

## **Weeks 1–5 : Term-I Coverage (≈60–65%)**

### **Week 1:**

Swagatam Basu – four-principles of OOP, paradigms, classes, java execution internals  
Soumadip Biswas – class hierarchy view, inheritance motivation, polymorphism  
motivation, use cases  
Susovan Jana – java fundamentals - variables, basic syntax and strings

### **Week 2:**

Swagatam Basu – OOP foundations: classes, objects, encapsulation, constructors  
Soumadip Biswas – Inheritance basics, is-a relationship  
Susovan Jana – Method overloading & overriding

### **Week 3:**

Swagatam Basu – Object lifecycle: copying, cloning, wrapper classes  
Soumadip Biswas – Abstract classes & interfaces  
Susovan Jana – Dynamic binding, declared vs actual type

### **Week 4:**

Swagatam Basu – Streams & basic I/O operations  
Soumadip Biswas – Collections: List, Set, Map  
Susovan Jana – Exception handling fundamentals

### **Week 5:**

Swagatam Basu – Access modifiers, packages, Java APIs  
Soumadip Biswas – Collections sorting, iteration, complexity intuition  
Susovan Jana – Exception handling advanced patterns

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## **Weeks 6–10 : Term-II Coverage (Remaining Syllabus)**

### **Week 6:**

- Swagatam Basu – MVC architecture (conceptual + mapping)
- Soumadip Biswas – Collections performance & internal working
- Susovan Jana – Polymorphism with frameworks

### **Week 7:**

- Swagatam Basu – Short design patterns: intent & categories
- Soumadip Biswas – Multithreading fundamentals
- Susovan Jana – Swing & Applet programming basics

### **Week 8:**

- Swagatam Basu – Design pattern + MVC case study
- Soumadip Biswas – Thread synchronization & communication
- Susovan Jana – Android architecture & components

### **Week 9:**

- Swagatam Basu – OOP integration & design recap
- Soumadip Biswas – UML class diagrams
- Susovan Jana – Android UI & lifecycle

### **Week 10:**

- Swagatam Basu – End-sem orientation & revision
- Soumadip Biswas – UML sequence diagrams (single lecture)
- Susovan Jana – Android recap & integration

→ Term-II Examination