Computer Programming I

CS121 - Fall 2020

Hello, World!

So many of the devices you use and encounter in your day to day life have computer programs running on them. Phones, coffee makers, cars, scooters, traffic lights, ATMs, and more all have some sort of hardware that runs programs.

You will learn how to solve problems by coding!

This course is an introduction to Java programming and computer science concepts. You will learn about variables, data types, expressions, string processing, arrays, text file I/O, conditional statements and iterative statements. At the end we will be introduced to abstraction and reuse with methods, parameters and objects.

(If none of these words have meaning to you, that's OK!)

What is the format of the course?

This section of the course will be in a **mixed online asynchronous/synchronous** format.

Each week there will be pre-recorded lecture videos which you can watch any time **before** Thursday.

On **Thursday** there will be a **required** meeting at the regular course time **10:05am - 12:05pm**. This will be held over Zoom which you can access from Blackboard.

Is there a textbook for this course?

The textbook for this course is an online textbook that is **required**.

You need to subscribe following the steps below:
1. Sign in or create an account at https://learn.zybooks.com
2. Enter zyBook code: **PACECS121GuidaFall2020**
3. Subscribe

A subscription is $77. Students may begin subscribing on Aug 10, 2020 and the cutoff to subscribe is Dec 01, 2020. Subscriptions will last until Dec 29, 2020.

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How does this textbook work?

Inside zyBooks you will find text to read like any other book. You will also find:

Participation Activities
These are **required** activities that help you strengthen your knowledge of the material.

Challenge Activities
These are *optional* activities to challenge your skills. If you are a few points shy of finishing the Participation Activities for the week, you can make it up in Challenge Activities.

Labs
These are **required** programming exercises. The first labs in a week are worth 1 point. "Minibosses" are worth 5 points. "Boss Battles" are worth 15 points.

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What kind of computer and software do I need?

You can use a web browser for almost everything, however it is recommended you use the Eclipse IDE for coding. It is faster than web based solutions. Eclipse is free and runs on Mac, Windows and Linux.

Go to this page: https://www.oracle.com/java/technologies/javase/javase-jdk8-downloads.html
Choose the one for your operating system and click accept. You might need to create an account. **Wait for the JDK to finish installing before going to the next step!**

Install Eclipse: https://www.eclipse.org/downloads/packages/
Look for: "Eclipse IDE for Java Developers" (use this one do not get the Enterprise one).

Using a Chromebook? You can get by for most of the course using a website such as https://repl.it

How does the grading work in this class?

Your grade is based on the following:

Attendance/Participation:	5%
zyBooks Participation Activities:	10%
zyBooks Labs:	40%
Midterm Exam:	20%
Final Exam:	25%

What are the grade ranges?

The grade ranges are below. Grades are not curved.

100–94%	A	79–77%	C+
93–90%	A-	76–73%	C
89–87%	B+	72–70%	C-
86–83%	B	69–60%	D
82–80%	B-	59–0%	F

Can I get extra credit?

Short answer: No

Long answer: Noooooooooooooooooooooooo

How do we take an exam in this course?

Exams in this course have a multiple choice/short answer part as well as a programming part. On **Thursday** (on the dates of the midterm and final) an exam will be made available in Blackboard. **You must download and use the lockdown browser** to take this part of the exam. This will **require a Mac or Windows computer**. Once you finish the first part of the exam, you can use Eclipse and submit the programming portion to zyBooks (similar to the labs).

You must be available on the dates of the Midterm and Final.

Midterm: Thursday, October 8th from 10:05am - 12:05pm (Eastern Time)

Final: Thursday, December 3rd from 10:05am - 12:05pm (Eastern Time)

What are the policies/rules for deadlines with zyBooks Activities and Labs?

Work for the previous week is always due on **Tuesday by 10:00am** (Eastern Time).

You can submit late up to **Thursday by 10:00am** (Eastern Time).

After that time your assignment will **not be accepted**.

You will lose **10% of the points per day late**.

Due by 10:00am means your assignment was submitted by 10:00am. **1 minute late is a day late.**

If you are having any sort of technical issues, you must **email me before the deadline**:

Only email me from your @pace.edu email address: cguida@pace.edu

What is the schedule of topics each week?

This is what is happening over the next 15 weeks:

1. Introduction, Variables, Int, Arithmetic
2. Binary, Strings, Characters, Floating-point Numbers
3. Comments, Style, Debugging, Type Conversions, Overflow, Numeric
4. String Operations, Formatting, API Docs, Math and Random
5. If, Else, Ranges Equality, Logical Operators
6. Comparisons Character Operations
7. Review (Tuesday) and **Midterm (Thursday)**
8. Loops and Strings, Nested Loops
9. Switch, Break, Conditional Expressions Enums, Do-While, Scope, Files
10. Arrays concept, Iteration, Loops Enhanced Loops, Modifying Arrays
11. Methods, Command-line Arguments
12. Classes, Class Initialization, References
13. Return Values, Variable Scope, OOP
14. Inheritance
15. Review (Tuesday) and **Final (Thursday)**

What are some tips for succeeding in this course?

Start the assignments early!

If you start 2 hours before the deadline and it is 3 hours of work, you are going to have a bad time.

Worry about your grade now!

Students in the last week or two of class will tell me they are worried about their grade. It is too late by then, worry about your grade now!

Do not plagiarize, copy code, peek at code, cheat, collaborate, etc.

I have multiple degrees in Computer Science and believe it or not, I know what Google is. Plagiarism and any other form of academic dishonesty will earn you a grade of 0.

Ask for help!

I don't expect you to enter this class knowing how to code. If you are stuck, ask for help.

You can reach out to me anytime: cguida@pace.edu

Academic Integrity Code

The Academic Integrity Code supports honesty and ethical conduct in the educational process. It educates students about what constitutes academic misconduct, helps to deter cheating and plagiarism, and provides a procedure for handling cases of academic misconduct. Students are expected to be familiar with the Code, which can be found under "University Policies" in the Student Handbook.

Continuity Plan

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to change when necessitated by revised course delivery, semester calendar or other circumstances. Information will be communicated online. If the course is not able to meet face-to-face, students should immediately read any announcements and/or alternative assignment. Students are also encouraged to continue the readings and assignments as outlined on this syllabus or subsequent syllabi.

Accomodations

Procedure for Students with Disabilities Who Wish to Obtain Reasonable Accommodations for a Course: The University's commitment to equal educational opportunities for students with disabilities includes providing reasonable accommodations for the needs of students with disabilities. To request a reasonable accommodation for a qualified disability a student with a disability must self-identify and register with the Office of Disability Services for his or her campus. No one, including faculty, is authorized to evaluate the need for or grant a request for an accommodation except the Office of Disability Services. Moreover, no one, including faculty, is authorized to contact the Office of Disability Services on behalf of a student. For further information, please see Resources for Students with Disabilities at:

http://www.pace.edu/counseling-center/resources-students-disabilities