Syllabus

Course Information
- **Course Number and Title**: COP 4020.02 Programming Languages
- **Credit Hours:** 3
- **Academic Term:** Spring 2026

Instructor Information
- **Instructor:** Xianping Wang
- **Office Location: B**ARC 1189
- **Office Hours**: TR 11AM-12:30PM
- **Other Ways to Contact You: Appointment through email xianpingwang@floridapoly.edu**

Course Delivery and Course Description

- **Delivery Mode**: This course is delivered in a face-to-face format. Please check the Canvas course website for all information, including announcements, discussions, and any supplementary material for topics covered in this course.
- **Course Website**: https://floridapolytechnic.instructure.com/courses/8884
- **Official Catalog Course Description**: This course provides students with the fundamental skills of creating new programming languages with particular emphasis on the essential design concepts of the four major programming paradigms: the imperative programming paradigm, object-oriented programming paradigm, functional programming paradigm, and logical programming paradigm.
    - **Prerequisites**: COP 3337 Object-Oriented Programming or COT 4210 Formal Languages and Automata
    - **Communication/Computation Skills Requirement (6A-10.030)**: N
- **Required Texts and Materials:**
    - Programming Languages: Principles and Practices, 3rd Edition, by Kenneth C. Louden, Kenneth A. Lambert, ISBN: 9780357671351.

Course Objectives and Outcomes

- **Course Objectives**:
    - To introduce fundamental concepts of designing programming languages and apply different programming paradigms to solve computer science problems.
- **Course Learning Outcomes**:
    1. Understand lexical analysis.
    2. Understand syntactical analysis.
    3. Apply functional programming to solve problems.
    4. Apply logic programming to solve problems.
- **Alignment with Program Outcomes**:

Computer Science Program Student Outcomes	Course Learning Outcome and Learning Level			
	1	2	3	4
1. Analyze a complex computing problem and to apply principles of computing and other relevant	Analysis	Analysis		

	disciplines to identify solutions.			
2.	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.			
3.	Communicate effectively in a variety of professional contexts.			
4.	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.			
5.	Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.			
6.	Apply computer science theory and software development fundamentals to produce computing-based solutions.		Application	Application

Academic Support Resources

- **Library**: Students can access the Florida Polytechnic University Library through the University website and Canvas, on and off campus. Students may direct questions to library@floridapoly.edu.
- **Peer Learning Strategists (PLS)**: Are specially trained student leaders who help their peers strategize approaches to course content and work through solution methods. PLS work in collaboration with the courses they support so the content and methods are aligned with your instructors' expectations. Students can meet with a PLS in The Learning Center, which is located on the first floor of the Innovation, Science and Technology (IST) building in room 1019.
- **Academic Success Coaches**: All students at Florida Poly are assigned an Academic Success Coach. Your Academic Success Coach can assist you with academic success strategies. Please visit the Student Success Center on the second floor of the IST building to meet with an Academic Success Coach.
7. **Writing Center**: Located on the second floor of the IST (2059/2061), the Writing Center helps students to develop their writing and presentation skills. Consultations are available in person and virtually. For more detail, visit https://floridapoly.edu/writingcenter.

Civility and Collegiality

Faculty and students come to the university for the same reason, which is to participate in a highly professional educational environment. To that end, both students and faculty are expected to treat each other with mutual regard and civility. Communication, written, oral and behavioral, between faculty and students must remain respectful. Within and outside of the classroom, students must refrain from derogatory comments toward the faculty member and their fellow students, and faculty as well must refrain from derogatory comments toward their students. Faculty and students should address each other with respect, in accordance with the wishes of the faculty and the students: for example, no one should be addressed by their last name alone.

Faculty from the outset of a course can and should specify what constitutes activities and behavior that take away from, that diminish, the educational environment. An individual student's distracting behavior impedes the education of fellow students, which itself is a form of disrespect. Civility and collegiality also include respecting each other's time: for example, neither students nor faculty should arrive late to class (unless unforeseen, pressing circumstances prevail); faculty should be present at the posted office hours; and students and faculty should be punctual when meeting times are scheduled. In more general terms, collegiality means respecting the right of both faculty and students to participate fully and fairly in the educational enterprise.

Course Policies

Attendance

- Students in **face-to-face (this includes labs and C-courses)** courses are expected "to attend all of their scheduled University classes and to satisfy all academic objectives as defined by the instructor" (University Policy, FPU-5.0010AP).
- To be considered as excused absences, students must provide the instructor with reasonable evidence.

Participation

Students are expected to participate in the classroom experience. The use of earbuds/headphones during class is specifically not allowed and students who engage in this behavior may be asked to leave the class for the day (noting exceptions for authorized accommodations). In addition, students who routinely do not bring materials to class that are required for participation, will not be given credit for class attendance, and if this becomes a pattern of behavior, may be asked to leave the class for the day. Persistent problems with participation may result in a code of conduct referral.

