**Power Query Course Curriculum (Structured View)**

**Level 1 - Get and Transform Data: Home Part 1**

* Introduction - Let's Get Some More Data
* Exploring the Power Query Editor Interface
* Introducing the M Language
* Let’s Start Look at the Home Tab
* Home Menu - Manage Columns
* Home Menu - Remove Rows and Use First Row as Headers

**Level 1 - Get Data: Home**

* Sort and Filter
* Split Column
* September 2024 Update - Group By
* Other Transform Activities

**Level 2 - Getting Multiple Files**

* Merge Queries and Expand Table
* Merge Queries with Group By and Different Join Types
* Comma Separated Files
* Appending Two Queries Together
* Appending Three or More Queries + Resolving Data Type Issues
* Combine Files (From Folder)

**Level 3 - Transform Menu**

* Transform - Table and Any Column
* Pivot Column
* Unpivot Column
* Practice Activity Number 11
* Practice Activity 11 - The Solution
* Unpivot in Conjunction with Other Transform Features

**Level 4 - Transform: Text and Numbers**

* Transform/Add Column - Text Format
* Transform/Add Column - Merge Columns
* Transform/Add Column - Extract
* Transform/Add Column - Parse
* Transform/Add Column - Number Column: Statistics and Standard
* Transform/Add Column - Other Number Functions
* Transform - Text and Numbers (Quiz)

**Level 5 - Transform: Dates and Time**

* Creating a List of Dates
* Transform/Add Column - Date
* Transform/Add Column - Date in Other Cultures/Languages
* Transform/Add Column - Time
* Transform/Add Column - Duration
* Transform - Dates and Time (Quiz)

**Level 6 - Add Columns, View and Help Menus**

* Column from Examples - Dates and Numbers
* Column from Examples - Text
* Importing CSV/Fixed and Extracting Tables Using Examples
* Conditional Column and Convert Semi-Structured Data
* Resolving Errors from Conditional Columns
* Index Column and Duplicate Column
* Custom Column - If Then Else
* Converting Text from Different Locale to Number
* Add Columns, View and Help Menus (Quiz)

**Level 7 - View and Help Menus + Advanced Features**

* Other M Functions
* View and Help Menus + Column Properties
* Profile the Data
* Advanced Editor
* Functions and Parameters
* DateTime/Zone Data Type and M Functions
* View and Help Menus + Advanced Functionality (Quiz)

**Level 8 - Get Other Types of Data**

* Installing SQL Server
* Introduction to SQL Server
* Importing Database into Power BI + Query Folding
* Expanding Multiple Tables in SQL Server
* Selecting a Storage Mode
* Importing from SQL Server Analysis Services (SSAS)
* Setting Up Azure SQL Database
* Using Azure SQL Database in Power BI
* Automatic Page Refresh
* Using Microsoft Dataverse
* Configure Data Loading
* Get Other Types of Data (Quiz)

**Additional Videos - Get and Transform**

* Not Needed for PL-300 Exam
* Using Big Data
* Resolve Problems
* Identify Query Performance Issues (Query Diagnostics)
* Apply AI Insights

**Power Pivot Course Curriculum**

### Level 1: Creating a Data Model

* Welcome to Modeling and DAX functions
* Get multiple data sets, and connect them together
* The problems with direction of relationships between data sets
* Creating a Data Model

### Level 2: Introduction to DAX functions, including Logical functions

* DAX functions - A useful Resource
* Calculated columns - an introduction
* Basic operators
* IF, BLANK and ISBLANK
* AND, OR and NOT
* SWITCH
* Other functions

### Level 3: Statistical functions (aggregation and iterator functions)

* Measures - an introduction, with standard aggregations including CountBlank
* Aggregation of calculations (iterator functions)
* Other statistical functions

### Level 4: Mathematical functions

* Introduction to mathematical functions
* Rounding functions
* Division functions - MOD and QUOTIENT
* SIGN (and use with SWITCH) and ABS
* Exponential functions
* Other mathematical functions

### Level 5: Text functions

* Text searching
* Text extraction and substitution
* Text conversion
* Other text functions

### Level 6: Information functions

* ISERROR and LOOKUPVALUE
* Other information functions

### Level 7: Filter and Value Functions

* RELATED - Flatten out a parent-child hierarchy
* Design a data model that uses a star schema
* RELATEDTABLE and COUNTROWS
* Contact
* ALL
* FILTER
* CALCULATE
* ALLEXCEPT
* ALLSELECTED
* Other filter and value functions

### Level 8: Time Intelligence Functions

* Date and Time Functions
* FIRSTDATE, LASTDATE
* Start of... and End of...
* Previous... and Next...
* DATESINPERIOD
* DATESTMTD, DATESQTD, DATESYTD, TOTALMTD, TOTALQTD, TOTALYTD
* Opening Balance and Closing Balance
* Semi-additive Measures
* SAMEPERIODLASTYEAR and PARALLELPERIOD
* Other Time Intelligence Functions

