



UNIVERSITY OF
SOUTHERN MAINE

Computer Proficiency Exam

Registration and Exam Information

University of Southern Maine
Office of Academic Assessment
240 Luther Bonney Hall
Portland Campus

REQUIREMENTS FOR THE SCHOOL OF BUSINESS COMPUTER PROFICIENCY EXAM

If you wish to take the exam, you must register in advance and pay the fee. You will find a copy of the registration form at the end of this document.

There is no credit given for this exam; it is simply a way of avoiding taking ABU190, if you already have a mastery of spreadsheets.

The exam is given in Excel 2007. There is a sample exam available from the School of Business.

The exam just covers spreadsheets.

The exam is much like the practice exam, but presents a different problem.

There are a number of make or break issues on this exam (they all must be done correctly to receive a passing grade)

1. You must possess **basic charting skills**. The chart you create must have all the key elements
2. You must know the basic set of functions and how to use them, including: **SUM, AVERAGE, MIN, MAX, COUNT** and **IF**
3. You must **not use numbers in your formulas**. Rather, in your formulas you must **reference the cells which contain the necessary values**.
4. All formulas must be written so that they can be copied to the other related cells. To do this effectively and consistently, **you must understand whether to use absolute or relative addressing** (Absolute addressing uses a \$ before the column and/or row in the cell references within the formula.)
5. Use functions where appropriate

In general you should also be capable of all basic spreadsheet skills such as formatting. Minor mistakes in areas other than the above first 4 items will not result in a failing grade.

THE SCHOOL OF BUSINESS COMPUTER PROFICIENCY PRACTICE EXAM

The following is an example of the types of activities that will be required for the computer proficiency exam. This should be used as a guide to the level of proficiency expected when evaluating whether or not to take the exam. It should also be used as a practice exam in preparation for the actual exam. (NOTE: THIS PRACTICE EXAM SHOULD BE COMPLETED WITHIN 1 HOUR AND 15 MINUTES TO APPROXIMATE THE ACTUAL EXAM CONDITIONS.)

The practice worksheet is stored on the USM School of Business Blackboard site and may be downloaded from any computer that has access to the Internet. Information about the practice exam can be found on Blackboard following these instructions:

go to blackboard, www.courses.maine.edu
click on the Community tab
enter SB Central in the search box
click on the ORG_P_SBannouncements result from the search
click on the Info for Students button on the left
the first notice is about the practice exam

The practice worksheet is: **payroll.xlsx** (Microsoft Excel 2007 version)

Download this file to the computer you will use to complete the practice exam.

Start Excel 2007 and open the practice worksheet. Save the worksheet under your own last name.

Or you can simply enter the data into a new worksheet as shown in the table below.

	A	B	C	D
1	ASSUMPTIONS:	Current	Proposed	
2	Overtime Above	40	36	hours
3	Overtime Rate	150%	135%	of hourly wage
4				
5				
6	Employee Name	Hours Worked	Hourly Wage	
7	Peter Abbott	40	4	
8	Mat Adore	30.5	5	
9	Steve Adore	50	4	
10	Torry Adore	20.3	10	
11	Al Dente	35	5.2	
12	Bill Dings	45	6	
13	Sam Dwich	40	6.25	
14	August Moon	60	7	
15	Julie Moon	5.1	1.98	
16	Payson Park	40	9.75	

REMEMBER TO SAVE OFTEN WHILE YOU ARE WORKING ON THIS EXERCISE.

You are being asked to build a worksheet model to help a local entrepreneur analyze the impact of possible changes in the way he currently pays his employees for overtime hours. He is thinking of lowering both the overtime rate and the hours above which he pays overtime, but wants to be able to examine different alternatives before he makes a decision.

He currently pays each employee his or her hourly wage for each hour (or portion of an hour) worked up to **40 hours** in a week (this is called the employee's **REGULAR PAY**).

