You’re Hired... ...Now What?

Barrie D. Fitzgerald—Senior Research Analyst, Valdosta State University
Sarah E. Hough—Research Analyst, Valdosta State University
Tiffany S. Soma—Research Analyst, Valdosta State University
Summary of Presentation

- First Six Months
  - Helping to build a solid foundation
- Next Six Months
  - Reinforcing the solid foundation
- One to Four Years
  - Advancing the foundation
First Six Months...
Building the Foundations
Understanding Your Data

• Institutional definitions
• Structured data
  • Nominal, ordinal, interval, and ratio
• Unstructured data
  • Comments from surveys
  • Faculty vitas
  • Literature review
Retrieving Data

- Institutional data
- IPEDS, NCES
- State Board Of Regents (BOR)
- Department of Education (DOE)
- U.S. Census Data
- Occupation Outlook Handbook (OOH)
- Department of Labor (DOL)
Excel: Shortcuts & Formulas

- SUM, AVERAGE, COUNT, MIN, MAX
- ROUNDDOWN, ROUNDUP
- VLOOKUP
- CONCATENATE
- CTRL + C, CTRL + V
- CTRL + ↑, CTRL + ↓
- CTRL SHFT + ↑, CTRL SHFT + ↓
- F4
**Excel: PivotTables**

- Simply summarize & sort data
- Quickly identify trends

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Fall 2013</th>
<th>Spring 2014</th>
<th>Summer 2014</th>
<th>Fall 2014</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>9,712</td>
<td>9,157</td>
<td>3,436</td>
<td>9,312</td>
<td>31,617</td>
</tr>
<tr>
<td>Freshman</td>
<td>2,730</td>
<td>1,939</td>
<td>409</td>
<td>2,521</td>
<td>7,599</td>
</tr>
<tr>
<td>Junior</td>
<td>2,091</td>
<td>2,155</td>
<td>923</td>
<td>2,162</td>
<td>7,331</td>
</tr>
<tr>
<td>Senior</td>
<td>2,735</td>
<td>2,881</td>
<td>1,548</td>
<td>2,578</td>
<td>9,742</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2,156</td>
<td>2,182</td>
<td>556</td>
<td>2,051</td>
<td>6,945</td>
</tr>
<tr>
<td>Graduate</td>
<td>2,170</td>
<td>2,111</td>
<td>1,641</td>
<td>2,238</td>
<td>8,160</td>
</tr>
<tr>
<td>Graduate</td>
<td>1,726</td>
<td>1,684</td>
<td>1,336</td>
<td>1,755</td>
<td>6,501</td>
</tr>
<tr>
<td>Doctoral</td>
<td>444</td>
<td>427</td>
<td>305</td>
<td>483</td>
<td>1,659</td>
</tr>
<tr>
<td>Grand Total</td>
<td>11,882</td>
<td>11,268</td>
<td>5,077</td>
<td>11,550</td>
<td>39,777</td>
</tr>
</tbody>
</table>
**Excel: Formatting & Charts**

- Format Painter
- Fill Handle
- Columns & Rows
  - Adjusting Width
  - Add/Delete
- Text Formatting
- Professionalism
- Tables vs. Charts
- Fonts and Colors

### Count of Students

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>201308</th>
<th>201402</th>
<th>201405</th>
<th>####</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergradu</td>
<td>9712</td>
<td>9157</td>
<td>3436</td>
<td>9312</td>
<td>31617</td>
</tr>
<tr>
<td>Female</td>
<td>5765</td>
<td>5425</td>
<td>2128</td>
<td>5504</td>
<td>18822</td>
</tr>
<tr>
<td>Male</td>
<td>3947</td>
<td>3732</td>
<td>1308</td>
<td>3808</td>
<td>12795</td>
</tr>
<tr>
<td>Graduate</td>
<td>2170</td>
<td>2111</td>
<td>1641</td>
<td>2238</td>
<td>8160</td>
</tr>
<tr>
<td>Female</td>
<td>1524</td>
<td>1484</td>
<td>1157</td>
<td>1571</td>
<td>5736</td>
</tr>
<tr>
<td>Male</td>
<td>646</td>
<td>627</td>
<td>484</td>
<td>667</td>
<td>2424</td>
</tr>
<tr>
<td>Grand Total</td>
<td>11882</td>
<td>11268</td>
<td>5077</td>
<td>5077</td>
<td>39777</td>
</tr>
</tbody>
</table>

### Student Enrollment by Level and Gender, Fall 2013 to Fall 2014

<table>
<thead>
<tr>
<th>Student Level &amp; Gender</th>
<th>Fall 2013</th>
<th>Spring 2014</th>
<th>Summer 2014</th>
<th>Fall 2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>9,712</td>
<td>9,157</td>
<td>3,436</td>
<td>9,312</td>
<td>31,617</td>
</tr>
<tr>
<td>Female</td>
<td>5,765</td>
<td>5,425</td>
<td>2,128</td>
<td>5,504</td>
<td>18,822</td>
</tr>
<tr>
<td>Male</td>
<td>3,947</td>
<td>3,732</td>
<td>1,308</td>
<td>3,808</td>
<td>12,795</td>
</tr>
<tr>
<td>Graduate</td>
<td>2,170</td>
<td>2,111</td>
<td>1,641</td>
<td>2,238</td>
<td>8,160</td>
</tr>
<tr>
<td>Female</td>
<td>1,524</td>
<td>1,484</td>
<td>1,157</td>
<td>1,571</td>
<td>5,736</td>
</tr>
<tr>
<td>Male</td>
<td>646</td>
<td>627</td>
<td>484</td>
<td>667</td>
<td>2,424</td>
</tr>
<tr>
<td>Total</td>
<td>11,882</td>
<td>11,268</td>
<td>5,077</td>
<td>11,550</td>
<td>39,777</td>
</tr>
</tbody>
</table>
Excel: Tips and Tricks

