

# CS 170 Problem Solving and Programming

## Spring 2020 – Syllabus for **Section 700 only**

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**Office Hours:** 12:30pm-1:30pm on Monday and Wednesday and 09:00am-10:00am on Tuesday.

**Office Location:** 2112 COHH.

**Blackboard:** **This class is not offered on Blackboard. Check the website below.**

**Class Web Page: https:** Please check the course webpage (<https://www.vlab.academy>) during the semester to see the latest updates, uploaded materials and example and the class announcements. If you have trouble accessing it or find a broken link, then please let me know as soon as possible. The syllabus, schedule, and class material will be posted there during the entire semester. This site is subject to change as necessary.

**Class Prerequisites:** Eligibility for MATH 116.

This course covers introductory skills in computer programming using Python programming language. The course assumes NO programming experience, but you should already have basic computing skills, like being able to copy files from one place to another, renaming files, making folders. The course may not be counted toward a computer science major or minor.

**Class and Lab Meeting:**

This is an online class.

**Required Textbook and Software:**

- **Required Textbook:** This class requires the student to obtain access to the website: <https://www.vlab.academy> (Please, use **Google Chrome** to access it). The website provides an interactive book called “**Introduction to Programming (Python 2020)**” and a group of tools that can help the student to practice the class exercises and labs. The website allows the student to read the book’s contents while interacting with it, such as, checking the examples’ output, modifying the provided code, answering exercises, writing lab code, and checking grades. Everything will be done online and in one place.

**On Friday before the class starts, you will receive an invitation email (sent to your WKU Topper email)** from my email above (Check spam if you can’t find it) about joining the course website. If you enroll in the class after the semester starts, please contact me (through email) to gain access to the course materials.

**This course participates in The WKU Store’s Day One Access program. Which is designed to provide immediate access to required materials for all students at prices cheaper than any other option.** The required textbook will be delivered to you automatically by enrolling in this course unless you choose to opt-out. The WKU Store will automatically bill your Student Billing account, and you will see a charge appear under this Term along with Tuition and Fees (“Account Summary by Term” under the Student Services tab). It will be

labeled as “The WKU Store Purchases”. This will happen after the Add/Drop period. For more information on this program or to opt-out of participation, go to the following information page, <http://www.wkustore.com/t-day-one-access.aspx>.

- **Software: We are mainly going to use the class’s website to write, test and upload all the work.** However, you have the freedom to download and install a local copy of python on your machine to test your code. You can use Python 3.4.2. It is free and can be downloaded through the following [link](#).
  - **Note:** Apple Macintosh computer owners, be careful here. Your device comes already with Python 2.x. You **need** to install Python 3.4.2
  - **Extra Software:** If you choose to install Python on your machine, then I recommend using **WingIDE 101** as an Integrated Development Environment (IDE) to write, test and debug your code. It does not crash as often as the Python IDE provided with the Python interpreter (IDLE). [Here](#) is the link to the page where you can download it. There are versions for Windows, Linux and OS X there.
    - **Note:** Be careful to get the 101 version of WingIDE - they also have professional and shareware versions which are not free.

### Class Outcome

By the end of the class the student will be able to:

1. To learn basic algorithmic problem-solving techniques (decision structures, loops, functions, etc.)
2. To be able to design, document, implement and test solutions to programming problems
3. To acquire an understanding of computer architecture and data representations (variables, representation of numbers and character strings)
4. To be able to use and understand objects used in programming

These outcomes are measured by projects, homework exercises, lab work, and exams.

### Expected Efforts:

- **Data collected from a survey filled by previous students show that a student who spent at least 6 hours per week outside the class on this course got at least B.**

### Student Evaluation

Lab Assignments	25%
Homework	10%
2 Projects	20%
Midterm Exam	10%
2 Lab Tests	20%
Final Exam (Comprehensive)	15%

Extra points will be given during the lectures, labs, projects assignments and exams.

