

55335A – SQL Server Machine Learning Serves using Python, R and Java Trainer Preparation Guide

2024/10/27

Table of Contents

Introduction:	1
Licensing.....	1
Courseware Information:	1
Before Teaching the Class:	1
Recommended Timing for Lectures and Labs:	2
Recommendations for Lab Exercises:	3
Pre and Post Assessments:	3

55335 Instructor Guide

Introduction:

This information is provided to help trainers prepare to teach 55335A and answer student questions. Error corrections and presentation recommendations will be added to this document in a timely manner.

Because this is a lab intensive course, trainers may elect to include or exclude Q&A and review sessions. Because it is expected that most students will not have a strong background in programming, it is recommended that the demonstrations not be skipped. Run each section of the demonstration script separately and review the documentation that comes with it with the students. Encourage them to follow the same process when they do their own exercises.

Before setting up the class lab machines, it is important to review the **55335A-ENU_PowerShellSetup.pdf** file. If course customizations are needed or if the material will be combined with other courses, the material there will provide helpful details for making sure this is done properly.

The student computer configuration requires that lab files be placed in the **C:\Labfiles.<Course Number>** folder (or the location mapped to the **\$Labfiles** or **\$WorkFolder** variable) in the setup script (**55335AzureSetup.ps1**).

Licensing

The training center or any organization hosting the lab computers for this class are fully responsible for the licensing of all software used in the course and labs. Using standard Microsoft Azure deployments is strongly recommended to accomplish this.

Courseware Information:

Setup Files: <https://github.com/neiltucker/55335A>
Printed Courseware: <http://www.neiltucker.com>
Online Courseware: <http://www.softwaretutorialservices.com>

Before Teaching the Class:

All trainers should have experience working with recent versions of Windows Server and SQL Server. The following skills are also recommended:

- A basic knowledge of SQL
- A basic knowledge of command-line scripting (PowerShell, Shell or Batch)
- Working knowledge of one of the programming languages (Python, R or Java)
- Working knowledge of SQL Server database management

The introductory demonstration in Module 0 should be completed by each student. Making time for this exercise will ensure that students have a good understanding of the lab environment and that their systems are configured properly. This will also lessen the number of questions asked about the environment during lab exercises. Answers to all module review questions are included with the PowerPoint slide notes.

55335 Instructor Guide

Recommended Timing for Lectures and Labs:

Each trainer will have their own preferences as to what material to emphasize and spend more time on. It is important to understand the skills / needs of the students before starting the class to make good decisions about this. Because the course material is modular, you have the flexibility to change the order of demonstrations and exercises and long as you run the appropriate preparation script defined for that exercise..

It is not necessary to complete a lab in one sitting. When the lab runs longer than 60 minutes, it is recommended that students be given the option of taking a break, so they do not become fatigued.

The recommended timings below may have to be adjusted depending on the skill level of students. For classes with less experienced students, the demonstrations may be treated as class exercises for the students to “warm up” before the lab exercises. Each lab has an exercise that corresponds to a demonstration. Exercises may be completed together in a single lab per module, or they may be completed individually after each lesson / demonstration. Additional setup files for optional training materials may be found in the **C:\Labfiles.55335\Tools** folder.

55335A:

Modules	Lectures & Demos	Lesson Labs	Review / Q&A
0	30	30	10
1	45	120 – 150	10
2	60	180 - 240	10
Optional: (SQL Tutorial)	-	-	-
Total Minutes	135	330	30
Total Hours	2.25	5.50	0.50

55335 Instructor Guide

Recommendations for Lab Exercises:

It is best to have breaks between modules and especially after labs. After a demonstration, do a Q&A and you may decide to include breaks here as well. The module review can be done before or after a break. Some trainers find it useful to use it as a lead in for the new module.

Read the instructions in the **55335AzureSetup.ps1** file and other setup scripts before running them. Additional setup files for optional training materials may be found in the **C:\Labfiles.55335\Tools** folder.

Pre and Post Assessments:

The course assessments are now included as a part of the course material in the online version (www.softwaretutorialservices.com/course/55335a). The assessment questions are similar to the end of module review questions and will always be based on material in the course or on the labs / demonstrations.