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Python for Data Science Syllabus April 21st • May 26st	
Study Plan	
Session 1 Sat, April 21 10.00am – 1.00pm	<ul style="list-style-type: none">• Variables• Data types: strings, integers, floats, lists• Mutability• Control Flow statements• If statements• For loops• Practical Exercises
Session 2 Sat, April 28 10.00 am – 1.00pm	<ul style="list-style-type: none">• Functions• Data types: tuples, dictionaries, sets• While loops• Indexing and slicing• Reading from CSV and TXT Files• Writing to CSV and TXT Files• Analyzing a File's content• Practical Exercises
Session 3 Sat, May 5 10.00 am – 1.00pm	<ul style="list-style-type: none">• Scientific computing with Python• NumPy Arrays• Creating and manipulating NumPy Arrays• Computation on NumPy Arrays• Broadcasting and UFuncs• Sorting and Indexing NumPy Arrays• Practical Exercises
Session 4 Sat, May 12 10.00 am – 1.00pm	<ul style="list-style-type: none">• Python Data Analysis Library - Pandas• Pandas Data structures• Aggregating data in Pandas• Data Indexing and Selection• Logic, Control Flow and Filtering in Pandas• Aggregation and Grouping• High-Performance Pandas

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	<ul style="list-style-type: none">• Practical Exercises
Session 5 Sat, May 19 10.00 am – 1.00pm	<ul style="list-style-type: none">• Visualization with Matplotlib• Line Plots, Scatter Plots and Histograms• Customizing Plots• Multiple Subplots• Density and Contour Plots• Practical Exercises
Session 6 Sat, May 26 10.00 am – 1.00 pm	<ul style="list-style-type: none">• Final Project – Statistical Modeling with Python• Writing Efficient Python Code• Q and A Session