# 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:** Dr. Caroline Budwell

**Office**: Engineering East E4236

**Phone**: 804 828 0285

email: ccbudwell@vcu.edu

**Classroom:** Engineering East E1232

**Class website:** Blackboard

**Office Hours**: Tuesday / Thursday 11:00am – 12:00pm (or by appointment)

# 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 Structure:

Lecture hours/week – 3 Lab hours/week – 2

## 3.0 - 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

#### 4.0 - ABET Criteria Addressed:

- c. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- i. An ability to use current techniques, skills, and tools necessary for computing practice.

# 5.0 - 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

#### 6.0 - Textbook:

This course is using a mandatory zyBook textbook called: Programming in Java. Here are the steps to acquire the book:

- 1. Sign in or create an account at learn.zybooks.com
- 2. Enter zyBook code: <u>VCUCMSC255Spring2019</u>
- 3. Subscribe and join the appropriate section.

A subscription is \$58 and will last until May 18, 2019.

#### 7.0 - Class Schedule:

- Lecture: Tuesday/Thursday 9:30am 10:45am, Engineering East, E1232
- Lab: Wednesday 11:00am 12:50pm, Engineering East E4221

#### 8.0 - Evaluation:

#### **General Instructions:**

- 1. All projects and programming assignments must be uploaded to Blackboard on or before the due date specified. Only files submitted to Blackboard on or before the due date will be considered for grading. Requests to re-grade projects must be made with two weeks from the date the project grade is posted in Blackboard, requests after this time will be denied.
- 2. No assignments will be accepted late unless special permission has been given prior to the due date.

- 3. 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.
- 4. 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.
- 5. Personal computers/laptops/cell phones may be used in class only with the instructor's permission.
- 6. You will <u>not be allowed</u> to participate in labs without having completed the zyBook Challenge Activities due the night before the lab. Without having completed the activities, you will not have enough understanding to fully participate in the lab assignments.
- 7. 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.

#### **Grading:**

Category	Weight Percentage
Homework, Classwork, zyBook	15
Participation Activities and Labs	
zyBook Challenge Activities	10
Programming Projects	35
Final Project	10
Tests	15
Final Exam	15

### **Grading scheme:**

A: >= 90%

B: >= 80% and < 90%

C: >= 70% and < 80%

D: >= 60% and < 70%

F: < 60%

### **Campus emergency information**

What to know and do to be prepared for emergencies at VCU:

- Sign up to receive <u>VCU text messaging alerts</u>. Keep your information up-to-date. Within the classroom, the professor will keep his or her phone on to receive any emergency transmissions.
- Know the safe evacuation route from each of your classrooms.
   Emergency evacuation routes are posted in on-campus classrooms.

- Listen for and follow instructions from VCU or other designated authorities. Within the classroom, follow your professor's instructions.
- Know where to go for <u>additional emergency information</u>.
- Know the emergency phone number for the VCU Police (828-1234).
- Report suspicious activities and objects.
- Keep your permanent address and emergency contact information current in eServices.

# Class registration required for attendance

Students may attend only those classes for which they have registered. Faculty may not add students to class rosters or Blackboard. Therefore, if students are attending a class for which they have not registered, they must stop attending.

# Honor System: upholding academic integrity

The VCU Honor System policy describes the responsibilities of students, faculty and administration in upholding academic integrity, while at the same time respecting the rights of individuals to the due process offered by administrative hearings and appeals. 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." In addition, "To support a commitment to the Honor System, all members of the VCU community are required to:

- Adhere to the Honor System policy and its procedures;
- Report any suspicion or knowledge of possible violations of the Honor System;
- Answer truthfully when called upon to do so regarding Honor System matters.
- Maintain appropriate confidentiality regarding related to Honor System matters."

More information can be found at in the VCU policy library.

#### Important dates

You can view important dates for the semester in the academic calendar.

### **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), University Student Health Services (MPC 804 828-8828, MCV Campus 804 828-9220) and the Wellness Resource Center (804-828-9355). 24 hour emergency mental health

support is available by calling 828-1234 and asking to speak to the on-call therapist or utilizing the National Suicide Prevention Lifeline (1-800-784-2433).

