

This is a course on using Microsoft Excel to solve business problems. Although previous knowledge of spreadsheet software is not assumed, this is not a “point and click” class. There are many excellent online tutorials that can be printed out or used interactively to learn the fundamentals of the program—simply carry out a Web search for “Excel tutorial” or use the links on the course Web site.

Lab Meetings

You have registered for one 50-minute lab each week, meaning that space is reserved for you in the computer lab during this time. Although lab attendance is optional, it is provided so that you may drop in and work on your weekly assignments. You may attend any of the lab sessions but be aware that there are 42 computers in the teaching lab, and those who are registered for a particular lab time will have priority. The teaching assistant will be present at all lab times and will be available to answer your questions.

Specific Course Outcomes

Upon successful completion of this course, you will be able to demonstrate competent use of Microsoft Excel in the following areas:

Applying Fundamental Excel Skills and Tools in Problem Solving

- Identifying and Correcting Common Errors in Formatting and Formulas
 - Examining a basic worksheet for errors
 - Correcting formatting problems
 - Correcting errors in formulas
- Calculating and Comparing Data Using Simple Functions
 - Working with multiple worksheets
 - Calculating totals using the sum function
 - Calculating average, minimum, and maximum values
 - Calculating the number of values using the COUNT and COUNTA functions
- Analyzing Cell References when Writing and Copying Formulas
 - Creating a budget workbook
 - Understanding relative cell referencing
 - Understanding absolute and mixed cell referencing

Solving Problems with Statistical Analysis Tools

- Using Statistical Functions to Compare Data Values
 - Understanding fundamentals of statistics
 - Controlling the precision of data using the ROUND function
 - Using PASTE SPECIAL to copy and paste data
 - Calculating descriptive statistics
 - Managing large worksheets by freezing panes and splitting the window
 - Comparing current values to historical values

Organizing and Evaluating Different Data Groupings

- Determining a rank for each value in a data set
- Determining the highest and lowest values in a data set
- Determining the number of items that meet specified criteria
- Determining a total value for items that meet specified criteria

Extending the Analysis with What-if, Goal Seek, and Simulation

- Evaluating a larger data set
- Specifying a custom number format
- Considering alternatives: What-if analysis and goal seek
- Combining COUNTIF and SUMIF to analyze data in specific categories
- Analyzing data through simulation

Determining Effective Data Display with Charts

Visualizing Data

- Effective charting in Excel

Evaluating Chart Sub-types

- Evaluating sub-types for various chart types

Exploring More Advanced Chart Types

Applying Logic in Decision Making

Analyzing Data Using Relational Operators and Boolean Logical Functions

- Reviewing financial criteria related to credit
- Using relational operators to compare two values
- Using Boolean logical functions to evaluate a list of values
- True or false value

- Applying conditional formatting to a worksheet

Analyzing Data Using IF Functions and Nested Functions

- Introduction to IF functions and nested functions
- Writing simple IF functions
- Writing IF functions with nested functions
- Constructing a simple nested function

Retrieving Data for Computation, Analysis, and Reference

Performing Basic Lookups to Calculate and Evaluate Data

- Working with lookup tables
- Retrieving data from a vertical lookup table
- Retrieving data from a horizontal lookup table

Performing More Complex Lookups Involving Multiple Worksheets and Multidimensional Tables

- Retrieving data from multiple worksheets
- Looking up data in a one-row or one-column range
- Retrieving data from multidimensional tables

Nesting Lookup and Reference Functions to Retrieve and Calculate Data

- Refining the order form
- Preventing errors in data retrieval
- Nesting lookup functions to calculate the price per unit
- Calculating totals
- Calculating the discount amount
- Calculating the shipping costs using MATCH and INDEX functions

Required Materials

1. Gross, D, Akaiwa, F, & Nordquist, K. (2008). *Succeeding in Business with Microsoft Excel: A Problem-Solving Approach*. Boston, MA: Thomson Course Technology.
2. USB memory stick – you must back up all files.

Learning Exercises

The best way to learn the material is to read a level of a chapter, watch the associated video tutorial, and then complete the Steps to Success learning exercise for that level. Fifteen hands-on assignments will be completed over the course of the semester. These assignments are computer-based exercises that require you to use Excel skills to solve business problems. Each exercise will require the generation of one or more Excel files that must be submitted online and will be graded. **Files not submitted by the due date/time will not be accepted.** Do not be fooled; some of the learning exercises are more difficult and time-consuming than others, so keep on schedule. You may submit early, but not late. (See page 7.)

Graded Project and Excel Skills Final Demonstration

One brief Excel final project will be assigned for you to complete alone. **Projects not submitted by the due date will not be accepted.** In lieu of a final exam, you will be assigned a computer lab time at the end of the semester, during which you will be asked to solve a set of business problems demonstrating your Excel skills.

Course requirements and their point totals are shown in the table below.

Item	Number	Points Each	Total	Percent
Learning exercise	15	10	150	46%
Excel project	1	25	25	8%
Excel skills final	1	150	150	46%

Academic misconduct will be dealt with according to university policy. You should be aware that the consequences are serious.

