Course Syllabus – COP3502
Programming Fundamentals I

Contact Information

Instructor: Fernando J. Rodríguez
Email Address: fjrodriguez@ufl.edu
Office Hours: Tue/Thu 1:30pm – 3:00pm, Wed/Fri 10:30am – 11:30am

TAs:	Gabriella Gonzalez	Carlos de Guzman
Email Address:	gonzalezg2@ufl.edu	deguzmanc@ufl.edu
Office Hours:	Mon/Thu 9:35am – 10.25am	Mon/Wed 1:55pm – 2:45pm

Course Information

This is the first course of a two-semester introductory sequence for students without prior programming experience. Topics include major concepts of computer science and computer programming processes, including object-oriented programming, procedural and data abstraction and program modularity.

Accreditation

This course contributes to meeting the professional component of ABET program criteria:

    b) includes one and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to computer engineering.

This course is used to assess program outcomes for these ABET criteria:

    c) an ability to design hardware and software systems, components, or processes to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

    e) an ability to identify, formulate, and solve hardware and software computer engineering problems, accounting for the interaction between hardware and software.

    k) an ability to use the techniques, skills, and modern engineering tools necessary for computer engineering practice.

Course Objectives

By the end of the semester, successful students should be able to:

- understand what programming is and the unique features of Java,
- read and understand programs written in Java,
- design and implement programs using Java,
- compile and execute programs to get results, and
- debug (identify and fix) syntax, semantic, and logic errors in Java source code.

Course Materials

Required: Programming in Java (ONLINE), Frank Vahid and Roman Lysecky (2015), zyBooks
              1. Sign in or create an account at learn.zybooks.com
              2. Enter zyBook code: UFLCOP3502Fall2020
              3. Subscribe (A subscription is $69.30. Subscriptions will last until Jan 11, 2021.)

Optional: Introduction to Java Programming 11E, Y. Daniel Liang (2017), Pearson

There are also lots of free Java resources available online.

Mobile Computing Requirement

The College of Engineering requires students to have a mobile computing device (standard laptop) with 802.11 WiFi capability (https://www.eng.ufl.edu/students/resources/computer-requirements/). **Students are required to use their mobile computing devices during class for in-class assignments!**

Course Overview

The following is a rough topical overview of what we will examine during the course (subject to change):

Mod.	Dates	Lecture	Lab	Project
00	08/31 – 09/06	Introduction to Computer Science	No Quiz / No Lab	
01	09/08 – 09/13	Variables & Arithmetic, & IO	Lab 01 / Quiz 01	
02	09/14 – 09/20	Program Control	Lab 02 / Quiz 02	
03	09/21 – 09/27	Methods & Data Types 1	Lab 03 / Quiz 03	P1 Due: 09/25
04A	09/28 – 10/04	Data Types & 1-d Array	Lab 04 / Quiz 04	P2a Due: 10/02
E	10/05 – 10/11	Review, EXAM 1	No Quiz/ No Lab	
04B	10/12 – 10/18	Arrays	Project 2 walkthrough	P2b Due: 10/16
05	10/19 – 10/25	Software Engineering	Lab 05 / Quiz 05	P2c Due: 10/23
06	10/26 – 11/01	Class	Lab 06 / Quiz 06	
07	11/02 – 11/08	Inheritance	Lab 07 / Quiz 07	
08	11/09 – 11/15	Searching and Sorting Algorithms	Lab 08 / Quiz 08	P3 Due: 11/13
E	11/16 –11/22	Review, EXAM 2		
TG	11/23 – 11/24	BREAK	No Quiz/ No Lab	
09	11/30 – 12/06	Recursion	Lab 09 / Quiz 09	P4 Due: 12/04
10	12/07 – 12/09	File I/O & Exceptions	Lab 10 / Quiz 10	

Grading

The grade breakdown is as follows:

Grade Category	Percentage	Letter	Range (%)
Development		A	93 – 100
Labs (10-Drop-1)	18%	A-	90 – 92
Projects (4)	36%	B+	87 – 89
		B	83 – 86
Assessment		B-	80 – 82
Quizzes (10-Drop-2)	16%	C+	77 – 79
Exams (1)	12%	C	73 – 76
Final Exam (1)	18%		
		C-	70 – 72
Total	*100%*	D+	67 – 69
		D	63 – 66
		D-	60 – 62

NOTE: A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: an average of

C- is equivalent to a GPA of 1.67 and therefore does not satisfy this graduation requirement. For more information on grades and grading policies, please consult the catalog.

Several opportunities for extra credit will be available throughout the semester, for up to **3% extra credit on your final grade**. The following are examples of opportunities to earn extra credit, each worth 1% (more will be announced as they become available):

- Participation in research studies (up to 2 studies): Research studies must be approved for extra credit beforehand
- Perfect attendance: Attending all synchronous class meetings and lab sessions
- zyBooks participation: Completing all zyBooks activities and challenges
- Reflection paper: Submission of a 2-page reflection paper about your experience taking the course

Final grades will be rounded to the nearest whole percentage point. Grades will not be "bumped up", and no additional credit will be offered at the end of the term – so **do not ask**! Any request for a final grade increase, via "bumping" or additional "extra credit" **will result in a deduction of 1% of the student's final grade**.

