

204100: IT & Everyday Life – Final Review

Final Exam

- ▶ When: Thursday, May 12th. 3:30pm-5:30pm
- ▶ Where: RB5210
- ▶ What can/should I bring?
 - ▶ NO Electronics
 - ▶ Student ID
 - ▶ Pen & Pencils
 - ▶ One paper (book) dictionary
- ▶ Assignments won't be accepted after May 11th, midnight.
 - ▶ **!!!Need PASS/PASS(Late) to get credit!!!**

Microsoft Word

Microsoft Word

- ▶ Basics
 - ▶ Copy (Ctrl-C)
 - ▶ Cut (Ctrl-X)
 - ▶ Paste (Ctrl-V)
 - ▶ Undo (Ctrl-Z)
 - ▶ Redo (Ctrl-Y)
 - ▶ Save, Save as
 - ▶ New, Open, Close

Microsoft Word

- ▶ **Formatting**
 - ▶ Ruler & Unit
 - ▶ Page Layout → Page Setup
 - ▶ Paper Size, Margins, Layout, Header/Footer Size
 - ▶ Different first page, different odd and even
- ▶ **Page Orientation**
 - ▶ Portrait, Landscape
- ▶ **Fonts**
- ▶ **Effects**
 - ▶ Underline, **bold**, ^{super}script, _{sub}script, ~~strikethrough~~.

Microsoft Word

- ▶ **Formatting (cont.)**
 - ▶ Bullets & Numberings
 - ▶ Set numbering value
 - ▶ Define new bullet
 - ▶ Text Alignment
 - ▶ Left, Right, Justified
- ▶ **Paragraph**
 - ▶ Indentation
 - ▶ Spacing
- ▶ **Page Border**
- ▶ **Columns**
- ▶ **Line Numbers**

Microsoft Word

- ▶ **Find & Replace**
 - ▶ Options
 - ▶ match case
 - ▶ whole word
 - ▶ Sound like (English)
 - ▶ All Word Forms (English)
 - ▶ Wildcards (like in Access)
 - ▶ *, ?
 - ▶ Replace/Replace All
- ▶ **Spellchecking**
 - ▶ Green/Red Squiggly Line
 - ▶ What won't be detected by spellcheck?

Microsoft Word

- ▶ **Insert → Table**
 - ▶ Components
 - ▶ Creating a Table
 - ▶ Drag mouse, insert, draw a table, excel spreadsheet
 - ▶ Entering Data
 - ▶ Alignment
 - ▶ Horizontal and Vertical
- ▶ **Resizing cells/columns/rows**
- ▶ **Moving Table**
- ▶ **Deleting a Border**
 - ▶ What will happen?

Microsoft Word

- ▶ Table (cont.)
 - ▶ Insert/Delete Cells/Columns/Rows
 - ▶ Merge/Split Cells
 - ▶ Formatting Border/Fill
 - ▶ Quick Table
- ▶ Sorting Data
- ▶ In-table Calculation
- ▶ Converting Table ↔ Text

Microsoft Word

- ▶ Inserting Images
 - ▶ Picture (from file)
 - ▶ Clip Art
 - ▶ Text Wrapping
 - ▶ Moving and Resizing
 - ▶ Cropping
 - ▶ Rotating
- ▶ Picture Tools
 - ▶ Change Picture
 - ▶ Reset Picture

Microsoft Word

▶ Inserting Special Objects

- ▶ AutoShapes
- ▶ WordArt
- ▶ TextBox
- ▶ SmartArt
- ▶ Symbols
 - ▶ How is symbol different from other special objects?
- ▶ Equation

Ex. If you want to make a symbol such as π bigger, what do you need to do?

- A. Highlight the symbol, and increase the font size.
- B. Drag the corner to enlarge it.
- C. Either A or B
- D. This cannot be done.

Microsoft Word

- ▶ Styles
 - ▶ What is a style?
 - ▶ What can you do with style?
 - ▶ How do you change a style?
- ▶ Creating a Report
 - ▶ Header and Footer
 - ▶ Page Numbers
 - ▶ position/format/counting option
 - ▶ Table of Contents
 - ▶ Assign Headings
 - ▶ Update Table
 - ▶ Cover Page

Microsoft Word

- ▶ Screen Capture
 - ▶ Capturing whole screen (PrtScn)
 - ▶ Capturing active window only (Alt-PrtScn)
 - ▶ What can you do after you capture a screen (paste)
- ▶ Printing
 - ▶ Selecting paper size
 - ▶ Print preview
 - ▶ Print Setting
 - ▶ Pages to be printed
 - ▶ Collated
 - ▶ Multiple pages per sheet

Microsoft Word

- ▶ Mail Merge
 - ▶ What is it?
 - ▶ Required:
 - ▶ Main document
 - ▶ Data source (recipients' data)
 - ▶ How to perform mail merge
 - ▶ Creating/Importing the main document
 - ▶ Creating/Importing recipients' data
 - ▶ What will you get at the end?

