## Welcome

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Programming Resources 10 min
Resources to Help You Succeed 1 min
Tips for Learning Programming 1 min
Using Forums: How to Ask for Help Effectively 3 min
Object Oriented Programming with Java Specialization 2 min

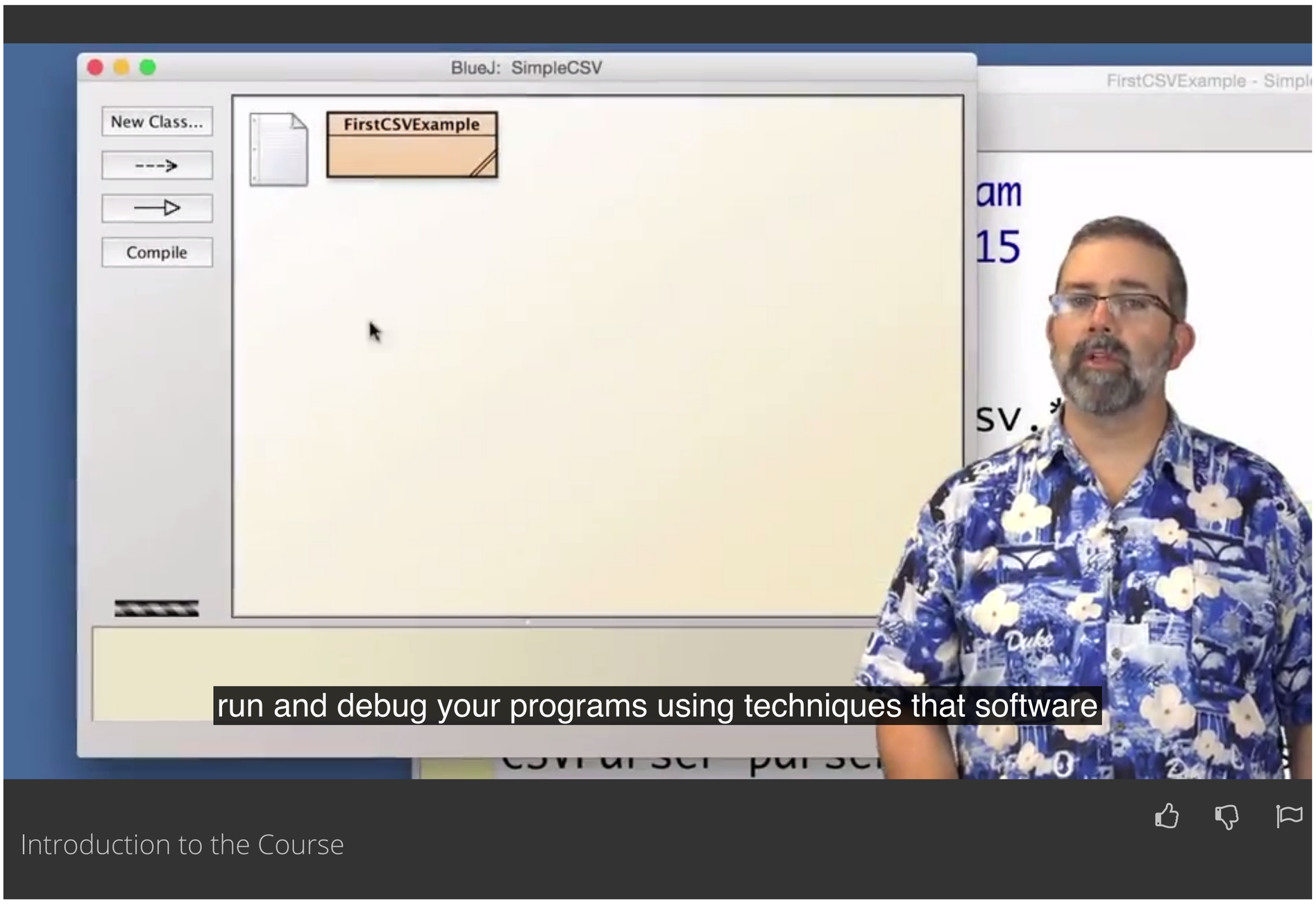
**Getting Started with BlueJ**

**Variables and Mathematical Operators**

**Functions and Conditionals**

**Classes, Types, and For Each Loops**

**Seven Steps for Solving Programming Problems**




Introduction to the Course

Have a question? Discuss this lecture in the week forums.

## Interactive Transcript

Search Transcript

English

0:00
>> This is Duke University. >> Hi I'm Drew and my colleagues and I would like to welcome you to Java Programming, Solving Problems with Software. We here at Duke are so excited that you're taking this first step in learning to solve real problems using Java. In this course, you will learn a seven-step process designed to help you understand how to approach any programming problem. You'll use this process to solve real problems and you'll learn that computer science is so much more than the syntax of a programming language like Java. You'll have a chance to work on problems such as analyzing DNA, manipulating CSV files and processing images. These are real problems that engineers, scientists, programmers, and others work on in real life. And you too will be able to tackle these problems as you begin to learn Java. >> I'm Susan. In this course you'll learn to program in Java using techniques that can be used with simple programs but that can also scale to larger programs and larger problems. The libraries in APIs we introduce, make it easy to process data in many formats. You'll be able to use the same techniques, tools, and libraries in solving the problems we've designed for you. Problems whose solutions require the programming knowledge that you'll learn here. >> I'm Robert. As you learn about the syntax and semantics of Java programs, you will practice with a programming environment that's been specifically designed and proven to help learners like you who are getting started in programming. This programming environment will let you design, test, run and debug your programs using techniques that software engineers scientists and programmers apply as they design, create, and solve problems using Java and other languages. This programming environment can scale to large problems and is a great first step, as you learn to master increasingly sophisticated concepts. >> I'm Owen. And I'm really excited about the problems we've created for this course. We've used our collective years of experience to simplify problems and to provide you with opportunities to demonstrate your mastery of Java programming, while you work on real problems that are only slightly simplified from those problems faced every day, by those working in the many fields that use computational and programming approaches. We've designed our Java libraries in a similar way using standard Java idioms that you'll see if you continue to study programming but that are more easily used by those just getting started with Java. >> Once again welcome to Java programming. Solving problems with software. See you in the course.

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Transcript (English) txt

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