### Level 9: Creating Date Tables, Calculation Groups, Visual Calculations

* Create calculated tables
* Create a common date table
* Creating a Time Intelligence model
* Creating a Calculation Group and Items
* Expanding our Calculation Group and Items, and adding a filter
* Creating a basic Visual Calculation
* Visual Calculations: Moving Average and Running Total
* Other Visual Calculations

### Level 10: Other Modeling and DAX Topics for the Exam

* Create role-playing dimensions
* Resolve many-to-many relationships - Joint Bank Accounts
* Resolve many-to-many relationships - Different types of granularity
* Improve cardinality levels through summarization and by changing data types
* Identify poorly performing measures, relationships, and visuals
* Using DAX Query View
* Other Modeling and DAX Topics for the exam

**Report View in Power BI**

**Level 1: Creating and Formatting a Table Visualization**

* Welcome to Visualizations
* Import from Excel and create the first visualization
* Exploring Power BI Desktop – Report view and Data view
* Focus mode, visualization types, and Dark mode
* Why use a work email and Power BI service
* Saving visualizations to Desktop and Power BI Service
* Creating and formatting a table visualization

**Level 2: Formatting Our First Visualization**

* Opening the Format Pane
* On-object interaction and formatting
* Formatting font and size
* Formatting colors and styles
* Formatting position and alignment
* Format Painter
* Configuring summarization and data formatting
* Custom number formatting and visual level formatting
* Configuring visuals

**Level 3: Creating Different Visualizations – Matrices and Bar Charts**

* Matrix visuals and drill down
* Stacked and clustered bar charts
* Formatting bar charts and categorical axes
* Edit interactions between visuals
* Combo charts and sparklines
* Line and area charts
* Matrices and bar charts overview

**Level 4a: Adding More Control – Filters and Slicers**

* Add text boxes, images, and shapes
* Basic and advanced filters
* Filter Top N items
* Slicers and slicer warning
* Syncing slicers across pages
* Button, text, and list-slicer visuals

**Level 4b: Sort, Small Multiples, Bookmarks, and Selection Pane**

* Sort visuals
* Configure small multiples
* Use bookmarks for reports
* Use the Selection Pane

**Level 4c: Drillthrough, Buttons, and Tooltip Pages**

* Drillthrough
* Buttons and actions
* Page navigation with buttons
* Natural Language Queries (Q&A)
* Tooltips and page navigator

**Level 5: Other Visualizations**

* Ribbon charts and waterfall charts
* Scatter, bubble, pie, and donut charts
* Treemaps and funnel charts
* Import a custom visual
* Other visualizations overview

**Level 6: Measure Performance with KPIs, Gauges, and Cards**

* Gauges and multi-row cards
* Conditional formatting
* New card visual
* KPIs and performance indicators

**Level 8: Identify Patterns and Trends**

* Quick measures
* Export report data
* Reference lines and forecast
* Error bars and outliers
* Clustering and anomaly detection
* Smart narrative
* Groupings and binnings
* AI visuals (Key influencers, Decomposition Tree)
* Analyze feature
* Custom themes
* Report accessibility
* Report Builder

**Power Platform Integration**

**Power Platform – Power Apps & Power Automate Integration**

* Introduction to Power Platform
* Embedding Power Apps into Power BI reports
* Triggering Power Automate flows from visuals
* Use cases of Power Platform in interactive reporting
* Best practices for integrating with enterprise workflows

**Power BI Service & Management**

**Section 1: Introduction to the Power BI Service**

* Power BI Service overview
* Logging in and exploring
* Reports, datasets, dashboards, apps
* Semantic models
* Report usage and navigation
* Using the Power BI Service

**Section 2: Power BI Pro – Sharing and Collaboration**

* Power BI Pro account setup
* Creating and sharing reports
* Exporting reports to PowerPoint
* Sharing across platforms

**Section 3: Row-Level Security**

* Role-based RLS
* Dynamic RLS
* Testing and validating RLS

**Section 4: Dashboards**

* Differences between reports and dashboards
* Dashboard title management
* Dashboard options (mobile, tiles, alerts)
* Configure subscriptions and themes
* Q&A and sensitivity labels

**Section 5: Manage Semantic Models**

* Analyzing in Excel
* Connecting Excel to Power BI models
* Certifying semantic models
* Data gateways and refresh settings
* Incremental refresh configuration

**Section 6: Workspaces and Publishing**

* Create and configure workspaces
* Assign roles
* Publish datasets and reports
* Power BI apps
* Personalize visuals

**Section 7: Scorecards and Metrics**

* Creating scorecards
* Sharing and tracking metrics
* Using scorecard visuals

**More: Introduction to Microsoft Fabric & Copilot**

**Microsoft Fabric Overview**

* What is Microsoft Fabric
* Key components: Data Factory, Synapse, Power BI
* How Fabric integrates across the data lifecycle

**Copilot in Power BI**

* Introduction to Copilot
* Using Copilot to generate DAX, visuals, and summaries
* Real-time Q&A with AI assistant
* Productivity boost with AI insights