



INTRODUCTORY EXCEL: ONE-DAY WORKSHOP

Lesson 1: Introduction to the Excel environment

Lesson 2: Entering data into Excel

Lesson 3: Working with formulas and functions

Lesson 4: Cell formatting

Lesson 5: Cell formatting and beyond

Lesson 6: Capstone 1: Creating a sales report

Lesson 7: Working with strings and dates

Lesson 8: Conditional logic and conditional aggregation

Lesson 9: Intermediate arithmetic and introduction to data analysis

Lesson 10: Lookup functions and introduction to data wrangling

Learning Objectives

- Student can navigate the Excel environment and can refer to the major elements of Excel
- Student can efficiently input text and character data into Excel
- Student can perform arithmetic in Excel using both mathematical formulas and pre-defined functions
- Student can adjust and format input cells using copying, pasting and the home ribbon
- Student can create Excel tables and sort/filter a table
- Student can create basic sales report from provided raw sales data
- Student can operate on string and date cells
- Student can check for equality and aggregate conditionally
- Student can conduct basic exploratory data analysis and data cleaning
- Student can bring data from an outside source into an existing table

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Lesson 1: Introduction to the Excel environment
Objective: Student can navigate the Excel environment and can refer to the major elements of Excel

Description:

- A guided tour of Excel
- A guided tour of the home ribbon

Exercises: Quiz on Excel terminology

Assets needed: None

Time: 45 minutes

Lesson 2: Entering data into Excel

Objective: Student can efficiently input text and character data into Excel

Description:

- Excel data entry
- Evaluating the active cell
- Working with ranges of cells
- Using the fill handle

Exercises: Practice creating small tables of data using the fill handle

Assets needed: Small real-life datasets to re-create in Excel

Time: 45 minutes

Lesson 3: Working with formulas and functions

Objective: Student can perform arithmetic in Excel using both mathematical formulas and pre-defined functions

Description:

- Summing cells manually
- Summing cells with AutoSum
- Identifying other Excel functions
- The difference between formulas and functions
- Evaluating a formula or function

Exercise: Perform basic arithmetic on table from Lesson 2

Assets needed: Table from Lesson 2

Time: 45 minutes

Lesson 4: Cell formatting

Objective: Student can adjust and format input cells using copying, pasting and the home ribbon

Description:

- Cutting, copying and pasting
- Inserting and deleting cells
- Formatting cells: fonts, border, fill
- Printing a worksheet

Exercise: Exercise and adjust the table created in earlier lessons

Assets needed: Table from previous lessons

Time: 45 minutes

Lesson 5: Cell formatting and beyond

Objective: Student can create Excel tables and sort/filter a table

Description:

- Creating an Excel table
- Navigating a table
- Sorting and filtering a table

Exercise: Build on table from previous lessons

Assets needed: Table from previous lessons

Time: 45 minutes

Lesson 6: Capstone 1: Excel reporting

Objective: Student can create basic sales report from provided raw sales data

Description:

- Formatting and preparing for distribution
- Basic arithmetic and analysis

Exercise: Create report

Assets needed: Sales data

Time: 20 minutes



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Lesson 7: Working with strings and dates

Objective: Student can operate on string and date cells

Description:

- Extracting, formatting and substituting string values
- Calculating, formatting and extracting date values

Exercise: Practice using string and date functions

Assets needed: Fictitious travel itinerary

Time: 50 minutes

Lesson 8: Conditional logic and conditional aggregation

Objective: Student can check for equality and aggregate conditionally

Description:

- Conditional operators
- Logical operators
- Testing multiple conditions
- Conditional aggregation: one condition
- Conditional aggregation: multiple conditions

Exercises: Practice using conditional logic

Assets needed: Professional sports records

Time: 50 minutes

Lesson 9: Intermediate arithmetic and introduction to data analysis

Objective: Student can conduct basic exploratory data analysis and data cleaning

Description:

- Rounding numbers
- Generating random numbers
- Intermediate arithmetic functions

Exercise: Drills

Assets needed: Professional sports records

Time: 50 minutes

Lesson 10: Lookup functions and introduction to data wrangling

Objective: Student can bring data from an outside source into an existing table

Description:

- VLOOKUP(), HLOOKUP(), approximate and exact matches
- INDEX()/MATCH()
- Data wrangling, the Power Query way

Exercise: Drills

Assets needed: Airport flight records

Time: 50 minutes



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