Core Java and Selenium Automation Syllabus

Week 1: (Saturday & Sunday)

Installation of Java
Basic Java language structure
Primitives (variables and data types)
Write, compile and run a simple java program in MS-DOS
Introduction to Integrated Development Environment (Eclipse)
Creating a java project in Eclipse
Creating a java package in Eclipse
Creating a java class in Eclipse
import statements

Week 2: (Saturday & Sunday)

Review of primitives
Introduction to class and object in java (brief)
conditional statements (if then else)
switch statements
Loops in java
Methods in java
passing parameters and return values in methods

Week 3: (Saturday & Sunday)

Strings in java
Arrays in java
Multi dimension arrays
Lists
Access modifiers
Inheritance in java (single/multi-level inheritance)
overriding
overloading
interfaces in java
Abstract class in java

Week 4: (Saturday & Sunday)

Complete Review of java with more example code
Question and Answer session
Installation of Selenium files

Week 5: (Saturday & Sunday)

Introduction to Selenium
How to start Chrome browser using Selenium WebDriver
How to start Firefox browser using Selenium WebDriver
How to start IE browser using Selenium WebDriver
How to handle variety of in Selenium WebDriver
How to verify page title in selenium
Introduction and Installation of Maven
Introduction to TestNG framework

From this point onwards, **TestNG** will be used to test Selenium code

Week 6: (Saturday & Sunday)

Introduction to Web Elements
How to find web elements using id
How to find web elements using Xpath
How to find web elements using CSS
How to create dynamic Xpath in Selenium
How to handle radio buttons in Selenium
How to handle Checkbox in Selenium
How to handle dropdown in Selenium

Week 7: (Saturday & Sunday)

How to use Assertion in TestNG
Soft and Hard assertion in TestNG
Various capabilities of TestNG. (Detailed study)
How to handle alert window in Selenium WebDriver
How to read data from excel file using Apache POI

Week 8: (Saturday & Sunday)

Introduction to Cucumber
An example script using Selenium and Cucumber
Complete Review of Selenium
Questions and Answers

No Guarantees. Only if time permits, following will also be covered:

Detailed review of java and Selenium WebDriver, TestNG and Cucumber
More about reading and writing excel files for data in Selenium
How to handle WebTable or Calendar in Selenium WebDriver
How to handle FluentWait in Selenium WebDriver
How to capture screenshots in Selenium WebDriver
Other topics if time permits

Progression of Java code from source (written in English) to Byte code to execution.