- Wrapping text: Inserting a new line inside an Excel cell
- Removing duplicates
- Creating custom views
- Freeze panes
- Quick access toolbar
- Filtering & recalculation
- Softcoding vs. Hardcoding
## Review, Review, Review

- Documenting sources
- Checking for formatting, spelling, & grammar errors
- Using Excel to verify data
- Conditional Formatting & Filtering
- Sorting & Filtering
- Formulas

### Student Enrollment by Level and Gender, Fall 2013 to Fall 2014

<table>
<thead>
<tr>
<th>Student Level &amp; Gender</th>
<th>Fall 2013</th>
<th>Spring 2014</th>
<th>Summer 2014</th>
<th>Fall 2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>9,712</td>
<td>9,157</td>
<td>3,436</td>
<td>9,312</td>
<td>31,617</td>
</tr>
<tr>
<td>Female</td>
<td>5,765</td>
<td>5,425</td>
<td>2,128</td>
<td>5,504</td>
<td>18,822</td>
</tr>
<tr>
<td>Male</td>
<td>3,947</td>
<td>3,732</td>
<td>1,308</td>
<td>3,808</td>
<td>12,795</td>
</tr>
<tr>
<td>Graduate</td>
<td>2,170</td>
<td>2,111</td>
<td>1,641</td>
<td>2,238</td>
<td>8,160</td>
</tr>
<tr>
<td>Female</td>
<td>1,524</td>
<td>1,484</td>
<td>1,157</td>
<td>1,571</td>
<td>5,736</td>
</tr>
<tr>
<td>Male</td>
<td>646</td>
<td>627</td>
<td>484</td>
<td>667</td>
<td>2,424</td>
</tr>
<tr>
<td>Total</td>
<td>11,882</td>
<td>11,268</td>
<td>5,077</td>
<td>11,550</td>
<td>39,777</td>
</tr>
</tbody>
</table>


TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE
Next Six Months...
Reinforcing the Foundation
Streamlining Preparation

• Data Prep
• Helpful formulas: VLOOKUP, IF statements
• Analysis using Pivot Tables
  • Easily manipulated and changed
• Charts vs. Graphs
  • Easily visible and understandable
  • Simplify graphs
Publications

- Newsletters: Enrollment, Faculty & Staff, Credit Hours
- Analyze data
  - Create charts & graphs using PivotTables
  - Creating a template
  - Linking charts and graphs from Microsoft through “Paste Special” Option
- Create/update procedures guide with notes and steps
Publications

- Fact Book
  - Deadline checklist for each section
    - Templates for sections to be emailed outside the office
    - Use previous year as template
  - Pasting charts and graphs into Microsoft Publisher using “Paste Special”
Surveys

- Streamline process to complete external surveys
  - Excel “database” linking all major external surveys
- Linking documents helps with efficiency
  - Uses previously entered information
  - Easily updated
  - Quickens proofreading
Surveys

• Survey analysis using SPSS
  • Syntax allows the same program to be run multiple times
    • Easily updated to add in a variable or remove a section
  • Syntax allows for quick analysis of data sets once loaded into SPSS
    • Can filter and run analyses independently
• Example: New Student Orientation
  • 8 session dates
    • Syntax allowed for full SPSS analysis of all sessions in around an hour
Time Management

- Deadlines
  - “To Do Lists” within each area
  - Balancing high priority requests with ad-hoc requests
  - Daily balancing time spent within projects
  - Accountability within the office
One to Four Years... Advancing Your Skills
Career Question

• Is this the job that turns into your career?
• Are you satisfied being a behind the scenes worker?
• Are you satisfied not seeing immediate results or impact from a project?
• Are you in it for the “long haul”?
Excel

- Become an Excel guru:
  - Learn from the colleague
  - Give them the credit too
  - Google/YouTube it
  - Practice the skill

- Tips to learn:
  - Nesting formulas
  - New formulas/shortcuts
  - Streamline complex projects
  - Use formulas for validation

=VLOOKUP(A3,'Fall 2014'!$A:$B,2,FALSE)

=IF(A3<12,"PT",IF(A3>=12,"FT","Check"))

=IFERROR(A3,0)
Data Tips

- The data fits within the university setting
- Easily recognized the types of data
- Never perform analyze on original data
- Keep in mind the question or data request
- Make sure data is clean
- Always check and validate your data manipulations before analyzing it
Networking with Colleagues

- Office Colleagues
  - Learn tips and tricks
  - Approach a task

- Colleagues from other institutions
  - A must within the field
  - Bounce ideas
  - Share processes

Collaboration is key!
Learn New Applicable Skills

- Statistical Package:
  - SPSS
  - SAS
  - Stata
  - Rstudio
- SQL
- Courses on statistics
- Multitasking effectively and efficiently
Balance
Conclusion

• First six months: Learning the basics
  • Internet research
  • Basic data manipulations and analyses
• Next six months: Advancing and reinforcing the basics
  • Developing speed and accuracy in projects
  • Time management in projects becomes a key
• Advancing skills
  • Data, Data, Data—begin to know it
  • Learn new skills within the field
Comments and Questions