Computer Proficiency Exam

Exam Information

University of Southern Maine
Office of Academic Assessment
Portland Campus
If you are not yet a USM student, information about the practice exam can be found on the Academic Assessment webpage:  https://usm.maine.edu/assessment/computer-proficiency-exam

If you are a USM student, you can also find the information about the practice exam on Blackboard following these instructions:

- Login to Blackboard
- Click on the Community tab
- Enter SB Central in the search box
- Hover on the ORG_P_SBannouncements result from the search
- Click the dropdown arrow and click on Enroll
- Click the Submit button
- Click the OK button
- You now have access to SB Central
- Click on the Info for Students button on the left
- The first notice is about the practice exam

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. The link to the page where you can find the registration form is:
https://usm.maine.edu/assessment/computer-proficiency-exam. Be sure to scroll down some to find the form.

There is no credit given for this exam; it is simply a way of avoiding taking BUS195, if you already have a mastery of spreadsheets.

The exam is given in Excel 2013. The exam just covers spreadsheets.
- There is a practice exam available.
- 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 workbook is stored on the USM School of Business Blackboard site as well as the Academic Assessment webpage for the computer proficiency exam and may be downloaded from any computer that has access to the Internet using the links provided at the beginning of this document.

The practice workbook is: **payroll.xlsx** (Microsoft Excel 2013 version)

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

Start Excel 2013 and open the practice workbook. Save the workbook as YourLastName.xlsx.

If you do not have access to the Internet, you can create the practice workbook yourself. Open a new Excel 2013 workbook and enter the following data on Sheet1 as shown in the table below. Save the workbook as YourLastName.xlsx.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ASSUMPTIONS:</td>
<td>Current</td>
<td>Proposed</td>
<td></td>
</tr>
<tr>
<td>2 Overtime Above</td>
<td>40</td>
<td>36</td>
<td>hours</td>
</tr>
<tr>
<td>3 Overtime Rate</td>
<td>150%</td>
<td>135%</td>
<td>of hourly wage</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Employee Name</td>
<td>Hours Worked</td>
<td>Hourly Wage</td>
<td></td>
</tr>
<tr>
<td>7 Peter Abbott</td>
<td>40</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>8 Mat Adore</td>
<td>30.5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9 Steve Adore</td>
<td>50</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>10 Tony Adore</td>
<td>20.3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11 Al Dente</td>
<td>35</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>12 Bill Dings</td>
<td>45</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>13 Sam Dwich</td>
<td>40</td>
<td>6.25</td>
<td></td>
</tr>
<tr>
<td>14 August Moon</td>
<td>60</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>15 Julie Moon</td>
<td>5.1</td>
<td>1.98</td>
<td></td>
</tr>
<tr>
<td>16 Payson Park</td>
<td>40</td>
<td>9.75</td>
<td></td>
</tr>
</tbody>
</table>
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 workbook you have just opened. An example of the model you are to build appears on page 6 (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.

The hours worked are collected to the nearest tenth of an hour and therefore all hours should be displayed to the nearest tenth. Percent numbers 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 columns 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, Legend and Labels as well as a
variety of appropriate fonts and sizes.

An example of an appropriate chart appears on page 7. Use this sample chart as a guideline for
producing your chart. Note that all objects on the chart are part of the chart, there are no
textboxes.

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**
  - Overtime Above: 40 hours
  - Overtime Rate: 150.0%
- **Proposed**
  - Overtime Above: 36 hours
  - Overtime Rate: 135.0% of hourly wage

<table>
<thead>
<tr>
<th>Employee Name</th>
<th>Hours Worked</th>
<th>Hourly Wage</th>
<th>Regular Pay</th>
<th>Overtime Pay</th>
<th>Total Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Current</strong></td>
<td></td>
<td><strong>Proposed</strong></td>
</tr>
<tr>
<td>Peter Abbott</td>
<td>40.0</td>
<td>$4.00</td>
<td>$160.00</td>
<td>$144.00</td>
<td>$160.00</td>
</tr>
<tr>
<td>Mat Adore</td>
<td>30.5</td>
<td>$5.00</td>
<td>$152.50</td>
<td>$144.00</td>
<td>$152.50</td>
</tr>
<tr>
<td>Steve Adore</td>
<td>50.0</td>
<td>$4.00</td>
<td>$160.00</td>
<td>$144.00</td>
<td>$220.00</td>
</tr>
<tr>
<td>Torry Adore</td>
<td>20.3</td>
<td>$10.00</td>
<td>$203.00</td>
<td>$203.00</td>
<td>$203.00</td>
</tr>
<tr>
<td>Al Dente</td>
<td>35.0</td>
<td>$5.20</td>
<td>$182.00</td>
<td>$182.00</td>
<td>$182.00</td>
</tr>
<tr>
<td>Bill Dings</td>
<td>45.0</td>
<td>$6.00</td>
<td>$240.00</td>
<td>$216.00</td>
<td>$285.00</td>
</tr>
<tr>
<td>Sam Dwigh</td>
<td>40.0</td>
<td>$6.25</td>
<td>$250.00</td>
<td>$225.00</td>
<td>$250.00</td>
</tr>
<tr>
<td>August Moon</td>
<td>60.0</td>
<td>$7.00</td>
<td>$280.00</td>
<td>$252.00</td>
<td>$490.00</td>
</tr>
<tr>
<td>Julie Moon</td>
<td>5.1</td>
<td>$1.98</td>
<td>$10.10</td>
<td>$10.10</td>
<td>$10.10</td>
</tr>
<tr>
<td>Payson Park</td>
<td>40.0</td>
<td>$9.75</td>
<td>$390.00</td>
<td>$351.00</td>
<td>$390.00</td>
</tr>
</tbody>
</table>

|                   | **Total**    |             | **Current** |              | **Proposed** |
|                   |              |             | **$2,027.60** |              | **$2,342.60** |
|                   | **Proposed** |             | **$1,879.60** |              | **$483.30** |

**Totals**

- **Current**: $2,027.60
- **Overtime**: $315.00
- **Proposed**: $1,879.60
- **Overtime**: $483.30

**Gross Total**: $2,342.60

**Proposed Total**: $2,362.90
Payroll Analysis
by Your Name

- Regular Pay
  - Current: $2,027.60
  - Proposed: $1,879.60

- Overtime Pay
  - Current: $315.00
  - Proposed: $483.30