

# Reading Guide PA14[13] 5

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## 1 Lecture 01 Introduction

### 1.1 Read (in Larman, chapters):

1. Object-Oriented Analysis and Design
2. Iterative, Evolutionary, and Agile
3. Case Studies (we will be using the POST case study)

### 1.2 Watch:

- none.

## 2 Lecture 02 Development Methods

### 2.1 Read:

21. Test-Driven Development and Refactoring
40. More on Iterative Development and Agile Project Management

### 2.2 Watch:

- Development Process

## 3 Lecture 03 Requirements

### 3.1 Read:

4. Inception is Not the Requirements Phase
5. Evolutionary Requirements
6. Use Cases
7. Other Requirements

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### **3.2 Watch:**

- Requirements Engineering
- Use Cases

## **4 Lecture 04 Modelling Structure**

### **4.1 Read:**

8. Iteration 1 – Basics
9. Domain Models

### **4.2 Watch**

- Concepts and Classes

## **5 Lecture 05 Modelling Behaviour**

### **5.1 Read:**

10. System Sequence Diagrams
11. Operation Contracts
13. Logical Architecture and UML Package Diagrams
29. UML State Machine Diagrams
30. Relating Use Cases

### **5.2 Watch:**

- Structuring Use Cases
- System Sequence Diagrams
- Contracts
- State Diagrams

## **6 Modelling Design – Collaborations**

**Note:** This used to be a separate lecture that I have now merged into lecture 04 and 05. I am keeping this as a placeholder so you don't get upset that I suddenly add new chapters that you "should have read" before a lecture that you have already attended.

### **6.1 Read:**

- 15. UML Interaction Diagrams
- 16. UML Class Diagrams
- 31. Domain Model Refinement
- 32. More SSD and Contracts

### **6.2 Watch:**

- TBD

## **7 Lecture 06 Design Patterns**

### **7.1 Read:**

- 17. GRASP: Designing Objects with Responsibilities
- 18. Object Design Examples with GRASP
- 25. GRASP More Objects with Responsibilities
- 26. Applying GoF Design Patterns
- 36. More Object Design with GoF Patterns

### **7.2 Watch:**

- GRASP Patterns
- GoF Design Patterns

## **8 Lecture 07 Mapping Design to Code**

### **8.1 Read:**

- 19. Designing for Visibility
- 20. Mapping Design to Code

### **8.2 Watch:**

- TBD