# Computer Science 255
# Introduction to Programming
# Syllabus

**Catalog listing:**   CMSC 255

**Course Level:**   Undergraduate

**Prerequisites**:   A calculus-level placement on the VCU Mathematics Placement Test within the one-year period immediately preceding enrollment in the course, or MATH 151 or equivalent. Students are expected to have fundamental computer skills.

**Instructor:**   Claire Sparks

**Pronouns:**   She / Her

**Office**:   Engineering East E4251

**Email**:   sparkscc@vcu.edu

**Classroom:**   Engineering East 2214

**Class website:**   Canvas

**Office Hours**:   Monday & Wednesday 4:00 – 5:15 or

Virtual by appointment. Contact me via email or Discord to schedule a time to meet in person or via Zoom. I will respond to your email within 48 hours. If I will be unavailable for a longer stretch of time, I will let the class know in an announcement.

## 1.0 – Overview (Catalog Course Description):

Semester course; 3 lecture and 2 laboratory hours. 4 credits. Introduction to object-oriented programming using Java. Topics include problem-solving, top-down design of algorithms using control structures, methods, arrays, basic I/O, basic concepts of objects and classes in Java, Java classes for manipulating strings, and introduction to program testing, UML notation and integrated development environments.

**2.0 – Course Goals**

Upon successful completion of the course, the student will be able to:

a. Determine if expressions and statements are syntactically correct in a high-level language.
b. Determine the semantics of a program in a high-level language.
c. Write a general algorithm solution of a problem in pseudocode that demonstrates a grasp of structured programming.
d. Write correct program of 200 to 500 lines of moderate difficulty in a high-level language determining knowledge in course content topics

**3.0 – ABET Criteria Addressed:**

1. Analyze a complex computing problem and to apply principles of computing and other relevant 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.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

Other Criteria:
- Coverage of algorithms, concepts of programming languages
- Coverage of at least one general-purpose programming language
- A major project that requires integration and application of knowledge and skills acquired in earlier course work

**4.0 – Major Topics Covered:**

- Computers and computer programs
- Basic problem solving and algorithm development
- Control statements in a high-level language
- Simple data types in a high-level language
- Arrays in a high-level language
- Proper program methodology and debugging technique

**5.0 – Course Structure / Campus Requirements**

- All information will be accessible through the online learning environment. Assignments and projects will be submitted online.
- This is a 15-week course that will require participation and collaboration with fellow classmates. Be prepared to complete assignments as well as participate in group discussions on topics related to online teaching and learning.
- Follow the course schedule to be sure you are keeping up with discussion, activities and assignments.

**6.0 – Textbook:**

Required Text:

        Title:          Revel for Introduction to Java Programming – Access Card, 1/e
        Author:       Y. Daniel Liang
        Publisher:     Pearson
        ISBN:         9780134167008

This text is built into our classroom site as an ebook. You will need to purchase an access code.

**7.0 – Class Schedule:**

- Lecture: Monday/Wednesday 5:30 – 6:45pm
- Lab: Tuesday 5:00 - 6:50pm

**8.0 – Technology Support**

**Engineering & VCU Resources:**

- **Personal Computer Requirement**: For our current system requirements and recommendations, see: https://egr.vcu.edu/admissions/accepted/computer-recommendations/
- **Remote Access to Public Lab computers**: To provide remote access, we use the Citrix App2Go environment to provide full and exclusive control over "the next available" computer in the lab. See this link for more details: https://wiki.vcu.edu/x/Oa0tBg
- **VCU provides a lot of software available for students to download to their personal computers.** For a list of software and the specifics for each, see: https://ts.vcu.edu/software-center/. In particular, Microsoft Office is available free to students.
- **VCU is transitioning to Canvas.** See the Canvas Student Guide at this link: https://community.canvaslms.com/t5/Student-Guide/tkb-p/student
- **For IT help in the College of Engineering**, see our Wikipedia for "student" help at: https://wiki.vcu.edu/display/EGRITHELP
- **VCU's Technology Services (TS) provides support for "central IT" services**. If you have a technical issue with any of the following services, please submit a ticket with VCU Technology Services at https://itsupport.vcu.edu/ or call (804) 828-2227. VCU TS maintains and supports these services and will be able to provide assistance to you.
    - VCU Cisco VPN
    - 2Factor or Dual Authentication (DUO)
    - Blackboard/Canvas
    - Gmail or other Google Apps
    - Zoom videoconferencing
    - VCU App2Go (Application server)
    - Resetting VCU password

