

COURSE SYLLABUS

COURSE TITLE:	55072AC Visualizing Data with SharePoint 2013 No Code
FORMAT:	Instructor-Led
CERTIFICATION EXAMS:	None



This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs. Course content, prices, and availability are subject to change without notice.

ELEMENTS OF THIS SYLLABUS ARE SUBJECT TO CHANGE.

ABOUT THE COURSE

What do we mean by no code? It is a matter of perspective. In today's world the successful software vendor needs to develop software that is easily customizable by casual users. In the realm of business intelligence that means offering a variety of tools to different types of users that, depending on their experience, they can utilize to rapidly create the visualization of data that suits their needs. Microsoft has produced a great array of such tools that target different users. These tools are variously Wizards, Dialog Boxes, Forms, Web Pages Designers and so forth. In this course we utilize the built in tools and do not write a single line of code!

No Code visualization means using the data structures that exist already to get the job done. You don't have the time or maybe the inclination to learn how to code but you need answers. I.T., if you haven't already noticed, is always working through a backlog but your business situation is dynamic and rapidly changing and will not wait for any backlog. In this five-day course you will learn how to get those answers without submitting a request and waiting.

AUDIENCE

The target audience of this course is for Business Analysts, Report Designers, Team Leads, SharePoint Administrators, Business Intelligence Developers and Project Managers that will be tasked with the implementation, support, management or training needed to rapidly empower the users to take advantage of the exploding world of data visualizing.

AT COURSE COMPLETION

After completing this course, students will be able to:

Why this course may be for you

- ▶ You have the infrastructure but getting reports generated out of I.T. just takes too long.
- ▶ Lack of insight into what has happened is hampering your ability to move forward.
- ▶ You need or want to use the web browser as your source of information so that it is as accessible as the internet.
- ▶ You want to take advantage of the SharePoint deployment to manage the data connections, report objects, dashboards KPI's etc.
- ▶ You need to rapidly prototype reports for changing conditions
- ▶ You want to move from textual reports to graphical reporting.
- ▶ You are tasked with implementing Six Sigma type reports using Visio data-driven objects
- ▶ Your organization wants to implement analysis based on automatically updating data
- ▶ You need to implement a "Single Source of The Truth" structure.
- ▶ You need to understand the effectiveness of the reports and dashboards.
- ▶ You need an understanding of the tools that are available and how to determine which is the target audience for those tools.



- ▶ You need to implement actionable dashboards to allow line managers to rapidly take action.
- ▶ After completing this course, students will be able to perform all of the actions and answer all of the questions listed in: Why this course may be for you.

PREREQUISITES

Before attending this course, students must have:

- ▶ None

ADDITIONAL READING

To help you prepare for this class, review the following resources:

- ▶ None

MODULE 1: COURSE OVERVIEW

This module explains how the class will be structured and introduces course materials and additional administrative information.

Lessons

- ▶ Introduction
- ▶ Course Materials
- ▶ What Does No Code Mean?
- ▶ How To Get The Most Out Of This Course
- ▶ Facilities
- ▶ What We'll Be Discussing

Lab 1: COURSE OVERVIEW

- ▶ None

After completing this module, students will be able to:

- ▶ Successfully navigate the course environment
- ▶ Successfully log into their virtual machine.
- ▶ Have a full understanding of what the course intends to cover.

MODULE 2: DASHBOARD DESIGN PRINCIPLES

This module is an introduction to successful design principles for dashboard design.

Lessons

- ▶ Dashboard Design
- ▶ Capabilities Summarization
- ▶ Three Types of Dashboards
- ▶ Successful Dashboards
- ▶ Data Visualizations
- ▶ Tables or Graphs
- ▶ Types of Charts/Graphs
- ▶ Choosing a Chart Type
- ▶ Key Performance Indicators
- ▶ Pitfalls In Dashboard Design
- ▶ Microsoft Report Builder 3.0
- ▶ Plan Your Reports
- ▶ Datasets
- ▶ SharePoint Web Parts

Lab 1: DASHBOARD DESIGN PRINCIPLES

- ▶ Explore the Report Builder 3.0 Interface
- ▶ Create an Embedded Data Source into SQL 2012 Engine
- ▶ Create an Embedded Dataset into SQL 2012 Engine