Late Work/Make-up work
- To make up an exam and project presentation, signed document from authority (such as doctor, clinic, law enforcement officers, etc.) is needed.
- The penalty for late assignment is 10% per day. No late assignment will be accepted later than 3 days after the due date.
- *Other makeup work need approval from the instructor and request in advance.*

Grading Scale
- **A** : above 93%
- **A−** : 90% - 92%
- **B+** : 87% - 89%
- **B** : 83% - 86%
- **B−** : 80% - 82%
- **C+** : 77% - 79%
- **C** : 73% - 76%
- **C−** : 70% - 72%
- **D+** : 67% - 69%
- **D** : 63% - 66%
- **D−** : 60% - 62%
- **F** : below 60%

Assignment/Evaluation Methods
- Attendance: 5%
- Exam 1: 20%
- Exam 2: 20%
- Exam 3: 20%
- Assignments: 20%
- Programming Assignments: 15%

University Policies

Reasonable Accommodations
The University is committed to ensuring equal access to all educational opportunities. The University, through the Office of Disability Services (ODS), facilitates reasonable accommodations for students with disabilities and documented eligibility. It is the student's responsibility to self-identify as a student with disabilities and register with ODS to request accommodations.

If you have already registered with ODS, please ensure that you have requested an accommodation letter for this course through the ODS student portal and communicate with your instructor about your approved accommodations as soon as possible. Arrangements for testing accommodations must be made in advance. Accommodations are not retroactive.
If you are not registered with ODS but believe you have a temporary health condition or permanent disability requiring an accommodation, please contact ODS as soon as possible.

The Office of Disability Services (ODS):
DisabilityServices@floridapoly.edu
(863) 874-8770
The Access Point
ODS website: www.floridapoly.edy/disability

Accommodations for Religious Observances, Practices and Beliefs
The University will reasonably accommodate the religious observances, practices, and beliefs of individuals in regard to admissions, class attendance, and the scheduling of examinations and work assignments. (See University Policy.)

Title IX
Florida Polytechnic University is committed to ensuring a safe, productive learning environment on our campus that prohibits sex discrimination and sexual misconduct, including sexual harassment, sexual assault, dating violence, domestic violence and stalking. Resources are available if you or someone you know needs assistance. You may speak to your professor, but your professors have an obligation to report the incident to the Title IX Coordinator. Please know, however, that your information will be kept private to the greatest extent possible. You will not be required to share your experience. If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the Florida Polytechnic University Ombuds Office, BayCare's Student Assistance Program, 1-800-878-5470 and locally within the community at Peace River Center, 863-413-2707 (24-hour hotline) or 863-413-2708 to schedule an appointment. The Title IX Coordinator is available for any questions to discussion resources and options available.

Academic Integrity
The faculty and administration take academic integrity very seriously. Violations of academic integrity regulation include actions such as cheating, plagiarism, use of unauthorized resources (including but not limited to use of Artificial Intelligence tools), illegal use of intellectual property, and inappropriately aiding other students. Such actions undermine the central mission of the university and negatively impact the value of your Florida Poly degree. Suspected violations will be fully investigated, possibly resulting in an academic integrity hearing and sanctions against the accused student if found in violation. Sanctions range from receiving a zero on the exam or assignment, to expulsion from the university. Repeat offenders are subject to more severe sanctions and penalties.

Any "special" instructions that are appropriate for academic integrity and the course should go here.
(It is essential that a heading and a statement on what constitutes, includes, academic integrity be included in the syllabus, and that the students be made aware of academic integrity at the beginning of a course.)

Recording Lectures
Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use. Recordings may not be used as a substitute for class participation or class attendance. Recordings may not be published or shared in any way, either intentionally or accidentally, without the written consent of the faculty member. Failure to adhere to these requirements is a violation of state law (subject to civil penalty) and the student code of conduct (subject to disciplinary action).

*Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion (except when incidental to and incorporated within a class lecture), and invited guest speakers is **prohibited**.*

Course Schedule
- This syllabus is tentative and may be subject to change. Everything in the syllabus might change except for 1) the Course Description; 2) the textbook; and 3) the grading policy.
- Assignments/Labs/Quizzes/Projects will vary in number and dates.
- Important Dates: https://floridapoly.edu/academics/academic-calendar/index.php

Week 1	Syllabus

	Chapter 1: Introduction
Week 2	Chapter 2: Language Design Criteria Assignment 1
Week 3	Chapter 2: Language Design Criteria (cont'd) Chapter 3: Functional Programming
Week 4	Chapter 3: Functional Programming (cont'd) Programming Assignment 1
Week 5	Chapter 3: Functional Programming (cont'd) Exam 1: 2/6, 3:30 PM – 4:30 PM
Week 6	Chapter 4: Logic Programming
Week 7	Chapter 4: Logic Programming (cont'd) Programming Assignment 2
Week 8	Chapter 5: Object-Oriented Programming
	Spring Break: No Class
Week 9	Chapter 6: Syntax Assignment 2
Week 10	Chapter 6: Syntax (cont'd) Exam 2: 3/20, 3:30 PM – 4:30 PM
Week 11	Assignment 3
Week 12	Chapter 7 Basic Semantics
Week 13	Chapter 8 Data Types Assignment 4
Week 14	Chapter 9: Control I – Expressions and Statements
Week 15	Chapter 10: Control II – Procedures and Environments (if time allowed) Q&A
Week 16	Exam 3: To Be Announced