

School of Engineering and Applied Sciences
CS 180 Computer Science I
Summer 2022

Instructor: Guangming Xing

Office: COHH 4136

Office Hours:

<https://wku.zoom.us/j/95855981742>

I am free most of the time, email me for an appointment.

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Course format: online. Please use blackboard to gain access to vLab. All assignments, programming labs, and quizzes are administered through vLab. Each assignment, programming lab and quiz has a due date. You need to follow the class schedule.

Prerequisites: CS 170 with a grade of C or higher, or a satisfactory score on a CS placement test, or eligibility for MATH 117 (based on criteria developed by the Department of Mathematics).

Catalog Description

CS 180 Computer Science I. Four hours

Prerequisites: CS 170 with a grade of C or higher, or a satisfactory score on a CS placement test or eligibility for MATH 117 (based on criteria developed by the Department of Mathematics).

A study of the algorithmic approach to the analysis of problems and their computational solutions, using a high-level structured language. Labs are included in the course.

Course Objectives

After successfully completing this course each student

- is able to describe and explain the basic principles in object oriented design;
- is able to apply the basic principles in object oriented design;
- is able to develop meaningful algorithmic solutions for simple problems;
- is able to translate algorithms into readable and modifiable Java programs, and test and debug these programs;
- correctly uses basic control/data structures of the Java programming language. (including nested loops and arrays of objects);
- is able to develop solutions using at least two separate classes;
- is able to read and understand well-written code at a suitable complexity level.
- demonstrates basic writing skills in documenting a program solution.
- Enter CS290 well prepared

Textbook

Introduction to Programming and Data Structures ISBN: 978-1-7354724-0-9

by vLab Academy Technologies

<https://www.vlab.academy>

Available on Saturday, May 7, 2022.

Login to wku.blackboard.com

Go to “Content” and click “vLab”, you will be directed to vLab site. If you didn’t have an account with vLab, you will be asked to create an account first.

Please use google chrome to access the website.

To enhance your learning experience and provide affordable access to the right course material, this course is part of an inclusive access model called First Day. You can easily access the required materials for this course at a discounted price, and benefit from single sign-on access with no codes required in Blackboard. WKU will bill you at the discounted price as a course charge for this course.

It is NOT recommended that you Opt-Out, as these materials are required to complete the course. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. For more information and FAQs go to customer.care.bncollege.com.

Technology requirements

You do need a computing device with a keyboard to complete the course. This can be a laptop or a tablet with a keyboard. Chrome books will be enough. Please let me know if you have difficulties in getting the computing devices.

Assignments and Quizzes

There is no assigned meeting. You are given an assignment each week, and there is a quiz after each assignment. Most assignment questions allow three attempts. During the quiz, you will not be able to use the book as a reference, and only the last attempt for each question will be graded.

Grading

You will be graded on homework/lab assignments, quizzes, and a final. Your average will be computed using the following weights:

Weekly Programming Assignments 20%

vLab Assignments 30%

Weekly Quizzes 40%

Final Exam 10%

and your final grade will be computed based on your average using the following scale:

90-100 A

80-89 B

70-79 C
60-69 D
0-59 F

How to succeed in the class

- Regular practices are critical to success in this course.
- It is recommended that you spend at least 10 hours each week. When you have questions, ask your instructor or tutor asap.
- The textbook was built on a platform featuring interactive examples, make sure that you go through each example, and **understand** the solution. After going through the example, you should try to recreate the solution by yourself.
- Complete the exercises in each section as you go through the content.
- Review after each class period and explain to your peers what you have learned.
- Complete the assignments by individual efforts. Do not rely on tutors to come up with a solution(they shouldn't do that and it will hurt you).

Cheating policy

All work handed in for credit by a student is to be the work of that student alone. It is your responsibility to not cheat and to protect your own work from being copied by others. If you are caught cheating, you will receive an F in the course (for EVERYONE involved) in accordance with established University policy.

WKU Covid-19 Mask Statement

All students are strongly encouraged to get the COVID-19 vaccine. Out of respect for the health and safety of the WKU community and in adherence with CDC guidelines and practices of all public universities and colleges in Kentucky, the University requires that a cloth face covering (reusable or disposable) that covers both the nose and mouth must be worn at all times when in public areas within all buildings. Students must properly wear face coverings while in class regardless of the room size or the nature of the classroom activities. Students who fail to wear a face covering as required will be in violation of the WKU Student Code of Conduct and will be asked to comply or will face disciplinary action, including possible dismissal from the University. Accommodations can be requested in special cases through the Student Accessibility and Resource Center (SARC): 270-745-5004 (voice), 270-745-3030 (TTY), or 270-288-0597 (video).

All students must immediately report a positive Covid-19 test result or close contact with a person who has tested positive to the Covid-19 Assistance Line at 270-745-2019. The assistance line is available to answer questions regarding any Covid-19 related issue. This guidance is subject to change based on requirements set forth by public health agencies or the office of the governor. Please refer to the Healthy on the Hill website for the most current information. www.wku.edu/healthyonthehill

Title IX Misconduct/Assault Statement

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and

Discrimination and Harassment Policy (#0.2040) at https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf.

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

*Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and **MUST** report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.*

Ogden Student Course Attendance Statement

The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. **Active participation requires you to attend.** Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any absences as soon as practical. **Your instructor may incorporate class attendance/participation as part of the grading criteria.**

ADA Accommodation Statement

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at

270-745-5004 [270-745-3030 TTY] or via email at sarc.connect@wku.edu . Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

Changes to the syllabus

I reserve the right at any time during the semester to make changes to the syllabus. Students will be appropriately notified of these changes.

Tentative Schedule

We have Quiz on every Wednesday except Week 8(on Friday), Week 9(no quiz).

Each quiz is 30 minutes, and you can take any time on the quiz day.

Week 1: 05/09 to 05/13	Chapter 2: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
Week 2: 05/16 to 05/20	Chapter 2: 2.9 Wednesday Quiz 1 Chapter 3: 3.1, 3.2, 3.3, 3.4
Week 3: 05/23 to 05/27	Chapter 3: 3.5 Wednesday Quiz 2 Chapter 3: 3.6, 3.7, 3.8, 3.9
Week 4: 05/30 to 06/03	Chapter 3: Review Wednesday Quiz 3 Chapter 4:
Week 5: 06/06 to 06/10	Chapter 4 Wednesday Quiz 4
Week 6: 06/13 to 06/17	Chapter 4 Wednesday Quiz 5
Week 7: 06/20 to 06/24	Chapter 4b: Wednesday Quiz 6
Week 8: 06/27 to 07/01	Chapter 4b: Friday Quiz 7
Week 9: 07/05 to 07/08	Chapter 5
Week 10: 07/11 to 06/15	Chapter 5 Wednesday Quiz 8

	Chapter 6
Week 11: 07/18 to 06/22	Chapter 6
Week 12: 07/25 to 06/29	Chapter 6
Week 13: 08/01 to 08/04	Chapter 7