Object oriented programming in c#  
Intro  
Classes  
Interfaces  
Abstract classes  
Class accessors  
Lab create class, abc, interfaces  
Inheritance  
Encapsulation  
Polymorphism  
Inheriting  
Virtual

Day 1

Object Oriented Features in C#  
Changing behavior with polymorphism  
Changing behavior with composition  
Defining behavior with interfaces  
Lab 1. Creating classes , inheriting, using interfaces  
Lab 2 changing behavior with composition  
Principles: Single Responsibility, Liskoff Substitution,

Patterns. Creation patterns  
Lab.  
  
  
Day 2  
Unit testing  
Lab.

Refactoring  
Test driven development  
Lab

Principles: Demeter, Inversion of Control  
 Solid 1 Pattern 1. Strategy  
Lab.  
IOC containers  
Lab  
  
Day 3

Law of Demeter

Open Closed

Lab

Combining functional programming

anonymous functions, lamdas

Declaritive Programming

Lab

Convention over Configuration

Lab

Day 4

Reflection and MetaProgramming

Expressions

DSLs

Lab

Student Requested Material

Patterns to cover  
Strategy  
Factory  
Builder  
Chain of responsibility  
Pipes and filters

Day 1

Object Oriented Programming Basics

Extension Methods

Testing

TDD

Day 2

Separation of Concerns

Factory Patterns

Liskoff

IOC

SOLID:

Separation of Concerns

Open Closed Principle

Liskoff

IOC

Dependency Injection