Introduction to Java Programming
ITP 109 (2 Units)
Spring 2018

USC Viterbi — School of Engineering

Catalogue Description	Learn the fundamental principles of programming and object-oriented software design using Java in order to solve real-world problems.
Objective	This course is intended to teach the basics of programming, the foundations of object-oriented programming, and the process of building a project in a modular fashion using the Java programming language.
Prerequisites	None. This class is intended for non-programmers.
Instructor	Kendra Walther (kwalther@usc.edu) or Barrett Koster
Office Hours	Listed on Blackboard under Contacts.
Lab Assistants	Listed on Blackboard under Contacts.
Course Hours	MW 10:00-11:20am (**Note**: class is scheduled until 11:50 but will end at 11:20) TuTH 12:30-1:50pm or TuTh 2:00-3:20pm
Course Structure	The class meets for one hour and 20 minutes twice a week for a total of 2 hours and 40 minutes. These sessions include lectures and hands-on graded labs. Two exams are given during the semester and held during the class meetings. Weekly assignments and a final project are completed outside of class time. The textbook includes on-line activities that are part of the final grade. Access to a laptop computer during lecture and lab is required. ITP does have a laptop loaner policy for students enrolled who do not have a personal laptop. All course material is available on Blackboard at http://blackboard.usc.edu.
Required Textbook	zyBooks at http://zybooks.zyante.com. Sign up and enter code **USCITP109Spring2018**. Cost is $70. This book is required.
Grading	The following percentage breakdown is used to determine the final grade.

Class Participation	5%
Labs	10%
Book Activities	10%
Assignments (weighted proportionally)	35%
Exam #1	15%
Exam #2	15%
Final Project	10%
TOTAL POSSIBLE	100%

Grading Scale   The following scale is used to determine the letter grade:

93% and above	A	77 - 79%	C+	
90 - 92%	A-	73 - 76%	C	
87 - 89%	B+	70 - 72%	C-	
83 - 86%	B	69 – 65	D	
80 - 82%	B-	64 and below	F	

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.

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. Do not email them to the lecturer or lab assistant.
	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. Each student will be allowed **ONE** 24 hour late assignment for "free", which may not be used on final project, and you must indicate that you are using your free late in the Blackboard comments when you submit the assignment.
	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. **ITP is not responsible for any work lost**.
Policies	No make-up exams (except for documented medical or family emergencies) will be offered. Final projects must be submitted on or before the due date; any late assignments will not be accepted (except for documented medical or family emergencies)
	Attendance may be taken during lecture sessions electronically, verbally, or via a roster passed around the room. Attendance in class is part of class participation, and any student missing class should post a note on Piazza, including date missing class, reason for missing class, and class section.
	Do not reproduce, distribute, or post any lecture material, assignments, or exams publicly without my written consent. You may take notes and make copies of course materials for your own use. You may not post my course materials on sites such as CourseHero. Doing so is a copyright violation and an academic integrity violation that will be dealt with accordingly.
	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 at https://itp.usc.edu/current-students/open-lab-schedule/. In addition, ITP has a laptop loaner program for students who may need temporary use of a laptop in order to complete an assignment. ITP reserves the right to record classroom spaces and to use recorded material if necessary for academic integrity cases.
Adding the course after week 1	Per university policy, students are allowed to add the course until the end of week 3. Any students wishing to add the course should plan on attending the course from the beginning of the semester. Upon adding the course after week 1, the student should email the instructor **immediately** to make a plan for completion of work and learning missed materials. All missed work is required to be completed and submitted according to the schedule provided by the instructor.

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.

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. Academic integrity tutorials can be found at https://libraries.usc.edu/research/reference-tutorials
Examples of behavior violating University standards:
• The submission of material authored by another person but represented as the student's own work, whether that material is paraphrased or copied in verbatim or near-verbatim form.
• Obtaining for oneself or providing for another person a solution to homework, a project or other assignments, or a copy of an exam or exam key without the knowledge and expressed consent of the instructor.
• Unauthorized collaboration on a project, homework or other assignment.
• Fabrication: Submitting material for lab assignments, class projects or other assignments which is wholly or partially falsified, invented or otherwise does not represent work accomplished or undertaken by the student.

Assignments and projects in introductory 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 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 (https://sjacs.usc.edu). Do not share lab assignments with other people. Do not submit another person'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.**

Disability Services	*The Office of Disability Services and Programs*, information at *http://dsp.usc.edu* 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. **Please be sure the letter is delivered to your course instructor as early in the semester as possible.** 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.
Emergency Preparedness	If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information*, information at http://emergency.usc.edu/, will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.
Support Systems	Discrimination, sexual assault, and harassment are not tolerated by the university. **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/ **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/

Support Systems, Continued	**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

Course Outline*

Week	Topics	Activities/Assignments
1	Course overview; introduction to computers, problem solving, and programming	zyBooks: Chapter 1 (Introduction) HW0: Tool Installation
	First program using BlueJ to make a Java object	zyBooks: Chapter 2 (Programming Basics) HW1: Intro program
2	(**No Monday Class, Thursday optional lab time**) Programming in the Small. Variables. Scanner.	zyBooks: Chapter 3 (Primitive Data) HW2: Basic input & output
3	Designing Classes.	zyBooks: Chapter 4 (Class Design) HW3: Design a class
	Constructors. Accessors. Mutators	
4	Abstract data types; Java API	zyBooks: Chapter 5 (Using classes)
	String & Random. Hands-on learning lab	
5	Conditionals and Switches	zyBooks: Chapter 6 (Branches) HW4: Using conditionals
	hands-on learning lab	
6	While and do-while loops	zyBooks: Chapter 7 (Loops) HW5: Using loops
7	(**No Monday Class, Thursday optional lab time**)	
	For loops. Practice with classes	
8	Loop Practice	zyBooks: Chapter 8 (More on classes)
	Loop Practice, OOP Concepts	
9	Review	Review Chapters 1 – 9. Deadline for challenge activities for Extra Credit.
	Exam #1	
SPRING BREAK		
10	Review & ArrayList	zyBooks: Chapter 10 (ArrayList) HW6: Using arraylists
	ArrayList	
11	Arrays	zyBooks: Chapter 11 (Arrays) HW7: Using arrays
	Arrays; hands-on learning lab	
12	Classes, Methods, Inheritance	zyBooks: Chapter 12 (Inheritance) HW8: Using inheritance
	Inheritance; hands-on learning lab	
13	Polymorphism, Abstract classes & inheritance	zyBooks: Chapter 13 (Abstract & Interfaces) HW9: OO Programming
	Interfaces; hands-on learning lab	
14	Review	Review Chapters 1 – 13. Deadline for challenge activities (Chapters 10-13) for Extra Credit.
	Exam #2	
15	GUI programming	zyBooks: Chapter 14-15 (Opt) Farrell Chapter 15 (Opt) Final Project Assigned
	GUI programming	
Finals	**Final Project due Saturday May 5, 2017 at 11:59 pm**	

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