

## **C++ Introduction Reading Recommendations**

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### **Lesson 1**

#### **Reading Assignment**

Eckel, Bruce, *Thinking in C++*, "Chapter 1 - Introduction to Objects " and "Chapter 4 - Data Abstraction".

Chapter 1 - Sections:

- All

Chapter 8 - Sections:

- Header File Etiquette

### **Lesson 2**

#### **Reading Assignment**

Eckel, Bruce, *Thinking in C++*, "Chapter 2 - Introduction to Objects", "Chapter 3 - C in C++", and Chapter 13 "Dynamic Object Creation".

Chapter 2 - Sections:

- All - skim most, read sections on  
I/O 90-91  
Namespaces 91-92  
Strings 98-100  
Files 100-102

Chapter 3 - Sections:

- All - skim most, read and review / understand sections on  
Pointers 133-140, 182-192, 198-202  
References 140-143  
Scoping 143-147  
Storage Allocation and Linkage 147-152  
Constants 152-154  
Make: Managing Separate Compilation 202-210 (not covered but worth reading through)

Chapter 13 - Sections:

- Read and understand sections on  
Object Creation 549-553  
New and Delete for Arrays 563-564

## Lesson 3

### Reading Assignment

Eckel, Bruce, *Thinking in C++*, "Chapter 4 - Data Abstraction", "Chapter 5 - Hiding the Implementation", "Chapter 6 - Initialization and Cleanup", and "Chapter 7 - Overloading and Default Arguments".

Chapter 4 Sections:

- All - skim

Chapter 5 Sections:

- Setting Limits, C++ Access Control 260-263
- Object Layout 269-273

Chapter 6 Sections:

- All excluding discussion of Stash and Stack 283-294, 301-304

Chapter 7 Sections:

- Unions 318-321

## Lesson 4

### Reading Assignment

Eckel, Bruce, *Thinking in C++*, "Chapter 5 - Hiding the Implementation", "Chapter 8 - Constants", and "Chapter 12 - Operator Overloading".

Chapter 5 Sections:

- Friends 263-269

Chapter 8 Sections

- Classes 352-359

Chapter 10 Sections:

- Static Elements from C 405-414
- Static Members in C++ 423-443

Chapter 12 Sections:

- Operator Overloading 486-508

## Lesson 5

### Reading Assignment

Eckel, Bruce, *Thinking in C++*, "Chapter 11 - References and the Copy-Constructor", "Chapter 12 - Operator Overloading" and "Chapter 10 - Overloaded Operators".

Chapter 11 Sections:

- The Copy Constructor 455-472

Chapter 12 Sections:

- Operator Overloading 486-508
- Overloading Assignment 521-523
- Automatic Type Conversion 533-542

## **Lesson 7**

### **Reading Assignment**

Eckel, Bruce, *Thinking in C++*, "Chapter 14 - Inheritance and Composition".

Chapter 14 Sections:

- All up to but not including Multiple Inheritance 583-613

## **Lesson 8**

### **Reading Assignment**

Eckel, Bruce, *Thinking in C++*, "Chapter 15 - Polymorphism and Virtual Functions".

Chapter 15 Sections:

- All up to but not including Operator Overloading 627-675

## **Lesson 9**

### **Reading Assignment**

Eckel, Bruce, *Thinking in C++*, "Chapter 16 - Introduction to Templates".

Chapter 16 Sections:

- All up to but not including Stack and Stash as Templates 689-705

### **Required Tools**

For this assignment, you will need a compiler that supports templates. Compilers known to comply with most of these requirements are GNU g++ 2.7.2 or greater, Borland 4.52 or greater, and Visual C++ 4.0 or greater.