






















## CIT-130: Object-oriented design in Java

The following table maps course session dates, lesson topics, LIANG9 references, and content links for all three Java courses in the series.

Course	SP19 Est.	Wk.	Sess.	Session description	Resources	Learning objectives	Out-of-class work
CIT-130	MON 28-JAN-19	1	1		<b>Fiddling with Strings and Arrays: Review of Objects, types, classes, &amp; methods</b>   <a href="#">Week 1 Module: Passwords</a>	<b>CCAC.130.LO.3:</b> Apply Java language elements to use string(sic) processing techniques in a program  <b>CCAC.130.LO.4:</b> Apply Java language elements to create programs with single dimension arrays of primitives and objects. APply Java language elements to use string(sic) processing techniques in a program	
CIT-130	WED 30-JAN-19		2	 Too cold for school!!	 <a href="#">LIANG9 Chapter 6</a> <a href="#">LIANG9 Chapter 9</a>	<b>1.E.1: Design an algorithm for processing password candidates and strength auditing</b>  <b>1.P.1: Initiating an empty git repo on a remote, cloning, pushing, and pulling</b>	
CIT-130	MON 4-FEB-19	2	1		<b>Plain old arrays to ArrayLists: Introduction to the Collection classes</b>  <b>Exercise 1:</b> Continue work on the Week 1 Passwords module <hr/>  <a href="#">Week 2 Module: Student inheritance hierarchy</a>  <b>Exercise 2:</b> Adding HSStudent and CollegeStudent subclasses  <b>TODO for Monday:</b> Work your password <b>StrengthChecker</b> class into sharable condition for printing first thing Monday	<b>TR.130.2.L.1:</b> Create a two-class object hierarchy and demonstrate accessing a parent's data from the child  <b>TR.130.2.L.2:</b> Demonstrate a core feature of inheritance by storing and manipulating an object reference to a child class in a variable typed to the parent  <b>TR.130.2.L.3:</b> Write a program that uses Object-type variables and type casting to manipulate objects in a sample class hierarchy  <b>CCAC.130.LO.5:</b> Apply Java language elements to create programs utilizing inheritance  <b>TR.130.2.E.1:</b> Great graphical representations of both human and Java-based inheritance hierarchies and explain the similarities and differences of each	








Course	SP19 Est.	Wk.	Sess.	Session description	Resources	Learning objectives	Out-of-class work
CIT-130	WED 6-FEB-19		2	First implementation of the <b>Student</b> class hierarchy		<b>TR.130.2.P.1:</b> Install and use a NetBeans plugin to visualize an Object inheritance hierarchy	
CIT-130	MON 11-FEB-19	3	1		<b>Inheritance Pt.1: Create a class hierarchy (a tree) by giving a class a parent with extends</b>   <a href="#">LIANG9: Chapter 11 - Inheritance</a>	<b>CCAC.130.LO.5:</b> Apply Java language elements to create programs utilizing inheritance	
CIT-130	WED 13-FEB-19		2				
CIT-130	MON 18-FEB-19	4	1	Complete our inheritance project	<b>Inheritance Pt.2: Modeling computer timelines</b>   <a href="#">Inheritance non-example</a>  <a href="#">LIANG9: Chapter 11 - Inheritance</a>  Create a Java-based representation of the computer history timeline hanging in the hall outside of S21133   <a href="#">Computing power timeline</a>	<b>CCAC.130.LO.5:</b> Apply Java language elements to create programs utilizing inheritance	<b>Study the <a href="#">Liang9 chapter 11</a> - inheritance and complete the two practice questions and the mini-project</b>
CIT-130	WED 20-FEB-19		2	Print and include in your folder your <b>Student[]</b> array class			
CIT-130	MON 25-FEB-19	5	1		 <a href="#">Inheritance non-example</a>  <a href="#">LIANG9: Chapter 11 - Inheritance</a>  Create a Java-based representation of the computer history timeline hanging in the hall outside of S21133   <a href="#">Computing power timeline</a>	<b>TR.130.5.L.1:</b> Create a class hierarchy diagram by hand of your chosen API classes including all relevant interfaces and super-classes  <b>5.L.2:</b>	
CIT-130	WED 27-FEB-19		2				
CIT-130	MON 4-MAR-19	6	1		<b>Inheritance &amp; Collections project design; software engineering techniques</b>   <a href="#">LIANG9 Textbook: Chapter 12(full): Sections 12.1-12.15</a>	<b>6.L.1:</b>  <b>6.L.2:</b>	
CIT-130	WED 6-MAR-19		2				
CIT-130	MON 11-MAR-19	7	1		<b>Inheritance &amp; Collections workshop and sharing</b>	<b>7.L.1:</b>  <b>7.L.2:</b>	