- **For IT issues related to College of Engineering teaching and research, email egrfixit@vcu.edu**
- **For loaner Chromebooks for emergency purposes:** See this link for more details: https://vcutsmpc.getconnect2.com/

**General Instructions:**

1. Clear your browser's cache.
2. Shutdown and restart your computer.
3. If your problems persist, contact the IT support center itsc@vcu.edu or 804-828-2227.

## 9.0 – Technology Usage

- We will be using Canvas as our classroom environment.  In addition to Canvas, we will also be using the following technologies:
    - Zoom for office hours
    - YouTube.com for watching and participating in lecture
    - Discord for virtual help sessions and group chat.
    - Pearson Revel for accessing the textbook and completing assignments in the textbook
    - Gradescope for grading project files
    - Respondus Lockdown Browser & Monitor (webcam needed for exams)

## 10.0   – Evaluation:

**General Instructions:**

1. All projects and programming assignments must be uploaded to Canvas **on or before the due date specified**. Only files submitted to Canvas/Gradescope on or before the due date will be considered for grading.
2. Requests to re-grade projects must be made with **two weeks** from the date the project grade is posted in Canvas, requests after this time will be denied.
3. Late programming projects will be accepted but will be subject to a late penalty. Said penalty will increase the later an assignment is.
4. No makeup exams will be given unless special permission has been given prior to the date of the test. Request to adjust scores or re-grade tests must be made at the end of the class meeting in which the test is returned, requests after this time will be denied.
5. Students will not be able to communicate in any way during an exam or quiz. Any perceived communication will result in the removal of the exam or quiz from the students involved.  This will result in a zero as the grade with the option of a different exam or quiz being administered at the convenience of the instructor.
6. All programs are to be individual efforts. This does not preclude the discussion of techniques to be used or ideas for algorithms. In addition, it is permissible to help

each other find syntax errors or minor logic errors. However, the actual correction of such errors is up to the author of the program.

7. Project solutions should not be shared until the final grades for the course have been posted.  Sharing solutions before that time can result in academic integrity violations.
8. Do your own work. **Plagiarism applies to source code as with any other intellectual property. Plagiarized code is a form of cheating and will be treated as such.** Each project will be scanned in Gradescope to detect plagiarism and to ensure that the submission is the result of an individual's effort. Programs that violate these standards will be immediately referred to the Honor System for action.

## 11.0   – Course Grading Policy

| Category | Weight Percentage |
|---|---|
| Homework & Textbook Assignments | 10 |
| Labs | 10 |
| Programming Projects* | 40 |
| Quizzes | 10 |
| Midterm | 15 |
| Final Exam | 15 |

**Grading scheme:**
> A:  >= 90%
> B:  >= 80% and < 90%
> C:  >= 70% and < 80%
> D:  >= 60% and < 70%
> F:  < 60%

* The Programming Projects category must be passed with a grade of 60 or better.  If this category is not passed, you will not earn a grade above D in this course.

## 12.0   – Extra Credit:

There will be two class wide opportunites for extra credit this semester:
1. Course Evaluations:
> If over 80% of the class completes the course evaluations provided by VCU, 10 points of extra credit will be rewarded to all. The dates for these evaluations are to be determined.
2. Voting:
> Election day this year is November 8nd. Any student who provides evidence of casting a ballot (in person or absentee) will receive 20 points of extra credit. This evidence must be

uploaded to Canvas by Nov. 11th at midnight. (Please do not use your *completed* ballot as evidence!)

