Schedule

Week 1

Mon • (Java/OOP) Classes, fields, constructors, encapsulation

- (Java/OOP) methods, parameters, local variables, constants/final
- (Coding) variable and method naming
 - Video: Names++
 - Reading: Clean Code chapters 1, 2
- Activity: 1 hour coding practice: grade reading and gpa computation
- (Java/OOP) static methods

Tue • (Coding) Function arguments, command-query separation

- Video: Functions
- Reading: Clean Code chapter 2
- (Java/OOP) Inheritance vs Delegation
- **Wed** (Principles) General values and principles for coding
 - (Principles) Single Responsibility Principle
 - Reading: ASD chapter 8
 - (Principles) Open-Closed Principle
 - Reading: ASD chapter 9
 - (Principles) Liskov Substitution Principle
 - Reading: ASD chapter 10
- **Thu** (Practices) Principles of Agile Development
 - Reading: ASD chapters 1-3
 - (Practices) User Stories
 - (Practices) CRC Cards
- **Fri** (Practices) Version Control Basics
 - (Practices) Issue Management

Week 2

Mon • (Coding) Comments, Formatting

- Video: Clean Code, Form
- Reading: Clean Code, chapters 4, 5
- (Coding) Law of Demeter (Tell, don't ask)

- Reading: Clean Code, chapter 6
- Work on Project

Tue • (Practices) Test-Driven Development

- Reading: Clean Code, chapter 9
- Reading: ASD, chapter 4
- Video: TDD Part 1 and 2
- Video: Advanced TDD Part 1?
- (Java/OOP) Interfaces
- (Principles) Dependency Inversion Principle
- Reading: ASD chapter 11

Wed • (Principles) Interface Segregation Principle

- Reading: ASD chapter 12
- (Practices) Version Control Advanced
- Work on Project

Thu • (Patterns) Command

- Video: Clean Code: Design Patterns
- Reading: ASD chapter 13
- (Patterns) Template Method, Strategy
 - Video: Strategy and Template Method Patterns
 - Reading: ASD chapter 14
- (Patterns) Facade, Mediator
 - Video: Clean Code: Pattern Roundup
 - Reading: ASD chapter 15
- (Practices) UML Class Diagrams
- Work on Project

Fri • (Java/OOP) Inner classes

- (Coding) Exception Handling
 - Reading: Clean Code chapter 7

Week 3

Mon • (Patterns) Factory

- Video: Clean Code: Factories
- Reading: ASD chapter 21
- TODO: Refactoring earlier

- (Coding) Refactoring: Basic extractions, Inline
 - Video: Function Screencast, Prime Number Generation
 - Reading: ASD chapter 5
- Work on Project

Tue - (Patterns) Null Object - Video: Clean Code: Pile O'Patterns - Reading: ASD chapter 16 ~ - (Patterns) Singleton, Monostate - Video: Clean Code: Pile O'Patterns - Reading: ASD chapter 17 - (Coding) Refactoring: Moving, signature change - Work on Project

- **Wed** Reading: Clean Code, chapter 17 (smells/heuristics)
 - Work on Project
- **Thu** (Patterns) Observer
 - Video: The Observer Pattern
 - Reading: ASD chapter 24
 - (Patterns) Adapter, Bridge, Proxy
 - Video: Clean Code: Pile O'Patterns
 - Reading: ASD chapters 25, 26
 - Work on Project
- **Fri** (Patterns) Composite
 - Reading: ASD chapter 23
 - (Practices) UML Sequence Diagrams
 - Work on Project

Week 4

- **Mon** (Java/OOP) packages, modules (earlier?)
 - (Patterns) Visitor
 - Reading: ASD chapter 28
 - Work on Project
- **Tue** (Patterns) State
 - Video: Finite State Machines and State Pattern
 - Reading: ASD chapter 29
 - Work on Project
- **Wed** Work on Project
- **Thu** Work on Project
- **Fri** Work on Project