Course	SP19 Est.	Wk.	Sess.	Session description	Resources	Learning objectives	Out-of-class work
							
CIT-130	WED 13-MAR-19		2	Sharing inheritance & Collection projects	 LIANG9 Textbook:		
CIT-130	MON 18-MAR-19	8	1		<b>Now for GUIs: Introduction to Graphical User Interfaces with Java AWT</b>	<b>8.L.1:</b>	
CIT-130	WED 20-MAR-19		2			<b>8.L.2:</b> <b>CCAC.130.LO.2:</b> Apply Java language elements to create Swing GUI components with event handling	
CIT-130	MON 25-MAR-19	9	1		<b>Event-driven programming paradigms</b>	<b>9.L.1:</b>	
CIT-130	WED 27-MAR-19		2			<b>9.L.2:</b> <b>CCAC.130.LO.2:</b> Apply Java language elements to create Swing GUI components with event handling	
CIT-130	MON 1-APR-19	10	1		<b>Advanced GUIs: Dissecting the GUI class hierarchy</b>	<b>10.L.1:</b>	
CIT-130	WED 3-APR-19		2			<b>10.L.2:</b> <b>CCAC.130.LO.2:</b> Apply Java language elements to create Swing GUI components with event handling	
CIT-130	MON 8-APR-19	11	1		<b>GUI &amp; Inheritance project workshop</b>	<b>11.L.1:</b>	
CIT-130	WED 10-APR-19		2	Share GUI & inheritance projects		<b>11.L.2:</b>	
CIT-130	MON 15-APR-19		-				
CIT-130	WED 17-APR-19		-				
CIT-130	MON 22-APR-19	12	1		<b>Graceful failure: Handling and creating Exceptions</b>	<b>12.L.1:</b>	
CIT-130	WED 24-APR-19		2			<b>12.L.2:</b>	
CIT-130	MON 29-APR-19	13	1		<b>Exceptional term projects:</b>	<b>13.L.1:</b>	

Course	SP19 Est.	Wk.	Sess.	Session description	Resources	13.L.2: Learning objectives	Out-of-class work
CIT-130	WED 1-MAY-19		2		<b>design and workshop time</b> 		
CIT-130	WED 8-MAY-19	14	1	* Bring fully-baked projects to share. * Same time and place as normal Wednesday class	<b>Sharing term projects and final checkout</b>  <a href="#">Final session checklist</a>	14.L.1:	

## CIT-244: Object-oriented design in Java

The following table maps course session dates, lesson topics, LIANG9 references, and content links for all three Java courses in the series.

Course	SP19 Est.	Wk.	Sess.	Session description	Module links	Language objectives	Out-of-class work
CIT-244	MON 28-JAN-19		1		<b>String manipulation and array review</b>  <a href="#">Week 1 Module</a>	<b>CCAC.244.LO.1:</b> Apply Java language elements to use string(sic) processing techniques in a program  <b>CCAC.244.LO.2:</b> Apply Java language elements to create programs with single dimension arrays of primitives and objects. APply Java language elements to use string(sic) processing techniques in a program	
CIT-244	WED 30-JAN-19	1	2	 Too cold for school!		 <b>LIANG9 Textbook:</b> Chapter 6: Arrays Chapter 9: Strings	
CIT-244	MON 4-FEB-19		1		<b>Inheritance revisited: Teasing apart use cases for plain inheritance, abstract methods, and interfaces</b>	<b>2.L.1:</b>  <b>2.L.2:</b>  <b>LIANG9 Textbook:</b> Chapter 15: 15.1 - 15.8	
CIT-244	WED 6-FEB-19	2	2		<b>2.L.1:</b> <b>2.L.2:</b> 		
CIT-244	MON 11-FEB-19	3	1		<b>Exploring constructors and interfaces with a Comparable Computer object</b>  <a href="#">Week 3: Abstract classes &amp; interfaces</a>	<b>3.L.1:</b>  <b>3.L.2:</b>  <b>LIANG9 Textbook:</b> Chapter 11: Inheritance and	