Important deadlines:

- Deadline to register to vote, or update an existing registration, is Monday, October 17, 2022.
- Deadline to request an absentee ballot to be mailed to you is Friday, October 28, 2022. Your request must be received by your Registrar by 5:00 p.m.
- Deadline for in-person early voting is Saturday, November 5, 2022 at 5:00pm

For any questions about this policy or about casting a ballot, please contact me or go to [www.elections.virginia.gov](www.elections.virginia.gov)

## Health and safety

### Public health information
Health advisories, including information about COVID-19 testing, vaccination, supplies and other public health measures, can be found at the Safety and Risk Management website. Visit this site to stay informed about recommendations for VCU and surrounding communities. Additional links to health, wellness and safety information are on the Life at VCU webpage.

### Campus emergency information
Sign up to receive at VCU Alerts. It is essential to keep your information up-to-date within VCU Alert and to keep your permanent address and emergency contact information current in eServices. VCU uses a variety of communication methods to alert the campus community about emergency situations and safety threats. Learn more about types of alerts online. Know the emergency phone number for the VCU Police (828-1234), and report suspicious activities and objects.

### Managing stress
Students may experience situations or challenges that can interfere with learning and interpersonal functioning including stress, anxiety, depression, alcohol and/or other drug use, concern for a friend or family member, loss, sleep difficulties, feeling hopeless or relationship problems. There are numerous campus resources available to students including University Counseling Services (804-828-6200 MPC Campus, 804-828-3964 MCV Campus) which provides brief therapy treatment, University Student Health Services (MPC 804 828-8828, MCV Campus 804 828-9220) and the Department of Recreation & Well-Being (RecWell) (804-828-9355). 24 hour emergency mental health support is available by calling (804) 828-6200 or utilizing the National Suicide Prevention Lifeline (dial 988).

### Mandatory responsibility of faculty members to report incidents of sexual misconduct
All VCU faculty members are Responsible Employees as defined by University policy. Responsible employees have a duty to report alleged policy violations to the Title IX Coordinator. This includes incidents of sexual harassment, sexual assault, dating & domestic violence, stalking, sexual exploitation, and related retaliation. Responsible employees may report information through this form or by emailing titleix@vcu.edu. For confidential support, contact University Counseling Services, (804-828-6200 for MP Campus/804-828-3964 for MCV Campus) For more information, visit our Title IX webpage.

### Reading Days
No classes or exams are held on Reading Day (Friday, Oct. 21, 2022) except in instances where a student is involved in clinical and field placements, practica, co-ops, internships and other work-related experiential learning activities. Faculty may not give an

examination or an assignment on those days. Instead, students are encouraged to use these days for relaxation, study and/or review of class materials.

## Academic Success and Integrity

### VCU Libraries
Use [VCU Libraries](#) to find and access library resources, spaces, technology and services that support and enhance all learning opportunities at the university.

### Honor System: upholding academic integrity
The VCU Honor System policy describes the responsibilities of students, faculty and administration in upholding academic integrity. According to this policy, "Members of the academic community are required to conduct themselves in accordance with the highest standards of academic honesty, ethics and integrity at all times." [Students are expected to read the policy in full and learn about requirements](#).

### Early academic alerts
VCU's [Early Notification Program](#) supports student success. If as an instructor I am concerned about your academic engagement or performance in the first few weeks of class, you may receive a Progress Report email encouraging you to reach out to me after class or during student hours (office hours) for additional support. As a community of care, your [academic advisor](#), the [Writing Center](#), and the [Campus Learning Center](#) may also follow up to provide additional layers of support.

### Students with disabilities
VCU is committed to ensuring that all students maintain equal access to all aspects of the university, including educational experiences through the provision of reasonable accommodations and academic adjustments. In addition to being a requirement under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, this speaks directly to VCU's mission of inclusion, equity, and access. To receive accommodations or other disability-related supports, students must register with the Office of Student Accessibility and Educational Opportunity on the Monroe Park Campus (828-2253) or the Division for Academic Success on the MCV campus (828-9782). Students and faculty can visit the [Student Accessibility and Educational Opportunity website](#) and/or the [Division for Academic Success website](#) for additional information. Once students have completed the registration process, they will be provided with a letter of accommodation. They should provide a copy to their instructor(s) and attempt to schedule a meeting to discuss the implementation of accommodations as early in the semester as possible.