For each hour (or portion) worked **above 40** hours, he currently pays at **150.0%** of the employees hourly wage (this amount is called **OVERTIME PAY**).

For example, an employee with an hourly wage of \$4.00 who works 50 hours in a week would have **REGULAR PAY** of **\$160.00** (40 hours at \$4.00 per hour) and an **OVERTIME PAY** of **\$60.00** (the 10 hours above 40 at **150.0%** of \$4.00. You are to also show a **TOTAL** for all columns except the Hours Worked and Hourly Wage columns.

He wants to compare his current payroll costs, paying overtime at 150% above 40 hours versus paying overtime at 135% above 36 hours.

To help you get started, a list of employees, their hours worked, and their hourly wage has already been entered into the worksheet you have just opened. An example of the model you are to build appears on the next page (including results for the first 3 employees and for the TOTALS). You are to build your model so that it appears just like this example. NOTE: IT IS VERY IMPORTANT THAT YOU USE EXACTLY THE SAME ROWS AND COLUMNS AS THE EXAMPLE SINCE YOU WILL NOT BE SUBMITTING PRINT SCREENS OF YOUR WORKSHEET.

The hours worked are collected to the nearest tenth of an hour and therefore all hours should be displayed to the nearest tenth. Percents should be displayed to the nearest tenth of a percent, while currency should be displayed to the nearest penny. When calculating the OVERTIME PAY, nothing should appear when there is no overtime!

THE APPROACH YOU ARE TO USE TO DEVELOP YOUR MODEL:

- When an assumption is changed in the ASSUMPTIONS area, the impact can immediately be seen in the body of the model.
- All formulas are to be created in their initial locations and then, whenever possible, COPIED to the remainder of their locations (INCLUDING SUMMARY FIGURES),
- Use functions whenever appropriate.
- You should use the IF function to determine both regular and overtime pay.

CHART

After you have finished your worksheet, you are to produce a chart that will compare the CURRENT overtime pay strategy with the PROPOSED strategy of paying overtime above 36 hours worked in a week, and paying an overtime rate of 135.0% of the hourly wage. The chart is to be a Column Chart with bars showing the regular pay and overtime pay for each strategy.

The first line of the title should be the same as the title for your worksheet. The second line should state "by" followed by your name. Use other appropriate Titles, Legends and Labels as well as a variety of appropriate fonts and sizes.

An example of an appropriate chart appears on the next page. Use this sample chart as a guideline for producing your chart. Note that this chart includes 2 textboxes that further help describe the chart, but all other objects on the chart are part of the chart.

When you have finished and SAVED your completed worksheet and chart, produce the following printouts:

A PRINTOUT of your entire worksheet, no gridlines, no row and column headings

A PRINTOUT of your formulas, with gridlines and row and column headings

A PRINTOUT of your completed chart.

Payroll Analysis									
ASSUMPTIONS:	Current	Proposed							
Overtime above	40	36	hours						
Overtime Rate	150.0%	135.0%	of hourly wage						
			Current		Proposed		Gross		
Employee Name	Hours Worked	Hourly Wage	Regular Pay	Overtime Pay	Regular Pay	Overtime Pay	Total Current	Total Proposed	
Peter Abbott	40.0	\$4.00	\$160.00		\$144.00	\$21.60	\$160.00	\$165.60	
Mat Adore	30.5	\$5.00	\$152.50		\$152.50		\$152.50	\$152.50	
Steve Adore	50.0	\$4.00	\$160.00	\$60.00	\$144.00	\$75.60	\$220.00	\$219.60	
Torry Adore	20.3								
Bill Dings	35.0								
Sam Dwich	45.0								
August Moon	40.0								
Julie Moon	60.0								
Reverend Moon	5.1								
Payson Park	40.0								
TOTALS			Current \$2,027.60	\$315.00			\$2,342.60		
					Proposed \$1,879.60	\$483.30		\$2,362.90	