Microsoft Excel

Microsoft Excel

- ▶ Basics
 - ▶ Cell name (such as E17), row, column
 - ▶ Worksheet vs. Workbook
 - ▶ new, open, save (as)
 - ▶ Inserting/ renaming a worksheet
 - ▶ Print Preview
 - ▶ Data entry
 - ▶ Force new line with Alt-Enter

Microsoft Excel

- ▶ Selecting cells
 - ▶ Dragging mouse
 - ▶ Selecting entire row/column/worksheet
 - ▶ Select adjacent (shift), non-adjacent (ctrl) cells
- ▶ Resizing row/column

Microsoft Excel

- ▶ Auto Fill
 - ▶ How to use, mouse icon
 - ▶ Options
 - ▶ Copy Cells
 - ▶ Fill Series
 - ▶ Fill Formatting Only
 - ▶ Fill without formatting
 - ▶ Fill Days/Weekdays

Microsoft Excel

- ▶ Format Cells
 - ▶ Number format
 - ▶ Alignment
 - ▶ Border
 - ▶ Fill
- ▶ Printing

Microsoft Excel

- ▶ Cell Reference
 - ▶ Relative Reference
 - ▶ C3
 - ▶ Absolute Reference
 - ▶ \$C\$3
 - ▶ Reference cell from another worksheet
 - ▶ sheet1!\$C\$3

Microsoft Excel

- ▶ Formula
 - ▶ How to write a formula (=)
 - ▶ Operators (+, -, *, /) precedence
 - ▶ Perform which first?
- ▶ Function
 - ▶ How to use
 - ▶ Search/View/Select a function
 - ▶ Example of useful functions
 - ▶ sum, max, min, average, stdev
 - ▶ If() and the logic
- ▶ Sorting

Microsoft Excel

- ▶ Charts
 - ▶ *Design* tab
 - ▶ Changing Chart Type
 - ▶ Switch Row/Column
 - ▶ Select Data
 - ▶ Quick Layout
 - ▶ Quick Styles
 - ▶ Move Chart

Microsoft Excel

- ▶ More Charts
 - ▶ *Layout* tab → Labels
 - ▶ Chart Title
 - ▶ Axis Titles
 - ▶ Legend
 - ▶ Data Labels
 - ▶ Data Table

Microsoft Excel

- ▶ Data Analysis
 - ▶ Correlation
 - ▶ Interpreting the results
 - ▶ Positive/Negative
 - ▶ Histogram
 - ▶ Preparation
 - ▶ What are bins?
 - ▶ How to read output
 - ▶ Regression
 - ▶ Make sense of the output
 - ▶ R-Square
 - ▶ P-value
 - ▶ Deriving the model (equation) from the output

Microsoft Excel

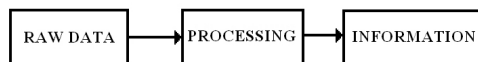
	Coefficients	Standard Error	t Stat	P-value
Intercept	2.055664807	0.020970525	98.02639	6.2417E-35
X1	-0.001515759	0.001988074	-0.76243	0.452667722
X2	3.50011908	0.002075558	1686.351	4.83322E-67
X3	1.701154987	0.001979671	859.312	1.98069E-59

► Ex. With the above regression results, which of the following equations is the best one to explain it?

