

<b>Catalogue Description</b>	Programming applications with dynamic graphical user interfaces. Topics include events, controls, resources, data bindings, styles, and user experience.																				
<b>Prerequisites</b>	CSCI 104 or ITP 365																				
<b>Instructor</b>	Kendra Walther (kwalther@usc.edu)																				
<b>Office Hours</b>	Listed on Blackboard under Contacts.																				
<b>Lab Assistants</b>	Listed on Blackboard under Contacts.																				
<b>Course Hours</b>	MW 10:00-11:50am   MW 12:00-1:50pm																				
<b>Course Structure</b>	The class meets for one hour and 50 minutes twice a week for a total of 3 hours and 40 minutes. One midterm exam and several in class quizzes will be given. Weekly programming labs and 4-5 larger assignments will be assigned to be completed outside of class time. Access to a computer is required, and ITP holds open lab hours with computers. All course material is available on Blackboard at <a href="http://blackboard.usc.edu">http://blackboard.usc.edu</a> .																				
<b>Recommended Textbook</b>	Selected books from Safari Books online including: <a href="#">Learn JavaFX: Building User Experience and Interfaces with Java 8</a> (by Kishori Sharan) and <a href="#">Core Java</a> (by Cay Horstmann)																				
<b>Grading</b>	The following percentage breakdown is used to determine the final grade. <table border="0" style="margin-left: 20px;"> <tr> <td>Final Project</td> <td style="text-align: right;">15%</td> </tr> <tr> <td>Labs &amp; Assignments (weighted proportionally)</td> <td style="text-align: right;">45%</td> </tr> <tr> <td>Quizzes</td> <td style="text-align: right;">20%</td> </tr> <tr> <td>Exam</td> <td style="text-align: right;">20%</td> </tr> <tr> <td><b>TOTAL POSSIBLE</b></td> <td style="text-align: right;"><b>100%</b></td> </tr> </table>	Final Project	15%	Labs & Assignments (weighted proportionally)	45%	Quizzes	20%	Exam	20%	<b>TOTAL POSSIBLE</b>	<b>100%</b>										
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<b>Grading Scale</b>	The following scale is used to determine the letter grade: <table border="0" style="margin-left: 20px;"> <tr> <td>93% and above</td> <td>A</td> </tr> <tr> <td>90 - 92%</td> <td>A-</td> </tr> <tr> <td>87 - 89%</td> <td>B+</td> </tr> <tr> <td>83 - 86%</td> <td>B</td> </tr> <tr> <td>80 - 82%</td> <td>B-</td> </tr> <tr> <td>77 - 79%</td> <td>C+</td> </tr> <tr> <td>73 - 76%</td> <td>C</td> </tr> <tr> <td>70 - 72%</td> <td>C-</td> </tr> <tr> <td>69 - 65</td> <td>D</td> </tr> <tr> <td>64 and below</td> <td>F</td> </tr> </table> <p>If you are taking the class with a grade of P/NP, you must earn a grade of 70% or higher in order to receive a P. Final grade percentages are calculated to two decimal places and rounded to hundredths. For example, 89.99 is a B+ while 89.995 is rounded to 90 and thus an A-.</p>	93% and above	A	90 - 92%	A-	87 - 89%	B+	83 - 86%	B	80 - 82%	B-	77 - 79%	C+	73 - 76%	C	70 - 72%	C-	69 - 65	D	64 and below	F
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**Homework** The assignments will be posted on Blackboard under the “Assignments” section. Each assignment will include instructions, a due date, and a link for electronic submission. Assignments must be submitted using this link. All assignments will be digitally submitted through Blackboard except where specifically specified.

It is your responsibility to submit assignments **on or before** the due date. Assignments turned in up to 24 hours late will have 15% of the total points deducted from the graded score. Assignments turned in 24-48 hours late will have 30% of the total points deducted from the graded score. Assignments turned in 48-72 hours will have 50% of the total points deducted from the graded score. After three days, submissions will **not** be accepted and you will receive a 0. It is the responsibility of the student to contact the grader when posting late projects..

You are required to keep a copy of all of your assignments. You may save your assignments using a USB flash drive or a website such as <http://www.dropbox.com>. You will not be able to save your work on the ITP lab computers. ITP is not responsible for any work lost.

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**Policies** No make-up exams (except for documented medical or family emergencies) will be offered.

A roster will be passed around the room during each lecture session. Please initial by your name for the appropriate week. Do not sign in for another student; doing so is an academic integrity violation.

ITP offers open lab use for all students enrolled in ITP classes. These open labs are held beginning the second week of classes through the last week of classes. Hours are listed at <http://itp.usc.edu/labs/>. The open labs will not have a lab assistant for this specific class. These lab times are there in case you do not have a computer or need extra time to complete an assignment.

ITP reserves the right to record classroom spaces and to use recorded material if necessary for academic integrity cases.

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**Incomplete and Missing Grades** University Grading Handbook, located at <http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html>, contains details on incomplete and missing grades, as well as other grading concerns.

A grade of Missing Grade (MG) should only be assigned in unique or unusual situations such as for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year, the grade is changed to UW (Unofficial Withdrawal) and will be calculated into the grade point average as zero grade points.

A grade of Incomplete (IN) is assigned when work is not completed because of documented illness or other ‘emergency’ occurring **after the twelfth week of the semester** (or 12th week equivalency for any course scheduled for less than 15 weeks).

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**Academic Integrity** USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles.

SCampus is USC's Student Guide to Policies and Conduct Code and can be found at <http://scampus.usc.edu>. Section 11 contains the Behavior Violating University Standards and Appropriate Sanctions and can be found at <http://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards (SJACS) for further review, should there be any suspicion of academic dishonesty. The Review process can be found at <http://www.usc.edu/student-affairs/SJACS/>.

