

DAT206x: Analyzing and Visualizing Data with Excel

Course Prerequisites

Understanding of Excel analytic tools such as tables, pivot tables and pivot charts, and experience in working with data from databases and text files will be helpful.

Course Schedule

This course is available in self-paced format. Deadlines associated with the graded quizzes and labs are set to the end date of the course, which is displayed on the course **Home** page. You can listen to the lecture, review the additional reading materials (links), attempt the quizzes (you may need to try some the options out in Excel), and work on the labs exercises at any time prior to the deadline.

Week 1

- Setup the lab environment by installing Office applications.
- Learn how to perform data analysis in Excel using classic tools, such as pivot tables, pivot charts, and slicers, on data that is already in a worksheet / grid data.
- Explore an Excel data model, its content, and its structure, using the Power Pivot add-in. Create your first DAX expressions for calculated columns and measures.

Week 2

- Learn about queries (Power Query add-in in Excel 2013 and Excel 2010), and build an Excel data model from a single flat table.
- Learn how to import multiple tables from a SQL database, and create an Excel data model from the imported data.
- Create a mash-up between data from text-files and data from a SQL database.

Week 3

- Get the details on how to create measures to calculate for each cell, filter context for calculation, and explore several advanced DAX functions.
- Find out how to use advanced text query to import data from a formatted Excel report. Perform queries beyond the standard user interface.

Week 4

- Explore ways to create stunning visualizations in Excel. Use the cube functions to perform year-over-year comparisons.
- Create timelines, hierarchies, and slicers to enhance your visualizations. Learn how Excel can work together with Power BI.
- Upload an Excel workbook to the Power BI service. Explore the use of Excel on the mobile platform.

Expected Effort

Each week, you should expect to spend 2-4 hours on the course, including:

- Viewing the lecture videos and demonstrations.
- Reviewing additional reading materials (links).
- Completing the quizzes.
- Completing the lab exercises.

Coursework and Grading

This course includes coursework, some of which is graded. Each module in the course includes lecture videos, additional reading materials (links), graded short quizzes, and graded lab exercises. The quizzes account for 30% of the total grade, the lab exercises accounts for 65% of the total grade, and the two mandatory surveys account for the remaining 5%. You must achieve an overall score of 70% to pass the course. For the quizzes/labs questions, you have between one to four maximum attempts at each question, depending on the type of the question.

Discussion

We encourage all students to submit questions, observations, and comments in the Discussion section. If you have any issues while working on the course, check there first – your fellow students may have already found a resolution!

Please remember that the discussion forum is open to all students and staff, and while we love to see passionate engagement, abusive or inflammatory behavior will not be tolerated.

Due to the volume of students attending this course, it will not be possible for the course staff to answer every question individually. You should still post questions however, because in many cases, your fellow students may be able to help.