- A. $Y = 0.0210 + 0.002 X_1 + 0.002 X_2 + 0.0020 X_3$
- B. $Y = 0.0210 + 0.002 X_2 + 0.0020 X_3$
- C. $Y = 2.0557 - 0.0015 X_1 + 3.5001 X_2 + 1.7012 X_3$
- D. $Y = 2.0557 + 3.5001 X_2 + 1.7012 X_3$

Data Processing

Data Processing



- What is what?
- Type of Data Processing
 - Manual processing)
 - Automatic)
 - Online
 - Batch
 - Master File vs. Transaction File

Data Processing

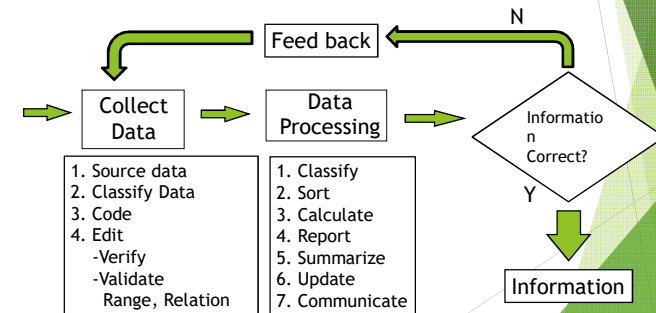
- Data Collection
 - Methods
 - Characteristics of Good Data
 - Accurate, Timely and Complete
 - Encoding
 - Which fields? /How to?
- Verification and Validation
 - Edit
 - Verify
 - Validate
 - Range Check
 - Relation Check

Data Processing

- ▶ Processing
 - ▶ Calculating
 - ▶ Updating
 - ▶ Reporting
 - ▶ Summarizing
 - ▶ Sorting
 - ▶ Searching
 - ▶ Classification

Computer Data Processing w/ Feedback

▶ Processing



Data Processing

- ▶ Data Organization
 - ▶ Bit
 - ▶ Character
 - ▶ Field
 - ▶ Record
 - ▶ File (Table in Access)
 - ▶ Database

Microsoft Access

Microsoft Access

- ▶ Database – Table – Record – Field
- ▶ Table
 - ▶ Table Design
 - ▶ Store what? – Which fields? – Data type/size
 - ▶ Creating table in access
 - ▶ Data entry
 - ▶ Field – Insert/Delete/Move
 - ▶ Table – copy/renaming/Delete

Microsoft Access

- ▶ Table
 - ▶ View
 - ▶ Datasheet
 - ▶ Design
 - ▶ Field
 - ▶ Data Type
 - ▶ Field Size
 - ▶ Indexed
 - ▶ Primary Key

Microsoft Access

- ▶ Query
 - ▶ Searching
 - ▶ Query Wizard
 - ▶ Select table/query → select fields → naming
 - ▶ Query Design
 - ▶ Select table
- ▶ Select fields
 - ▶ Sort
 - ▶ Show/Not Show
 - ▶ Criteria
- ▶ Criteria
 - ▶ Comparison
 - ▶ And/ Or
 - ▶ Wildcards (*, ?)
- ▶ !Run

Microsoft Access

- ▶ Working with Multiple tables
- ▶ Relationship
 - ▶ Meaning
 - ▶ Type (1-to-1, 1-to-many, many-to-many)
 - ▶ Primary Key vs. Foreign Key
 - ▶ Data type/field size
 - ▶ Indexed (no duplicate/ duplicate
- ▶ Creating a relationship on Access
 - ▶ Enforce Referential Integrity
 - ▶ Cascade Update/Delete
- ▶ Inputting foreign key
- ▶ Query with relationship
 - ▶ Table.field

Microsoft Access

- ▶ Form
 - ▶ Data Entry Tool
 - ▶ Form view | Layout view | Design view
 - ▶ Navigation (first/previous/next/last record + create new record)
 - ▶ Form
 - ▶ Split Form
 - ▶ Form + Datasheet
 - ▶ Multiple Items
 - ▶ Tabular, but can be adjusted

Microsoft Access

- ▶ Form (cont.)
 - ▶ Form Wizard
 - ▶ Step by step
 - ▶ Select table → select fields → select layout → select style → naming → start filling in data or go to Design view
 - ▶ Blank Form
 - ▶ How to insert fields
 - ▶ Form Design
 - ▶ Blank form in design view
 - ▶ Header/Footer
 - ▶ Inserting Title, Labels, Logo, Pictures

Microsoft Access

- ▶ Report
 - ▶ Design View | Report View | Print Preview
 - ▶ Report
 - ▶ Report Wizard
 - ▶ Select table/query → select fields
 - ▶ [With relationship] Selecting view
 - ▶ Select grouping
 - ▶ Select sorting (within group)
 - ▶ → Select layout → select style → naming → view the report or go to Design view

Microsoft Access

- ▶ Report (cont.)
 - ▶ Report Design
 - ▶ Start with blank report in Design view
 - ▶ insert fields
 - ▶ adjust/move
 - ▶ insert title, labels
 - ▶ Print Preview