

**CISC 2000/2010 R03 Computer Science II**  
**Spring 2023**  
**Dr. Karen Trovato**

**Class times:** Tues/Fri 10:00-11:15 Lecture. JMH 140  
Fri 1:00-2:15 Lab. JMH 302    **TA:** Oscar Bruno obruno2@fordham.edu

**E-mail:** ktrovato@fordham.edu

**Office hours:** Tues & Thurs 11:30-12:15. Other times arranged by appointment & Zoom.  
<https://fordham.zoom.us/j/9308768567?pwd=QWJ0Q1d2OStiU21ZQkUvSWszSEMzQT09>

**Office:** JMH 338

**Course presentations, attendance:** Blackboard

**Required Text:** learn.zyBooks.com (an interactive book)  
Create an account **with your Fordham email address**.

Title: CISC 2000: Computer Science II    zyBook code: FORDHAMCISC2000TrovatoSpring2023

Optional Textbook: “Starting Out with C++ From Control Structures to Objects”, 10<sup>th</sup> Ed. 2022  
Author: Tony Gaddis    Publisher: Pearson    ISBN-13: 9780137450626. You may use the older edition (has a grapefruit on the cover).

**Programming:** We will be building code on a computer named Storm, a Linux based environment. Let me know now if you do not have an account, or if your storm account does not match your Fordham email (username).

**Resources:**    Tutor Center, JMH 310, 11:30-3:45 M-F. Drop In, no reservations required!

**I also recommend you join the Computer Science Society:**    <https://fordhamcss.org/>

**Course description:** A second-level programming course with concentration on object-oriented programming techniques.

**Prerequisite:** CISC1600, Computer Science I and Lab

**Key topics:** Arrays/Vectors, pointers, dynamic memory, classes, inheritance, polymorphism, operator overloading and templates.

**Key tools:** Linux commands and the 'vi' text editor. Additional IDEs (Integrated Development Environments) and debugging environments may be discussed.

**Attendance and class participation:** It is important to attend every class, and to arrive on time. As per the FCRH policy, students cannot miss more than four classes. Missing more than two will damage your participation grade. Absences for reasons of religious holidays, serious illness, death in the student's immediate family, or required participation in a University sponsored event are, with the appropriate documentation, excused absences, and students will be given an opportunity to make up class examinations or other graded assignments. To get an absence excused, you must complete the Excused Absence Form using this link: <http://tiny.cc/fcrhexcusedabsence> .

If you miss a week of class, I will reach out to your class dean and to your core advisor to express my concern. It is your responsibility to find out what was discussed in the class(es) you missed. Please review the attendance policy here: <https://bulletin.fordham.edu/undergraduate/academic-policies-procedures/student-attendance>

Please *actively* participate in class since this will make the course more interesting for everyone!

**Lab time vs. lecture time:** This class has integrated lecture and 'hands-on' lab time. In other words, lectures may be given during lab time and lab instructions during lecture time. You are strongly encouraged to bring your laptop, although you may use lab machines as well. During lab time, we will work on exercises to reinforce topics covered in lecture. Lab time is an important practice for the skills required by the programming homework assignments. Often programs will be started in lab and completed on your own time. You should expect to spend at least 3 hours / week outside class. **DO NOT GET BEHIND!**

**Bring a laptop to every lab.**

**Course assignments:** Each week there will be 1- 2 programming assignments, including zyBook assignments. You will typically have until the next class to complete each. Please stay up to date.

**Programming Assignments:** All programming assignments will be posted to and graded via an autograder. Each assignment has a hard deadline of approximately a week, with some variance here and there for scheduling purposes. All deadlines will be visible for the assignments as they are uploaded. While assignment due dates are normally final, each student is provided with ten (10) late day tokens. When a project's hard deadline (and a student's extension, if any) has passed, students with late day tokens can continue to submit after the hard deadline. Tokens are used automatically the first time a student submits after a project's hard deadline. Using one token will allow a student to submit until 24 hours after the hard deadline. You do not need to ask me to use a token - use them as you see fit. If you no longer have any tokens, you must contact me. **A late**

**submission will lose 10% of the assignment grade for each day it is late**, so it is important to get assignments in on time. However, if extensions are required to an illness or other extraordinary circumstance, please let me know and I will provide you with one. This extension will not take up your tokens. If there is any confusion over what might count for this system, contact me and we can discuss the matter.