Code of Conduct

In order for the course to run smoothly, for everyone to be treated fairly, and for maximum benefit to be afforded to all participants, certain standards of consideration and cooperation must be maintained. By enrolling in General Business 365, the presumption is made that your conduct and performance in this course will conform to the following agreements and acknowledgements:

- **I will not ask for privileges that others do not ask for or receive.**
- I am solely responsible for my actions and the quality of my performance in this class.
- I acknowledge that I must submit each learning exercise and the Excel project on time in order for my work to be graded.
- I agree to abide by the University's rules concerning academic misconduct and I appreciate the serious consequences of a violation of these rules.

Graded Project Guidelines

For the Excel final project you will submit:

1. An electronic project file uploaded to the Web site for the course.
2. A printed copy of the file, including a word-processor generated title page in correct format and **signed**. The following information should be centered on the page:

YOUR NAME

YOUR STUDENT ID

COURSE NAME AND NUMBER

PROJECT NAME

FILE NAME

DATE

I _____ (your signature here) _____, verify the work submitted is my own.

(More details will be given later in the semester.)

Class Calendar and Required Work

September

Week 1

Due Dates:

Read:	New Features, Introduction, Chapter 1, Level 1	
Watch:	Tutorial 1	
Do:	Steps to Success (STS) Chapter 1, Level 1	

Week 2

Read:	Chapter 1, Level 2	
Watch:	Tutorial 2	
Do:	STS Chapter 1, Level 2	

Week 3

Read:	Chapter 1, Level 3	
Watch:	Tutorial 3	
Do:	STS Chapter 1, Level 3	

Week 4

Read:	Chapter 2, Level 1	
Watch:	Tutorial 4	
Do:	STS Chapter 2, Level 1	

Week 5

Read:	Chapter 2, Level 2	
Watch:	Tutorial 5	
Do:	STS Chapter 2, Level 2	

October

Week 6

Read:	Chapter 2, Level 3	
Watch:	Tutorial 6	
Do:	STS Chapter 2, Level 3	

Week 7

Read:	Chapter 3, Level 1	
Watch:	Tutorial 7	
Do:	STS Chapter 3, Level 1	

Week 8

Read:	Chapter 3, Level 2	
Watch:	Tutorial 8	
Do:	STS Chapter 3, Level 2	

	Week 9	
Read:	Chapter 3, Level 3	
Watch:	Tutorial 9	
Do:	STS Chapter 3, Level 3	Monday November 2 at 9:00 am
	November	
	Week 10	
Read:	Chapter 4, Level 1	
Watch:	Tutorial 10	
Do:	STS Chapter 4, Level 1	Monday November 9 at 9:00 am
	Week 11	
Read:	Chapter 4, Level 2	
Watch:	Tutorial 11	
Do:	STS Chapter 4, Level 2	Monday November 16 at 9:00 am
	Week 12	
Read:	Chapter 4, Level 3	
Watch:	Tutorial 12	
Do:	STS Chapter 4, Level 3	Monday November 23 at 9:00 am
	Week 13	
Read:	Chapter 5, Level 1	
Watch:	Tutorial 13	
Do:	STS Chapter 5, Level 1	Monday November 30 at 9:00 am
	December	
	Week 14	
Read:	Chapter 5, Level 2	
Watch:	Tutorial 14	
Do:	STS Chapter 5, Level 2	Monday December 7 at 9:00 am
	Week 15	
Read:	Chapter 5, Level 3	
Watch:	Tutorial 15	
Do:	STS Chapter 5, Level 3	Monday December 14 at 9:00 am
Final Exam:	TBA	

The above schedules and procedures in this course are subject to change in the event of extenuating circumstances.

Instructions for Learning Exercises

- 1.** Complete each assigned Excel Steps to Success (STS) exercise.
 - a. Check all of the formulas for accuracy.
 - b. Make sure the worksheet cells contain the necessary formulas, not just numbers.

- 2.** Save and close each workbook; make backups.
 - a. Save each workbook periodically. Warning: Saving may take a long time if you are working on a removable USB drive instead of a hard drive. If you are working on a USB drive (not recommended) DO NOT remove the USB drive until you have closed the file.
 - b. Close the file. Once the file is closed, if you have been working in a lab or on a computer that is not yours, copy your work to your USB drive and to your MyWebSpace account. Any files left on lab computers are deleted periodically.
 - c. It is essential that you back up your work to your USB drive and to another location, such as your personal computer, a second USB drive, or your MyWebSpace account. This way you will have copies of the completed workbook files in at least two locations.
 - d. If you submit a file that turns out to be unreadable (perhaps, among other reasons, because the file was not closed before being submitted) and cannot be graded, you will be asked for your backup file. If you cannot supply a backup file when requested, you will receive a grade of 0 for the assignment.

- 3.** Upload the completed workbook file to the course Web site for General Business 365.
 - a. Make sure the workbook file is closed and that you know the drive and directory where it is located.
 - b. Click on the assignment, browse to find the file on your computer, and upload it.
 - c. When you click on “submit for grading” you will not be allowed to modify your file. Do not forget to send it for grading by the due date and time.
 - d. Do not wait until the last minute. Your ability to submit a file will automatically end at the indicated due time, on the due date.
 - e. Do not forget to log out if you are in a campus computer lab or if you are using a friend’s computer.

- 4.** Each completed file will be graded according to the following guidelines:
 - a. No errors = 10
 - b. Minor error but your understanding is evident = 9
 - c. Minimal number of errors = 8
 - d. A few errors or a formula that does not work = 7
 - e. More than one non-working formula or poor worksheet presentation = 6
 - f. Too many errors, non-working formulas, or confusing worksheet 0 – 5
 - g. Late submission = 0