An academic integrity tutorial can be found at [http://www.usc.edu/libraries/about/reference/tutorials/academic\\_integrity/index.php](http://www.usc.edu/libraries/about/reference/tutorials/academic_integrity/index.php)

Assignments and projects in computer programming course are different from those in some other types of courses. Students **may NOT collaborate**, work together, share code, or in any way exchange solutions for assignments and projects. All assignments are analyzed by software that looks for similarity. Any sharing of ideas or code will be considered a violation of academic integrity (cheating); an SJACS report will be filed with the recommended penalty of an F in the course. Do not share your code with anyone else in this or a future section of the course, as allowing someone else to copy your code carries the same penalty as you copying the code yourself.

If the instructor, a grader, or a lab assistant suspects you of academic dishonesty, it has to be reported to SJACS. Do not share lab assignments with another student. Do not submit another student's work as your own. Do not look at other students' papers during exams. Do not leave the room during an exam without permission. **Do not cheat! As Trojans, we are faithful, scholarly, skillful, courageous, and ambitious.**

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**Viterbi Honor Code** Engineering enables and empowers our ambitions and is integral to our identities. In the Viterbi community, accountability is reflected in all our endeavors.  
Engineering+ Integrity.  
Engineering+ Responsibility.  
Engineering+ Community.  
Think good. Do better. Be great.  
These are the pillars we stand upon as we address the challenges of society and enrich lives.

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<b>Support Systems</b>	<p>Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the <i>Office of Equity and Diversity</i> at <a href="http://equity.usc.edu/">http://equity.usc.edu/</a> or to the <i>Department of Public Safety</i> at <a href="http://capsnet.usc.edu/departement/departement-public-safety/online-forms/contact-us">http://capsnet.usc.edu/departement/departement-public-safety/online-forms/contact-us</a>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. <i>The Center for Women and Men</i>, information at <a href="http://www.usc.edu/student-affairs/cwm/">http://www.usc.edu/student-affairs/cwm/</a>, provides 24/7 confidential support. The sexual assault resource center webpage at <a href="http://sarc.usc.edu">sarc.usc.edu</a> describes reporting options and other resources.</p>
<b>Disability Services</b>	<p><i>The Office of Disability Services and Programs</i>, information at <a href="http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html">http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html</a>, provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. <b>Please be sure the letter is delivered to your course instructor as early in the semester as possible.</b> If you need accommodations for an exam, the form needs to be given to the instructor at least two weeks before the exam, but preferably at the beginning the semester.</p>
<b>Emergency Preparedness</b>	<p>If an officially declared emergency makes travel to campus infeasible, <i>USC Emergency Information</i>, information at <a href="http://emergency.usc.edu/">http://emergency.usc.edu/</a>, will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology. Additional information about <i>Campus Safety and Emergency Preparedness</i> can be found at <a href="http://preparedness.usc.edu">http://preparedness.usc.edu</a>.</p>

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## Course Outline\*

**Note:** Approx. 6 hours/week of work outside of class: Reading (2 hrs/wk) + HW (4 hrs/wk)  
Most assignments will be due the Tuesday after they are assigned, at 10pm.

Week	Topics	Homework
1	Introduction to Java	Introduction HW
	Object Oriented Design. Scanner class (I/O). Testing	Scanner HW
2	OOP and UML. Inheritance. Debugging.	
	Inheritance and Polymorphism. Abstract Classes. Java Collection Classes.	OOP HW.
3	<b>No class (Labor Day)</b>	
	Design Patterns and Code Design	OOP HW w/Design Patterns.
4	<b>Quiz.</b> Collections. Design Patterns. Streams. Lambdas. Observable Collections.	
	UI Design. Properties (Beans).	Java Collections HW
5	Java FX Basics.	
	UI controls and Layouts	UI Layout HW
6	Events. Event Handling.	
	<b>Quiz.</b> Binding. Field checking (RegEx)	UI with functionality HW
7	TBD. Guest Lecture (Accessibility) or Open Lab.	Choose UI project
	TBD. Guest Lecture (Accessibility) or Open Lab.	
8	Lists.	
	Tables.	UI List HW* (Sunday due date)
9	Midterm Review.	
	<b>Midterm (October 18).</b>	
10	Localization. Internationalization	i18n HW
	MVC.	
11	JavaFX Multi-media, shapes, and animations.	
	Animations.	Animation gui.
12	Touch Events or Threading.	
	<b>Quiz.</b> SceneBuilder. CSS and FXML	Mini game
13	SceneBuilder cont'd.	
	Multi-scene applications, mics topics.	Final Project Design.**
14	Final Project Workshop.	
	<b>No Class.</b>	Final Project Checkpoint.**
15	<b>Quiz.</b> Final Project Workshop.	
	Final Project Workshop.	Final Project Checkpoint.**
<b>Finals</b>	<b>Final Project Presentations, during class exam period</b>	<b>** (Saturday due dates)</b>

**\* This course outline is for planning purposes and is subject to change.**

## Statement on Academic Conduct and Support Systems

### Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

### Support Systems:

*Student Counseling Services (SCS)* - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

*National Suicide Prevention Lifeline* - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

*Relationship and Sexual Violence Prevention Services (RSVP)* - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

*Sexual Assault Resource Center*

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

*Office of Equity and Diversity (OED)/Title IX Compliance* – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

*Bias Assessment Response and Support*

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

*The Office of Disability Services and Programs*

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

*Student Support and Advocacy* – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

*Diversity at USC*

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

*USC Emergency Information*

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

*USC Department of Public Safety* – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.

Provides overall safety to USC community. <http://dps.usc.edu>