### Career Services
Looking for ways to tie what you are learning in your class to your future career or professional goals? [VCU Career Services](#) provides career planning services for all current VCU students and alumni. Career Services can help students with finding a work-study job on/off campus, resume writing, internship development, interviewing, preparing for

graduate school, networking, or job searching. Students are invited to attend career events and workshops, and schedule individualized career advising appointments.

## Registration, Attendance and Financial Responsibilities

### Class registration required for attendance
Students may attend only those classes for which they have registered. Faculty may not add students to class rosters. If students are attending a class for which they have not registered, they must stop attending.

### Attendance and consequences of poor attendance
The instructional programs at VCU are based upon a series of class meetings involving lectures, discussions, field experiences, special readings and reporting assignments. Therefore it is important for each student to be in attendance on a regular basis. A student who misses a class session is responsible for completing all material covered or assignments made during the absence.

- Students having attendance problems should contact their instructor to explain the reasons for nonattendance and to discuss the feasibility of continuing in the course. If the student has fallen so far behind that the successful completion of the course is impossible, the student should withdraw from the course before the end of the first 10 weeks of classes (by Oct. 28, 2022).
- If the student continues to miss class and does not officially withdraw from the course, the instructor may withdraw the student for nonattendance with a mark of "W" before the end of the first 10 weeks of classes or may assign an academic grade at the end. Withdrawals are not permitted after the end of the first 10 weeks of classes. For classes that do not conform to the semester calendar, the final withdrawal date occurs when half of the course has been completed.

### Withdrawal from classes
Before withdrawing from classes, students should consult their instructor as well as other appropriate university offices. Withdrawing from classes may negatively impact a student's financial aid award and his or her semester charges. To discuss financial aid and the student bill, contact the Student Financial Management Center (RAMQ) regarding the impact on your financial aid.

### Military short-term training or deployment
If military students receive orders for short-term training or for deployment/mobilization, they should inform and present their orders to Military Student Services and to their professor(s). For further information on policies and procedures contact Military Student Services at 828-5993.

### Students representing the university – excused absences
Students who represent the university (athletes and others) do not choose their schedules. All student athletes should provide their schedules to their instructors at the beginning of the semester. The Intercollegiate Athletic Council strongly encourages faculty to treat

missed classes or exams (because of a scheduling conflict) as excused absences and urges faculty to work with the students to make up the work or exam.

**Student financial responsibility**
Students assume the responsibility of full payment of tuition and fees generated from their registration, all charges for housing and dining services and other applicable miscellaneous charges. Students are ultimately responsible for any unpaid balance on their account as a result of the University Financial Aid Office or their third party sponsor canceling or reducing their award(s).

## Technology

**Computer and network use**
All students are expected to know and comply with VCU's Computer and Network Use policy.

**Student email standard**
Email is considered an official method for communication at VCU. Students are expected to check their official VCU email on a frequent and consistent basis (the university recommends daily) in order to remain informed of university-related communications. Students are responsible for the consequences of not reading, in a timely fashion, university-related communications sent to their official VCU student email account. Mail sent to the VCU email address may include notification of university-related actions, including disciplinary action. Students must read this standard in its entirety.

**Faculty communication about students**
VCU instructional faculty, administrators and staff maintain confidentiality of student records and disclose information in accordance with the Family Educational Rights and Privacy Act (FERPA). This means that VCU officials may disclose student record information without the consent of the student in certain situations. To support university operations, for example, VCU officials share information about students with other educational officials as necessary to perform their job duties. FERPA permits this disclosure to school officials who have a legitimate educational interest in the student information. In addition, VCU officials have obligations to report information shared by a student depending on the content of that information, for example, in compliance with VCU's policy on the duty to report. Unless FERPA permits a certain disclosure, VCU generally requires consent from a student to disclose information from their education record to another individual. You may find additional information on the VCU FERPA website.

## Important dates

Important dates for the current and future semesters are listed in the VCU Academic Calendar.