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- ▶ Create an Embedded Data Source into SQL 2012 Analysis Services
- ▶ Create an Embedded Dataset into SQL 2012 Analysis Services
- ▶ Create a Shared Data Source Using Reporting Services
- ▶ Create a Shared Dataset Using the Shared Data Source

After completing this module, students will be able to:

- ▶ Explore the Report Builder 3.0 Interface
- ▶ Create an Embedded Data Source into SQL 2012 Engine
- ▶ Create an Embedded Dataset into SQL 2012 Engine
- ▶ Create an Embedded Data Source into SQL 2012 Analysis Services
- ▶ Create an Embedded Dataset into SQL 2012 Analysis Services
- ▶ Create a Shared Data Source Using Reporting Services
- ▶ Create a Shared Dataset Using the Shared Data Source

MODULE 3: THE BUSINESS INTELLIGENCE STACK

This module covers the Microsoft Business Intelligence stack including SQL 2012, Extract-Transform-Load, Reporting Services, Tabular Data, Analysis Services and SharePoint 2013.

Lessons

- ▶ Business Intelligence in Three Ways
- ▶ SQL 2012 Business Intelligence
- ▶ SharePoint 2013 Business Intelligence
- ▶ PowerPivot

Lab 1: THE BUSINESS INTELLIGENCE STACK

- ▶ SQL 2012 Multidimensional Model Basics
- ▶ SQL 2012 Tabular Model Basics
- ▶ Creating a Multidimensional Cube
- ▶ Creating a Tabular Database

After completing this module, students will be able to:

- ▶ Explore SQL 2012 Multidimensional Model Basics
- ▶ Explore SQL 2012 Tabular Model Basics
- ▶ Create a Multidimensional Cube
- ▶ Create a Tabular Database

MODULE 4: REPORT BUILDER 3.0

This module explains Report Builder 3.0 wizards, basics of report design, intermediate reports with report parameters and report expressions, report visualizations including graphs, charts, images, and gauges, advanced reporting including the utilization of maps, interactive reports, Report Parts and subreports.

Lessons

- ▶ Table or Matrix Wizard
- ▶ Chart Wizard
- ▶ Map Wizard
- ▶ Report Lists
- ▶ Report Tables
- ▶ Report Matrix
- ▶ Data Region(s)
- ▶ Report Parameters
- ▶ Report Expressions
- ▶ Report Parts
- ▶ Formatting Reports
- ▶ Overview of Visualizations
- ▶ Maps
- ▶ Dynamic Headers and Footers
- ▶ Your Company Report Templates



- ▶ HTML5 and Textboxes
- ▶ Using the List Object to Combine Other Items
- ▶ Subreports and Drill-Through Reports

Lab 1: REPORT BUILDER 3.0

- ▶ Create Four Shared Data Sources and Two Shared Datasets
- ▶ Use the Table or Matrix Wizard
- ▶ Use the Chart Wizard
- ▶ Use the Map Wizard
- ▶ Creating a Report Using Lists
- ▶ Creating a Report Using Tables
- ▶ Creating a Report Using a Tablix
- ▶ Creating a Report with a Query Parameter
- ▶ Report Parameter with a Shared Dataset
- ▶ Create Parameters Using a Dataset as a Filter
- ▶ Using Expressions in Your Report
- ▶ Creating a Report Using Report Parts
- ▶ Report Formatting
- ▶ Using Sparklines in a Report
- ▶ Report Builder Chart Borders Titles and Legends
- ▶ Linear Gauges
- ▶ Basic Maps
- ▶ Basic Maps with Color
- ▶ Report Header and Footer
- ▶ Creating Report Templates
- ▶ Embedding HTML in a Textbox
- ▶ Lists as Containers
- ▶ Subreports

After completing this module, students will be able to:

- ▶ Create Shared Data Sources and Shared Datasets
- ▶ Use the Table or Matrix Wizard
- ▶ Use the Chart Wizard
- ▶ Use the Map Wizard
- ▶ Create and configure a Report Using Lists
- ▶ Create and configure a Report Using Tables
- ▶ Create and configure a Report Using a Tablix
- ▶ Create and configure a Report with a Query Parameter
- ▶ Create and configure a Report Parameter with a Shared Dataset
- ▶ Create Parameters Using a Dataset as a Filter
- ▶ Use Expressions in Your Report
- ▶ Create and configure a Report Using Report Parts
- ▶ Configure Report Formatting
- ▶ Use Sparklines in a Report
- ▶ Create and configure Report Builder Chart Borders Titles and Legends
- ▶ Create and configure Linear Gauges
- ▶ Create and configure Basic Maps
- ▶ Create and configure Basic Maps with Color
- ▶ Create and configure Report Header and Footer
- ▶ Create and configure Report Templates
- ▶ Embed HTML in a Textbox
- ▶ Create and configure Lists as Containers
- ▶ Create and configure Subreports

MODULE 5: POWERPIVOT AND POWER VIEW 2013

In this module we will explore PowerPivot and its analytical capabilities. PowerPivot is a data analysis add-on for



Microsoft Excel that allows large amounts of data to be collected, aggregated, and analyzed in one workbook. Sound powerful? It is! We'll cover everything you need to know to get you up, running, and analyzing.

Lessons

- ▶ Best Things That PowerPivot Brings to Excel
- ▶ What Will PowerPivot Do for the Analyst?
- ▶ Introduction to PivotTables (Optional)
- ▶ PowerPivot Versions
- ▶ New 2013 PowerPivot Features
- ▶ VLOOKUP Not Required (Use Relationships)
- ▶ Architectural Changes in Excel 2013
- ▶ PowerPivot and Excel 2013
- ▶ PowerPivot and SharePoint
- ▶ Enterprise Business Intelligence and PowerPivot
- ▶ Importing Data
- ▶ Data Models
- ▶ Relationships
- ▶ Simple PivotTable Reports
- ▶ Calculated Columns and Calculated Fields
- ▶ Refreshing Data
- ▶ Calculations
- ▶ SharePoint Sharing
- ▶ Power View
- ▶ Report Design Principles
- ▶ New 2013 Power View Features
- ▶ Microsoft Power View User Interface
- ▶ Tables
- ▶ Charts
- ▶ BI Semantic Models
- ▶ Saving and Sharing

Lab 1: POWERPIVOT AND POWER VIEW 2013

- ▶ Pivot Tables (Optional)
- ▶ PowerPivot User Interface
- ▶ Importing Data
- ▶ Importing Large Datasets
- ▶ Importing Data with a Query
- ▶ Creating Relationships
- ▶ Creating a Cascading Relationship
- ▶ Creating a Relationship Between Tables from Different Sources
- ▶ Hiding Columns, Change Data Type, Sorting, and Filtering
- ▶ Calculated Column and Calculated Field
- ▶ Add a Calculated Field from the Pivot Table
- ▶ Filter Context Using One Table
- ▶ Row Context and Dynamic Selection
- ▶ FILTER Function
- ▶ CALCULATE Function
- ▶ Build a Date Table
- ▶ Relate a Table to an Excel Calendar
- ▶ Time Intelligence
- ▶ Perspectives
- ▶ Hierarchies
- ▶ KPIs
- ▶ Power View

After completing this module, students will be able to:



- ▶ Use Pivot Tables (Optional)
- ▶ Explore PowerPivot User Interface
- ▶ Import Data
- ▶ Import Large Datasets
- ▶ Import Data with a Query
- ▶ Create and configure Relationships
- ▶ Create and configure a Cascading Relationship
- ▶ Create and configure a Relationship Between Tables from Different Sources
- ▶ Hide Columns, Change Data Type, Sorting, and Filtering
- ▶ Create and configure Calculated Column and Calculated Field
- ▶ Add a Calculated Field from the Pivot Table
- ▶ Filter Context Using One Table
- ▶ Create and configure Row Context and Dynamic Selection
- ▶ Use FILTER Function
- ▶ Use CALCULATE Function
- ▶ Build a Date Table
- ▶ Relate a Table to an Excel Calendar
- ▶ Create and configure Time Intelligence
- ▶ Create and configure Perspectives
- ▶ Create and configure Hierarchies
- ▶ Create and configure KPIs
- ▶ Create and configure reports using Power View

MODULE 6: SHAREPOINT 2013 EXCEL SERVICES

In this module, we will go over all the new 2013 Excel Services features, and we will explore the core components of Excel Services. We will cover Excel Web Access and its capabilities along with any differences you may encounter in the browser as opposed to the desktop client. There is coverage of the Power View add-in for Excel, and then lastly we will explain the save and share process and have a look at best practices.