**Academic honesty:** All work produced in this course must be your own. You are allowed to discuss the assignment problems with other students generally, but you must write all parts of each assignment submission yourself. **Copying of assignments from any source is never acceptable and will be considered a violation of Fordham's academic integrity policy.**

Collaboration with others during exams is clearly prohibited.

**If you violate the policy, you will receive a grade of 0% on the assignment or exam and an Integrity Violation Report will be filed.**

See Fordham's Undergraduate Policy on Academic Integrity for more information.

#### **Copyright:**

*Assignments and exams are copyrighted, regardless of whether a copyright notice is listed. Uploading them or transferring them is prohibited and will be considered a violation of the academic integrity policy.*

**Accommodations:** If you are a student with a documented disability and require academic accommodations, you need to register with [Fordham's Office of Disability Services for Students](#) (ODS) in order to request academic accommodations for your courses. Please contact the main ODS office at Rose Hill at 718-817-0655 to arrange services. Staff at ODS can walk you through the process and arrange appointments depending on which campus you take courses at. Accommodations are not retroactive, so you need to register with ODS prior to receiving your accommodations. Please see your instructor after class or during office hours if you have questions or would like to submit your academic accommodation letter.

**Chosen name/pronoun policy:** Some members of the Fordham community are known by a name that is different from their legal name. Students who wish to be identified by a chosen name can contact their professor via email to request their chosen name and pronoun be used.

#### **Counseling and Psychological Services**

CPS provides a range of services to help students address and cope more effectively with their stress and psychological concerns. You are encouraged to stop by or call the office to make an appointment. Office hours are Monday–Thursday, 9 a.m. – 7 p.m.; Friday, 9 a.m. – 5 p.m.  
441 East Fordham Road, O'Hare Hall Basement, Bronx, NY 10458 Phone: 718-817-3725

### **Emergency Medical Service**

At Rose Hill, the Fordham University Emergency Medical Service (FUEMS) is available 24 hours a day and can be contacted by calling the Department of Public Safety at 718-817-2222.

### **If you need help**

You should not hesitate to e-mail or speak to me if you have any questions: about homework, assignments or just life. Please start homework early so that you will have time to ask questions in class, in office hours, or by e-mail. If you have any questions or want to go over some of the material - **No reservation needed for office hours. Just stop in.** If you need different hours, I can arrange Zoom or other meeting times. I am here to help you learn and understand!

**Please let me know if there is anything I can do to help make our classroom as inclusive as possible for learning and participating.**

**Exams:** There are two Mid-term exams and two Final exams. Each time there will be an in-class Practical (programming) exam and a Theory (written) exam.

**Grading:** The percentages given below are guidelines for both the student and instructor and may be changed as needed to reflect circumstances in the course. Any changes that occur during the semester will be minor.

Attendance	5%	Participation	extra 5%
Labs	28%	Mid-term	25%
ZyBook	15%	Final exam	27%

### **Schedule:**

Week 1: Review functions and parameter passing, call-by-value, call-by-reference, scope  
Week 2: Review stack, overloading, recursion, single & multi-dimensional arrays, file I/O  
Week 3: Array techniques: search, sort, swap, delete, insert, pointers  
Week 4: Memory usage, dynamic memory allocation, pointers  
Week 5: STL vectors, strings, c-strings, structs  
Week 6: Classes  
Week 7: Review + Mid-term  
Week 8: Object oriented programming, inheritance, separate compilation  
Week 9: Friends, static, const  
Week 10: Polymorphism, slicing problem  
Week 11: Operator overloading  
Week 12: Function templates, class templates  
Week 13: Review