# City College of San Francisco CS 111B: Programming Fundamentals: Java Sections 831 (CRN 52499) and 832 (CRN 53174) Summer 2016, Online

Professor Louie Giambattista lgiambat@ccsf.edu and Professor Jessica Masters jlmasters@ccsf.edu

# Course Goal:

This course covers programming fundamentals using the Java language, using an object-oriented approach to problem solving. Topics include classes, objects, references, dynamic memory allocation, inheritance, polymorphism, arrays, files, design and implementation of abstract data types, in numerical and non-numerical applications.

Student Learning Outcomes: Upon completion of this course a student will be able to:

- A. Design, implement, test, and debug programs that use each of the following fundamental programming constructs: basic computation, I/O from console and files, simple graphical user interfaces that include events and listeners, exception handling, standard conditional and iterative structures, and the definition of methods
- B. Design, implement, and use classes and objects with Java features including encapsulation, appropriately scoped variables, static and instance variables, inheritance (including overriding methods), and polymorphism
- C. Implement basic algorithms to manipulate arrays, including multidimensional arrays

Course Prerequisite: CS 110A or CS 111A, or equivalent experience

#### Course Requirements:

This is a summer course with a compressed schedule. You should expect to spend 25 hours per week (approximately 5 hours per day Monday–Friday) working on the course. You will be expected to sign into the course website daily. If you do not sign into the course website for three days, you may be automatically dropped from the course.

If you wish to drop the course, it is **your** responsibility to do so by the final deadlines given in the college schedule. You do not need a code or signature to drop the course.

This course requires reading the textbook, reading online lecture notes, watching instructor-created videos, participating in online discussion boards, and completing homework, projects, and exams. All course content is posted on Insight (<a href="http://insight.ccsf.edu/">http://insight.ccsf.edu/</a>). The final exam is in-person and required.

All communication in the course will occur through the online discussion forums. These take the place on in-class questions and discussions. Participation in the forums will be used to determine a final course grade if it is near the border of the next highest or lowest grade.

#### Textbook:

The required textbook for this course is:

Java: How to Program (Early Objects), 10th Edition

Authors: Paul Deitel and Harvey Deitel

ISBN-13: 978-0-13-380780-6

Copyright: 2014

The 9<sup>th</sup> edition is also acceptable.

The digital access code is **not** required.

# **Grading Policy:**

Your final course grade will be determined as follows:

Homework Assignments: 40%

Programming Projects: 30% (7.5% each)

Exams: 30% (15% each)

# Homework Assignments, Projects, and Exams:

Homework assignments (listed as *Quizzes* on Insight) will be posted online. Homeworks contain multiple choice, short answer, and short coding questions. There will be a homework associated with each topic. Assignments must be submitted by the posted due date. **There will be no late homework assignments accepted.** You can use all available resources on homework assignments. Each student must submit their own homework assignment.

Projects (listed as *Assignments* on Insight) will be posted online. Projects will ask you to create larger programs. Projects must be submitted by the posted due date. Late projects will be accepted within four days of the posted due date with a 10% late penalty. After four days, no further late projects will be accepted. You can use all available resources on projects. You are encouraged to work in groups of up to four on projects. You are **required** to work in a group for at least one project. You can use the discussion boards to find group members if you don't know anyone else in the class.

Exams will consist of multiple choice, short answer, and coding questions. The midterm exam is online and the final is in-person. Both exams are mandatory and open-book. You can use all existing resources **except other people**. You must work independently on the exams.

# Getting Help:

Sharing questions and ideas with each other is the best ways to learn in an online class. Use the discussion boards (forums) to ask us and your classmates for help. If you have a questions, it's very likely that someone else has the same question. If you know the answer to another student's question, share it! We will read and respond to discussion board postings, but the forums work best if everyone participates and helps each other.

You can e-mail us directly with questions about grades or assignment feedback, but you should use the forum for course-related questions because it is likely that another student has the same question. Posting a question in a discussion board will allow all students to review the answer.



#### Student Conduct:

Student conduct must confirm to City College rules and regulations as outlined in the CCSF Catalogue. Cheating of any kind will not be tolerated and may result in a failed grade or City College disciplinary procedures.

**Copying code is considered cheating.** Copying solutions is considered cheating. These behaviors will result in failure on the assignment, possible failure in the course, and possible disciplinary procedures.

#### Accommodations:

Students who need academic accommodations should request them from the Disabled Students Programs and Services (DSPS) located in the Rosenberg Library, Room 323 on the Ocean Campus (Telephone: 415-452-5481; 415-452-5481 (V), 415-452-5451. 415-452-5451 (TDD)). DSPS is the campus office responsible for verifying disability-related need for academic accommodations, assessing that need, and for planning accommodations in cooperation with students and instructors as needed and consistent with course requirements.

Please read this important message from DSPS:

http://www.ccsf.edu/NEW/en/student-services/student-counseling/dsps/about/online.html

#### Course Schedule (Subject to Change)

Because this is a summer course, the schedule is **very** fast-paced and compressed. Please be certain you have the required time to dedicate to this schedule.

	Week	Dates	Topics	Chapters	Projects
Prof. Louie Giambattista	1	Monday, June 13– Monday, June 20	Introduction Data and Expressions Classes and Methods I	1-3	
	2	Tuesday, June 21 – Monday, June 27	Classes and Methods II Conditionals Loops	4-6	Project 1 due Monday, June 27
	3	Tuesday, June 28 – Thursday, June 30	Arrays	7	
		Friday, July 1 – Tuesday, July 5	Holiday and Midterm Exam	1-7	Project 2 due Tuesday, July 5
Prof. Jessica Masters	4	Wednesday, July 6 – Tuesday, July 12	GUIs Event Handling	12-13	
	5	Wednesday, July 13 – Tuesday, July 19	Exception Handling Classes and Methods III	8, 11	Project 3 Due Friday, July 15
	6	Wednesday, July 20 – Tuesday, July 26	Inheritance and Polymorphism	9-10	
		Wednesday, July 27 – Thursday, July 28	Final Exam	8-13	Project 4 Due Thursday, July 28 (no late submissions)