Lessons

- ▶ New 2013 Excel Services Features
- ▶ Core Components
- ▶ Excel Web Access (EWA)
- ▶ What Excel Web Access is Not
- ▶ SharePoint Libraries to Store Workbooks
- ▶ Power View Excel 2013 and SharePoint 2013
- ▶ Excel Web Access Web Part
- ▶ Excel Interactive View
- ▶ Best Practices

Lab 1: SHAREPOINT 2013 EXCEL SERVICES

- ▶ Creating a Library to Hold Excel 2013 Workbooks
- ▶ Power View
- ▶ Creating a Web Part Page and Adding an Excel Web Part App

After completing this module, students will be able to:

- ▶ Create and configure a Library to Hold Excel 2013 Workbooks
- ▶ Create and configure reports using Power View
- ▶ Create and configure a Web Part Page and Add an Excel Web Part App

MODULE 7: SHAREPOINT 2013 PERFORMANCEPOINT

In this module, we will give you an overview of the new 2013 PerformancePoint Services features. Dashboard Designer is explored along with many of the objects and connections available within.

Lessons



- ▶ What's New?
- ▶ PerformancePoint Object Hierarchy
- ▶ Dashboard Designer
- ▶ Dashboards (Web Part Page)
- ▶ Indicators
- ▶ Data Sources
- ▶ Key Performance Indicators as PerformancePoint Objects
- ▶ Scorecards
- ▶ Filters
- ▶ Dashboards (Web Part Page) Revisited
- ▶ Dashboard Designer Management

Lab 1: SHAREPOINT 2013 PERFORMANCEPOINT

- ▶ Dashboard Designer Introduction
- ▶ Dashboard (Web Part Page Creation)
- ▶ Data Sources SQL Server Analysis Services (SSAS)
- ▶ Data Sources SQL, List, Excel Services
- ▶ KPI Basics Connect to a List and SQL
- ▶ KPI Multidimensional Scoring Patterns
- ▶ KPI using Dimensional Slicers
- ▶ KPI Change the "Worst" value
- ▶ Objective KPI
- ▶ Configure Time Intelligence
- ▶ Analytic Charts or Grids
- ▶ Other Reports
- ▶ Reporting Services Report
- ▶ KPI Details Report
- ▶ Connected Scorecards
- ▶ Combining Connected and Standard KPIs
- ▶ Scorecard Settings
- ▶ MDX Query (Optional)
- ▶ Member Selection Filter
- ▶ Named Set Filter
- ▶ Time Intelligence Filter
- ▶ Cascading Filters
- ▶ Dashboards (Web Part Pages)
- ▶ Dashboard Designer Management

After completing this module, students will be able to:

- ▶ Navigate and successfully use Dashboard Designer
- ▶ Create and configure a Dashboard (Web Part Page Creation)
- ▶ Create and configure Data Sources SQL Server Analysis Services (SSAS)
- ▶ Create and configure Data Sources SQL, List, Excel Services
- ▶ Create and configure KPI Basics Connect to a List and SQL
- ▶ Create and configure KPI Multidimensional Scoring Patterns
- ▶ Create and configure KPIs using Dimensional Slicers
- ▶ Create and configure KPIs Changing the "Worst" value
- ▶ Create and configure an Objective KPI
- ▶ Configure Time Intelligence
- ▶ Create and configure Analytic Charts or Grids
- ▶ Create and configure Other Reports
- ▶ Create and configure Reporting Services Reports
- ▶ Create and configure KPI Details Report
- ▶ Create and configure Connected Scorecards
- ▶ Combine Connected and Standard KPIs
- ▶ Configure Scorecard Settings



- ▶ Use MDX Query (Optional)
- ▶ Create and configure a Member Selection Filter
- ▶ Create and configure a Named Set Filter
- ▶ Create and configure a Time Intelligence Filter
- ▶ Create and configure Cascading Filters
- ▶ Create and configure Dashboards (Web Part Pages)
- ▶ Configure Dashboard Designer Management

