Flip to Tech

DATA ANALYSIS SYLLABUS

12 WEEKS PROGRAM

Instructor. [Mrs Amarachi Adenle]

Course Materials

1.Laptop with access to Access to Data Analysis Software(e.g. Microsoft Excel)
2.Book and pen
3.Textbook (if applicable, recommended by the instructor)

Course Schedule

Week 1 MICROSOFT EXCEL SECTION

Introduction to Excel and Data Analysis Basics

- Understanding Excels interface and essential functions
  Importing and organizing data in Excel
- Sorting and filtering data
- Basic data cleaning techniques

Week 2

Data Manipulation and Formulas in Excel

- Using formulas and functions for data calculations
- Working with logical functions (IF, AND, OR)
- Applying conditional formatting to highlight data patterns
- Combining data using CONCATENATE and TEXTJOIN functions

Week 3

Data Visualization in Excel

- Creating basic charts (bar, line, pie) to represent data visually
- Formatting and customizing charts for clarity
- Creating dynamic charts with data range selection
- Adding trend lines and data labels to enhance visualizations

Week 4

Advanced Data Analysis Technique

- Pivot Tables: Creating summary tables and analyzing data
- Using slicers and timelines for interactive filtering
- Introduction to Power Query for data transformation and integration
- Introduction to Power Pivot for advanced data modeling and analysis

Week 5

Statistical Analysis in Excel

- *Descriptive statistics: mean, median, mode, standard deviation, etc.*
- *Creating histograms and frequency distributions*
- *Performing t-tests and correlation analysis*
- *Introduction to regression analysis in Excel*

Week 6

Advanced Excel Functions and Automation

- *Working with lookup functions (VLOOKUP, HLOOKUP, INDEX, MATCH)*
- *Conditional functions (SUMIF, COUNTIF, AVERAGEIF)*
- *Using data validation and protection features*

Week 7 POWER BI

Introduction to Power BI

The Computer

- *Discover the Power BI Tool: Explore the Power BI ecosystem and understand its significance in data analysis and visualization.*
- *Master the Power BI Desktop Interface: Get hands-on experience with the Power BI Desktop application, including its various features and functionalities.*
- *Know the Power BI Mobile Application: Learn about the Power BI mobile app and its utility for on-the-go data access and reporting.*

Week 8

Obtaining Data

- *Transform Extracted Data: Dive into the process of acquiring data and explore methods for transforming and shaping it to suit your analytical needs.*
- *Use Data from Database or SSAS Object: Understand how to source data from databases and SSAS (SQL Server Analysis Services) objects.*
- *Identify the ETL Process: Gain insights into the Extract, Transform, Load (ETL) process and its role in data preparation.*

Week 9

Transforming Data

- *Data Cleanup: Learn techniques for data cleaning, including handling missing values, duplicates, and inconsistencies.*
- *Assemble Tables: Understand how to combine and assemble data from various sources into meaningful tables.*
- *Merge Queries: Explore the merging of queries to create unified datasets for analysis.*

Week 10

Defining the Data Model

- *Master the Diagram View: Dive into Power BI's diagram view to create and manage relationships between tables.*
- *Use Standard DAX Functions: Explore Data Analysis Expressions (DAX) and its standard functions for creating calculated columns and measures.*
- *Use DAX Time Intelligence Functions: Discover the power of DAX time intelligence functions for analyzing time-based data.*

Week 11

Power BI Report Creation

- *Power BI Report Creation: Learn the art of creating visually appealing and insightful reports in Power BI.*
- *Data Visualization: Explore different visualization options and techniques to effectively convey your data's story.*

Week 12

Power BI Online Service Overview

- *Storage and Sharing: Understand how to store and share your Power BI reports in the cloud.*
- *Pinning Reports: Learn to pin specific visuals to dashboards for easy access.*
- *Sharing Reports: Explore various sharing options to collaborate with colleagues and stakeholders.*
- *Exploiting Published Reports: Discover how to leverage published reports for data-driven decision-making within your organization.*

Disclaimer

This syllabus is subject to change at the discretion of the instructor. Any changes will be communicated promptly to students

Bank Details

1. Account Name: Flip to Tech

2. Account Number: 9079184014 (FCMB)

Branches and Location

JAKANDE BRANCH

Digital Art Library, by Iyana Isheri,
Jakande Estate, Ejigbo LCDA, Lagos.
Contact(09126076718)

IJEGUN CENTRE

Digital Art Library, 26 Oluokewunmi Street by Nepa/Prince Bus Stop, Ijegun-Ikotun,Lagos.
Contact(07017935247)

FESTAC CENTRE

Ozubulu Civic Centre, 111 Road, G close, 1st Avenue, Festac, Lagos state
Contact(07052075318)