

Week	Current Week Topics	Reading	Assessment Due	Weight
<b>Week 1</b>  <b>May 19-22</b>	1. Introduction to Java. 2. Key differences from C++ 3. First program in Java 4. Overview of the Language 5. Installation Instructions Creating Executable Jar File	Java fundamental concepts a. Classes in Java b. Methods c. Arrays (Single and Multi dimensional) d. Debugging in Java <b>For next week</b>	Diagnostic Assessment (checking prior concepts)	<b>N/A</b>
<b>Week 2</b>  <b>May 25-29</b>	1. Java fundamental concepts a. Classes in Java b. Methods c. Arrays (Single and Multi dimensional) d. Debugging in Java	1. Packages in Java and String Class 2. Inheritance in Java 3. Multiple inheritance in Java 4. Polymorphism in Java 5. Encapsulation and Abstraction in Java <b>For next week</b>	<b>Test 1</b>	<b>5%</b>
<b>Week 3</b>  <b>June 1-5</b>	1. Packages in Java and String Class 2. Inheritance in Java 3. Multiple inheritance in Java 4. Polymorphism in Java 5. Encapsulation and Abstraction in Java	1. Exceptional Handling in java a. Asynchronous and Synchronous exceptions b. Try, Catch and Finally Clauses 2. Interface in Java 3. Abstract classes in Java 4. Difference between Interfaces and Abstract classes. <b>For next week</b>	1. <b>Test 2</b> 2. <b>Workshop 1</b>	<b>5%</b> <b>5%</b>
<b>Week 4</b>  <b>June 8-12</b>	1. Exceptional Handling in java a. Asynchronous and Synchronous exceptions b. Try, Catch and Finally Clauses 2. Interface in Java 3. Abstract classes in Java 4. Difference between Interfaces and Abstract classes.	1. Input/ Output streams in Java 2. Reader/ Writer in Java 3. Serialization/ Deserialization in Java 4. Random Access File in java <b>For next week</b>	1. <b>Test 3</b> 2. <b>Workshop 2</b>	<b>5%</b> <b>5%</b>
<b>Week 5</b>  <b>June 15-19</b>	1. Input/ Output streams in Java 2. Reader/ Writer in Java 3. Serialization/ Deserialization in Java 4. Random Access File in java	1. Static nested classes in Java 2. Inner classes in Java 3. Anonymous classes in Java 4. Java FX (towards GUI) 5. Event handling in Java	1. <b>Test 4</b> 2. <b>Workshop 3</b>	<b>5%</b> <b>5%</b>

		<b>For next week</b>		
<b>Week 6</b>  <b>June 22-26</b>	1. Static nested classes in Java 2. Inner classes in Java 3. Anonymous classes in Java 4. Java FX (towards GUI) 5. Event handling in Java	1. Functional Programming in Java 2. Lambda's in Java 3. Functional Interfaces 4. Introduction to Java Streams  <b>For next week</b>	1. <b>Test 5</b> 2. <b>Workshop 4</b>	<b>5%</b> <b>5%</b>
<b>Study Week</b>				
<b>Week 7</b>  <b>July 6-10</b>	1. Functional Programming in Java 2. Lambda's in Java 3. Functional Interfaces 4. Introduction to Java Streams	1. Java Collection Framework <ul style="list-style-type: none"> <li>a. Lists</li> <li>b. Sets</li> <li>c. Map</li> <li>d. Queue</li> </ul> 2. Java Generics  <b>For next week</b>	1. <b>Test 6</b> 2. <b>Workshop 5</b>	<b>5%</b> <b>5%</b>
<b>Week 8</b>  <b>July 13-17</b>	1. Java Collection Framework <ul style="list-style-type: none"> <li>a. Lists</li> <li>b. Sets</li> <li>c. Map</li> <li>d. Queue</li> </ul> 2. Java Generics	1. Concurrency in Java <ul style="list-style-type: none"> <li>a. Creating threads in Java using Thread Class and Runnable Interface</li> <li>b. Synchronized design, using wait, notify and notifyAll</li> <li>c. Thread scheduling, management and grouping.</li> </ul> <b>For next week</b>	1. <b>Test 7</b> 2. <b>Workshop 6</b>	<b>5%</b> <b>5%</b>
<b>Week 9</b>  <b>July 20-24</b>	1. Concurrency in Java <ul style="list-style-type: none"> <li>a. Creating threads in Java using Thread Class and Runnable Interface</li> <li>b. Synchronized design, using wait, notify and notifyAll</li> <li>c. Thread scheduling, management and grouping.</li> </ul>	1. Networking in Java <ul style="list-style-type: none"> <li>a. InetAddress Class</li> <li>b. Socket programming in java</li> <li>c. Client/ Server paradigm</li> <li>d. URL Connection class</li> </ul> <b>For next week</b>	1. <b>Test 8</b> 2. <b>Workshop 7</b>	<b>5%</b> <b>5%</b>

<b>Week 10</b>  <b>July 27-31</b>	1. Networking in Java a. InetAddress Class b. Socket programming in java c. Client/ Server paradigm d. URL Connection class	1. Remote Method Invocation in Java a. RMI specifications b. RMI client and RMI server c. RMI tools: rmic, rmiregistry	1. <b>Test 9</b> 2. <b>Workshop 8</b>	<b>5%</b>  <b>5%</b>
<b>Week 11</b>  <b>August 4-7</b>	1. Remote Method Invocation in Java a. RMI specifications b. RMI client and RMI server c. RMI tools: rmic, rmiregistry	1. JDBC (Data Access API's) 2. Introduction to J2EE Platform (Enterprise Programming)  <b>For next week</b>	1. <b>Test 10</b> 2. <b>Workshop 9</b>	<b>5%</b>  <b>5%</b>
<b>Week 12</b>  <b>August 10-14</b>	1. JDBC (Data Access API's) 2. Introduction to J2EE Platform (Enterprise Programming)	N/A	1. <b>Test 11</b> 2. <b>Workshop 10</b>	<b>5%</b>  <b>5%</b>