Assignment Expectations

1) Participation is determined by Zybooks participation activities and challenges.
2) Quizzes, Projects and Exams are to be worked independently without code sharing. **All cheating will be reported to the Honor Court immediately.**
3) As for the labs, you will work with your peers during the discussion section. But you have to submit your own code.

Academic Dishonesty

- Sharing/copying, "borrowing" of code structure, looking at code from another student or providing such code, and plagiarism, in addition to other dishonest behaviors, are all considered to be academic dishonesty. No information regarding the project, quiz, and exam solutions may be shared by students except for a discussion at a conceptual level.
- For any conceptual discussions, cite the peer who you discussed it with or cite the internet resource you referred to. Such discussions should be held on a whiteboard using explanation figures/pseudo-codes or through talking. We strongly encourage that if you have doubts, visit the course staff in-office hours.
- When you are asked to work independently, **looking at any piece of your peer's code, sharing files, asking for old assignments from upperclassman, searching for solutions found online, or using someone else to code your solution is strictly prohibited**.
- When you are doing pair programming for the lab assignments, you could share the code you are working on together during the discussion section with your pair programming partner(s), work on it and submit your own code. However, **asking for old assignments from upperclassman, searching for online solutions, or using someone else to code your solution is strictly prohibited**.
- Any student found to have violated these rules, whether a provider or receiver or unauthorized help, will be given a zero on that assignment and a two-letter final grade decrement for a first offense. For a second offense, you will get an E grade, the failing grade. Also, for both offenses, you will be reported to the Honor Court. **If you aren't clear on what constitutes plagiarism, ask the course staff.**

Code Submissions

Functionality is key to success in software development and computer science, so it is **extremely important** that the guidelines are followed. Failure to follow these instructions will result in penalties.

1) Code must compile / run in debug and release mode. Debug information should never be released in the final version of a software project. **__Projects that do not compile AND run will be marked zero__**.

2) Include only those files specified by the documents in your archive. Projects should have no directory structure except as explicitly mentioned in the documentation (i.e., relevant files and folders should be submitted in the root of the zip file.) It should be possible to open the archive, copy your files directly into the project, compile, and then run the project without further steps. If the project has naming or organization error(s), its grade will be **__zero__**.

Expectations for the Class

Students are expected adhere to the following guidelines in this course:

Students are strongly recommended to attend all lectures. Students who fail to attend lecture and/or lab forfeit their opportunity to attend office hours unless the absence is excused by the instructor of the course. In lectures, important announcements are made that students are expected to follow.

Students are required to attend all discussion sections. Labs shall only be submitted by students who attend or who have been excused, and *pair programming is mandatory*. Quizzes are at the last 20 minutes of the discussion sections. If you missed your discussion section, then you are not allowed to submit the lab and quiz in that week.

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Grade reviews must be requested within one week of a grade being posted. After one week, no grade will be revisited. In the event of a grade review, the entire assignment will be reviewed.

All assignments are due by the time listed on Canvas. Projects and homework will have a cascading deduction: one (1) business day late for 10% penalty; two (2) for 30% penalty; or three (3) for 60% penalty. Quizzes and tests may not be submitted late for credit except with instructor approval for extenuating circumstances (see below).

Exam and quiz make-ups will not be given except in extenuating circumstances. For make-up consideration students will be required to submit written documentation from a reputable source as evidence. For any planned event (such as a wedding), the student is expected to contact the instructor no less than two weeks in advance for consideration. Please note that there is no guarantee that requests will be accommodated. Social, networking, and club events may be taken into consideration strictly at the discretion of the instructor.

Exams and quizzes may be reviewed during office hours but will not be distributed. Making good assessments takes time and testing. Unfortunately, some disreputable organizations and companies

attempt to compromise exams to give some students an edge for a fee. To combat this, we will always allow students to review quizzes and exams during office hours but will not release them en masse.

Office Hours and Code Review Policy
- Students should visit the course staff during scheduled office hours for help on projects or quizzes. Do not send emails or "@" instructors or TAs on Slack about project help. The TAs and instructor will often try to answer questions when possible in **#labs** or **#projects** channels, but the way to get personalized help is to visit them during office hours.
- The course staff cannot provide you more than 15 minutes of their time in case of long lines or more than two students waiting to get help during office hours.
- When making any **debugging requests**, make sure you provide the context of what problem you are trying to solve and where is your code failing. Small snippets (1 – 2 lines of code) can be posted on slack but not the entire code.
- **Debugging requests** for projects/quiz questions must first go through the TAs, peer mentors, or a post on Slack. This is **strongly encouraged** given we have a large class and several of you might have similar questions. If your problem is not fixed, then reach out to the Instructor.

Important correspondence (other than project help) should be engaged via email. In particular, the chat system is helpful for simple questions and allows students to help one another, but students should not expect a response to important questions via chat. **Please allow 48 business hours for a response**; the instructor and TAs have many responsibilities and respond to messages as efficiently as is practical.

Students are expected to provide professional and respectful feedback on the quality of instruction in the course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Student Assistance

The following services are available to students requiring assistance:

Accommodations for Students with Disabilities – Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

UF Counseling Services – Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- Career Resource Center, Reitz Union, 392-1601, Career development assistance and counseling
- University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling
- SHCC mental Health, Student Health Care Center, 392-1171, personal counseling
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.

Software Use Policy

All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.