DSO 401: Data Analysis with Spreadsheets

Data Sciences & Operations

Who should take this course?

- Students who are interested in working in the finance, real-estate and consultancy fields especially.
- Students who want to master the use and design of spreadsheets using Excel 365 in areas of information systems, marketing and operations
- Students who want to have data analytical skills as a hiring competitive advantage

What Can Excel Do?

- Dynamic Dashboard & Charts
- Custom Functions
- Complex Functions

Course Objectives

- Systematically build spreadsheet-based business and other models
- Present data effectively through the use of graphs, pivot tables and other data visualization tools
- Apply various logical, lookup and reference functions to extract appropriate values from datasets
- Effectively apply advanced data analytic tools, including advance filters, scenario managers and the solver to achieve optimal solutions in data analysis
- Utilize macros to effectively increase efficiency in data extraction and analyses
- Create basic custom functions

TOPICS COVERED

- Workshop #2: Conditional Formatting & Data Visualization
- Workshop #3: The IF Function: The workhorse of Excel
- Workshop #4: Lookup and Reference Functions
- Workshop #5: Understanding Array Functions & Syntax
- Workshop #6: Excel’s SUMIFS, Date and Time Functions
- Workshop #7: Choose, Errors & Pivot Tables (I)
- Workshop #8: Pivot Tables (II) & Gauge Charts
- Workshop #9: Sorting, SubTotal, Outline & Advanced Filter
- Workshop #10: Text Functions & Regression Review
- Workshop #11: Indirect & Advance Topics (I) Goal Seek Data Tables
- Workshop #12 & #13: Advanced Topics (II) Macros, Custom Functions & Solver

=IF(E2-F2*XLOOKUP(C2,Reference_Table!$A$2:$A$6,Reference_Table!$D$2:$D$6)>0,(E2-F2*XLOOKUP(C2,Reference_Table!$A$2:$A$6,Reference_Table!$D$2:$D$6))*XLOOKUP(C2,Reference_Table!$AS2:$A$6,Reference_Table!$ES2:$ES$6),0)

More Information
Contact
Francis Pereira, Ph.D.
Assoc. Professor
pereira@marshall.usc.edu