Welcome Week included workshops on the following basic Excel skills:

- Introduction to workbooks, navigating to different worksheets within the workbook
- Writing basic formulas (e.g. adding cells, taking the sum of a group of cells, calculating mean value of a group of cells)
- Using relative and absolute cell references in formulas
- Formatting cells (e.g. different number formats, fonts, borders)
- Copying formulas, values, and formats using Paste Special
- Searching for formulas and other Excel help
- Sorting and filtering data
- Conditional formatting
- Navigating the chart wizard to make different kinds of charts (e.g. bar charts, pie charts)
- Navigating the chart wizard to adjust formatting (e.g. axes, colors, font, titles, legends)
- Selecting the correct data series for charts
- Copying and pasting tables and charts into Word

This assignment, **due the second week of class**, will assess your ability to perform these functions. You may work with other students but you must submit your own independent work.

**What to Complete**

Replicate the attached memo. Use Excel to create a table and chart that is identical to those in the PDF. To create the table, you must use functions to calculate the **Total Wages** and **Wages with Tax**. To create the chart you must use functions in your Excel workbook to generate the data series for **% Hours** and **% Wages**. Where it says “{insert your name here)” in the “From” line, put your own name, i.e. “Sunyoung Pyo.” The tax rate (for **Wages with Tax**) is 17%. Employees that work >40 hours will be paid time-and-a-half for each additional hour of work (i.e. for the first 40 hours, their salary is the product of their hourly rate and number of hours work; thereafter their salary rate is 1.5 times that hourly rate). Use the “IF” function to calculate the **Total Wages**. The **Total row** will include: (a) the sum of all hours worked, total wages, and wages with tax; and (b) the average hourly wage.

**Assignment Submission Instructions and Grading Rubric**

Submit two documents to Blackboard: (a) the Word document (submit it as a .docx file, not as a PDF), and (b) the Excel spreadsheet that you used to create the table and chart. Label your files as “PAD504_HW1_FirstNameLastName,” e.g. “PAD504_HW1_SunyoungPyo.docx” and “PAD504_HW1_SunyoungPyo.xlsx.” You must create the table and chart in Excel; it is insufficient to copy and paste these from this PDF. To receive full credit your documents must include the following:
• Word text formatted identical to this document (e.g. font type (Calibri), style (appropriate bold, etc.), size, and justification; page layout; to/from layout; placement and approximate size of table and chart)
• Table formatted identical to this document (e.g. font style, column width, justification, borders, decimal places, number formats)
• Chart formatted identical to this document (e.g. title and legend placement, decimal places, chart type, axes, data labels, no grid lines, ordered by % Wages)
• Values in the table and chart identical to this document
• Excel worksheet includes working formulas to generate the Total Wages, Wages with Tax, % Hours, % Wages, and Total (Name, Hours Worked, and Hourly Wages should be entered as inputs but all other values should be generated with formulas)
• The “IF” function should be used for the Total Wages calculation (although there are other methods to calculate the total wages, use the “IF” function here)
• Excel worksheet includes the chart with appropriate data series
• Files named correctly (e.g. “PAD504_HW1_SunyoungPyo.docx” and “PAD504_HW1_SunyoungPyo.xlsx”)

Hints
• Review your notes from the Welcome Week workshop (www.albany.edu/rockefeller/welcomeweek), as well as the additional “Clinton Impeachment” take-home practice exercise and solutions manual. If you are still stuck, come to office hours.
• When copying and pasting the table into your Word document, use the “Keep Source Formatting” option. When copying and pasting the chart into your Word document, use the “Keep Source Formatting and Link Data” option.
• The data labels (e.g. 20.4%, 18.4%) will overlap when you first make the chart. Stretch the figure in Excel, and then copy and paste it as a picture to your Word document. In Word, you can resize it to fit within the margins.
• Create a table in Word (with no borders) for the To/From section, rather than using tabs and spaces to line up the text.
• If you have never used the “IF” function before, refer to the Excel handbook, the help information in Excel, and/or the internet.
• To ensure the faculty are listed in the correct order in the chart, make a new table inside your workbook that only contains the data series that you will put in the chart (Name, % of Hours, and % of Wages). Sort these in descending order by % of Hours so that Luna-Reyes is the first row and Martin is the last row.
To: Karl Rethemeyer, Interim Dean  
From: [insert your name here]  
Subject: Equity in Faculty Pay  
Date: Week 2

Following your request, I have completed the analysis of last summer’s faculty wages. The break-down is in the table below. Faculty worked a total of 181 hours, earning $1,811 in wages. The cost to the department, including tax, is $2,118.87.

<table>
<thead>
<tr>
<th>Name</th>
<th>Hours Worked</th>
<th>Hourly Wages</th>
<th>Total Wages</th>
<th>Wages with Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fox</td>
<td>37</td>
<td>$9.00</td>
<td>$333.00</td>
<td>$389.61</td>
</tr>
<tr>
<td>Luna-Reyes</td>
<td>60</td>
<td>$7.00</td>
<td>$490.00</td>
<td>$573.30</td>
</tr>
<tr>
<td>Martin</td>
<td>10</td>
<td>$26.00</td>
<td>$260.00</td>
<td>$304.20</td>
</tr>
<tr>
<td>Rubin</td>
<td>48</td>
<td>$9.00</td>
<td>$468.00</td>
<td>$547.56</td>
</tr>
<tr>
<td>Weinberg</td>
<td>26</td>
<td>$10.00</td>
<td>$260.00</td>
<td>$304.20</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
<td>$12.20</td>
<td>$1,811.00</td>
<td>$2,118.87</td>
</tr>
</tbody>
</table>

Although Dr. Luna-Reyes received the highest total salary ($490, 27.1% of all wages earned), he appears to be underpaid as he worked 33.1% of all hours. In contrast, Dr. Martin did not receive a large share of total wages ($260, 14.4% of all wages earned) but her hourly rate of $26 is much higher than that of the other faculty and she only worked 5.5% of all hours. This is shown graphically in the bar chart below.