Mandatory responsibility of faculty members to report incidents of sexual misconduct

It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct/violence (e.g., sexual assault, sexual exploitation and partner or relationship violence). This means that faculty cannot keep information about sexual misconduct/violence confidential if you share that information with them and they must report this information immediately to the university's Title IX Coordinator. In addition, department chairs, deans, and other unit administrators are required to report incidents of sex or gender-based discrimination to the university's Title IX Coordinator. Once a report is made, you will receive important information on your reporting options, on campus and off campus resources and remedial measures such as nocontact directives, residence modifications, and academic modifications. If you would prefer to speak with someone confidentially for support and to discuss your options for reporting, contact:

VCU's Wellness Resource Center
804.828.9355 | myoptions@vcu.edu | thewell.vcu.edu
Greater Richmond Regional Hotline (Community program)
804.612.6126 | 24-hour hotline
VCU's Counseling Services
804-828-6200

For more information on how to help, please <u>click here</u>. The Policy on Sexual Misconduct/Violence and Sex/Gender Discrimination, can be found in the <u>VCU policy library</u>. For more information about the University's Title IX process, please visit <u>equity.vcu.edu</u>.

# 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 or access the corresponding policies.

# Student conduct in the classroom

According to the <u>Faculty Guide to Student Conduct in Instructional Settings</u>, "The university is a community of learners. Students, as well as faculty, have a responsibility for creating and maintaining an environment that supports effective instruction. In order for faculty members (including graduate teaching assistants) to provide and students to receive effective instruction in classrooms, laboratories, studios, online courses, and other learning areas, the university expects students to conduct themselves in an orderly and cooperative manner."

Among other things, cell phones should be turned off while in the classroom. The Student Code of Conduct also prohibits the possession of or carrying of any weapon. For more information see <a href="http://register.dls.virginia.gov/details.aspx?id=3436">http://register.dls.virginia.gov/details.aspx?id=3436</a>.

# Student email policy

Email is considered an official method for communication at VCU because it delivers information in a convenient, timely, cost-effective, and environmentally aware manner. Students are expected to check their official VCU email on a frequent and consistent basis in order to remain informed of university-related communications. The university recommends checking email daily. Students are responsible for the consequences of not reading, in a timely fashion, university-related communications sent to their official VCU student email account. This policy ensures that all students have access to this important form of communication. It ensures students can be reached through a standardized channel by faculty and other staff of the university as needed. Mail sent to the VCU email address may include notification of university-related actions, including disciplinary action. Please read the policy in its entirety at the VCU Policy Library.

### Student financial responsibility

Students assume the responsibility of full payment of tuition and fees generated from their registration and 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).

### Students representing the university – excused absences

Students who represent the university (athletes and others) do not choose their schedules. Student athletes are required to attend games and/or meets. 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.

#### Students with disabilities

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, as amended, require that VCU provide "academic adjustments" or "reasonable accommodations" to any student who has a physical or mental impairment that substantially limits a major life activity. To receive accommodations, 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). Please also visit

the <u>Student Accessibility and Educational Opportunity website</u> and/or the <u>Division for Academic Success website</u> for additional information.

Once students have completed the registration process, they should schedule a meeting with their instructor (s) and provide their instructor (s) with an official accommodation letter. Accommodation letters will outline the required classroom accommodations. Additionally, if coursework requires the student to work in a lab environment, the student should advise the instructor or a department chairperson of any concerns that the student may have regarding safety issues related to a disability. Students should follow this procedure for all courses in the academic semester.

#### 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, visit the <a href="Student Services Center">Student Services Center</a> at 1015 Floyd Avenue (Harris Hall) and/or contact your financial aid counselor regarding the impact on your financial aid.

# 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 (policy.vcu.edu). 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: <a href="http://rar.vcu.edu/records/family-educational-rights-and-privacy-act/">http://rar.vcu.edu/records/family-educational-rights-and-privacy-act/</a>.