# **Computer Programming I**

CS121 - Spring 2021



## 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 is **online synchronous**. This means we meet at the scheduled days and times, but online. This course uses a website called "Coding Rooms" instead of Zoom.

We meet on **Tuesday** and **Thursday** from **12:15pm - 2:15pm**. You are required to not only attend but participate by **coding and actively engaging** in the course.

#### 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: PACECS121GuidaSpring2021
- 3. Subscribe

A subscription is \$77. Students may begin subscribing on Jan 01, 2021 and the cutoff to subscribe is Apr 29, 2021. Subscriptions will last until May 29, 2021.

#### 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.

## 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: <a href="https://www.oracle.com/java/technologies/javase-javase-jdk8-downloads.html">https://www.oracle.com/java/technologies/javase-jdk8-downloads.html</a>
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: <a href="https://www.eclipse.org/downloads/packages/">https://www.eclipse.org/downloads/packages/</a>

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 <a href="https://repl.it">https://repl.it</a>

## 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.

100–93%	Α	79–77%	C+
92–90%	A-	76–73%	С
89–87%	B+	72–70%	C-
86–83%	В	69–60%	D
82–80%	B-	59–0%	F

## Can I get extra credit?

Short answer: No

Long answer: Noooooooooooooooooo

## 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. **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, March 11 from 12:15pm - 2:15pm (Eastern Time)

Final: Thursday, April 29 from 12:15pm - 2:15pm (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 12:00pm** (Eastern Time).

You can submit late up to **Thursday by 12:00pm** (Eastern Time).

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

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

Due by 12:00pm means your assignment was submitted by 12:00pm. 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, Inheritance
- 14. 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.

You are not permitted to use Chegg, Course Hero, GeeksForGeeks or any other sort of sites like these at all. Plagiarism and any other form of academic dishonesty will earn you a grade of 0 for the entire assignment or exam. If you find yourself googling for an answer, email me instead.

## 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: <a href="mailto:cguida@pace.edu">cguida@pace.edu</a>

#### **University Policies and Resources**

#### **Academic Integrity**

Students in this course are required to adhere to Pace University's 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

<u>Student Handbook</u>. Individual schools and programs may have additional standards of academic integrity. Students are responsible for familiarizing themselves with the policies of the schools, programs, and courses in which they are enrolled.

Instructions for faculty, a paper about best practices, and the form for reporting integrity policy violations are posted on the <u>Provost's webpage under policies and forms</u>. Reporting forms should be sent to the Chairs of the Academic Conduct Committee on each campus.

#### **Learning Centers**

<u>The Learning Center</u> uses an array of programs and a holistic approach to assist students with academic skills and content knowledge. We are dedicated to developing independent learners by creating purposeful interactions with trained, well-qualified peer and professional staff.

#### Procedure for Students 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 Student Accessibility 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 Student Accessibility Services. Moreover, no one, including faculty, is authorized to contact Student Accessibility Services on behalf of a student. For further information, please see Resources for Students with Disabilities page.

#### Technological Resources:

- List of all <u>Pace Information Technology Services</u>.
- For assistance with a technological concern (Blackboard, Internet, Computer, etc.), contact the Pace Helpdesk at 914-773-3648 or create a <u>help desk ticket</u>.
- Visit the Learning Remotely website

#### Appropriate Use Policy for Information Technology:

Pace endorses the following statement on software and intellectual rights distributed by EDUCAUSE, the non-profit consortium of colleges and universities, committed to the use and management of information technology in higher education. The statement reads:

Respect for intellectual labor and creativity is vital to academic discourse and enterprise. This principle applies to work of all authors and publishers in all media. It encompasses respect for the right to acknowledgment, right to privacy and right to determine the form, manner and terms of publication and distribution.

Because electronic information is volatile and easily reproduced, respect for the work and personal expression of others is especially critical in computer environments. Violations of authorial integrity, including plagiarism, invasion of privacy, unauthorized access and trade secret and copyright violations, may be grounds for sanctions against members of the academic community.

<u>Pace's appropriate use policy</u> applies to recordings of classroom instruction and digital artifacts created by faculty and students.

#### Sex-Based Misconduct Policy and Procedure:

Pace University is committed to providing a safe environment for every member of its community and to ensuring that no student, faculty or staff member is excluded from participation in or denied the benefits of any University program or activity on the basis of sex. Accordingly, the University prohibits the following forms of Sex-Based Misconduct: sexual assault, sexual harassment, gender-based harassment, dating violence, domestic violence, sexual exploitation and stalking.

Instructors are a **non-confidential** resource and have an obligation to report any information about sexual assault with Ms. Lisa Miles, Executive Director of Institutional Equity and Title IX Coordinator (163 Williams Street, Room 1017, 212-346-1310, <a href="mailes@pace.edu">amiles@pace.edu</a>). The Title IX/Affirmative Action Office is responsible for investigating violations of the sexual misconduct policy. For more information about the Pace University sexual misconduct policy, see the <a href="mailes@sex-Based Misconduct Policy and Procedure">Sex-Based Misconduct Policy and Procedure</a> (PDF).

Members of the University community who believe that they have been subjected to Sex-Based Misconduct are encouraged to report such incidents to the University and, where applicable, to local law enforcement. **Confidential** resources include the **University Counseling Centers, Offices of Sexual and Interpersonal Wellness** and **University Healthcare**. Contact information for those offices may be found in the self-care section below.

#### Self-Care:

Your academic success in this course and throughout your college career depends heavily on your personal health and well-being. Stress is a common part of the college experience, and it often can be compounded by unexpected life changes outside the classroom. The Pace Community strongly encourages you to take care of yourself throughout the term, before the demands of midterms and finals reach their peak. Please feel free to talk with me about any difficulty you may be having that may impact your performance in this course as soon as it occurs and before it becomes unmanageable. Please know there are a number of other support services on campus that stand ready to assist you. I strongly encourage you to contact them when needed.

Department	Pleasantville	New York City		
Counseling Center	914-773-3710	212-346-1526		
Dean for Students Office	914-773-3351	212-346-1306		
Health Care Unit	914-773-3760	212-346-1600		
Residential Life	914-923-2791	212-346-1295		
Student Development and Campus Activities	914-773-3861	212-346-1590		
Office of Multicultural Affairs & Diversity Programs	914-773-3775	212-346-1563		
Sexual Assault Prevention & Education	914-597-8783	212-346-1931		
Academic Advisement				
Advising Center for Exploring Majors	914-773-3847	212-346-1798		
College of Health Professions	914-773-3961	914-773-3552		
Dyson College	914-773-3781	212-346-1518		
International Student / Scholars	914-773-3425	212-346-1368		
Lubin School of Business	914-773-3531	212-618-6550		
Pforzheimer Honors College	914-773-3941	212-346-1697		
Seidenberg School	914-773-3254	212-346-1864		
Study Abroad	914-773-3447	212-346-1368		