- Midterm Exam: You can take it between Saturday, March 14 and Monday, March 16, 2020 (Based on your availability).
- Final Exam (Based on the registrar final exams' schedule, which can be found [here](#))
  - You can take it between Saturday, May 9 to Monday, May 11 (Based on your availability).
- **The midterm and the final exam are proctored exams and must be taken in a testing center. They two tests are paper version and they are closed books. Before each test, I will provide you with test instructions and how to register for it in a testing center close to your location.**
- **WKU DELO Testing Centers does not charge a fee for distance learning course exams; however, the WKU Remote Proctoring Network includes proctor locations who charge for the proctoring services as well as those who do not charge. Students are responsible for payment of any proctoring fees if they choose to use a proctor who charges a fee for this service. Students are also responsible for any additional fees that might be associated with the use of a particular proctoring site, such as parking fees.**

\* The 2 Lab Tests will be taken from the home (you don't have to go to any testing center). The tests are protected by the Vlab system. You should work alone and should not share your code with anyone. Tests are opened books & notes:

- Lab Test 1: Friday, March 6, 2020 (Between 6:00 pm – 7:00 pm Central times).
- Lab Test 2: Friday, May 1, 2020 (Between 6:00 pm – 7:00 pm Central times).

#### **Class Grading Scale:**

90-100% = A  
60-69.9% = D

80-89.9% = B  
Below 60 = E

70-79.9% = C

#### **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

## **Class Specific Attendance Policies**

**This is an online class, students are expected to check their WKU and VLab website daily to be up to date with the class requirements, activities, and announcements. This is an online class and you are required to be on track all the time.** If you miss a test you are responsible for contacting me within one week of the absence. If the absence is excused and you have documentation for the absence, a credit will be given for attendance or make up for the missed test will be arranged without penalty. **If you do not contact me within the time limit (one week), your absence will be counted as unexcused. For an unexcused absence, makeup may be allowed, with a 40% penalty of your possible grade.**

### **Excused absences are the following:**

- Illness of the student or serious illness of a member of the student's immediate family.
- The death of a member of the student's immediate family.
- Trips for members of student organizations sponsored by an academic unit, trips for University classes, and trips for participation in intercollegiate athletic events. When feasible, the student must notify the instructor prior to the occurrence of such absences.
- Major Religious Holidays. Students are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays **no later than the last day for adding a class.**
- Written documentation, a paper copy that we can keep, will be required for all excused absences.

Missed announcements, instructions, assignments, etc. due to absence will not constitute acceptable reasons for failing to meet subsequent deadlines. It is the student's responsibility to learn the content of the missed classes and to initiate arrangements with the instructor for making up the work.

### **Makeup Policy**

A student who missed a test (lab or lecture) will be allowed to make it up if the following conditions are met:

- **You have to contact me within one week after the day the test was scheduled to be taken.**
- **The reason for the absence must be satisfactorily documented** (death in the family, illness serious enough to necessitate a visit to a doctor, an official university trip, etc.)
- If the absence is NOT excused, a makeup exam MAY be allowed with a 40% penalty of your possible grade.

### **Plagiarism / Cheating**

- Students are expected to do their own work on tests, homework, individual lab works, and program assignments. Cheating is considered a serious offense by the University. Any form of "seeking an unfair academic advantage" is considered cheating.
- **All the assignments are individual work.** That includes program implementation, individual lab parts, lab tests, lecture tests, and homework. You can also talk to me about individual work.

- Learning to program is an individual task; you are expected to implement the **programming assignments** on your own. One person taking any part of another person's work (with or without their permission) and claiming it as his or her own is plagiarism and will not be tolerated. Any occurrences will be dealt with according to the University policy stated [here](#). This policy allows for a minimum penalty of zero on an assignment AND a warning letter in the student's file. Repeat offenders (in ANY class) face increasing penalties with each offense.
- **The only way to LEARN programming is to DO programming.** You may think you have gotten the grade very easily by using someone else's work if the copying is not detected, but you have lost that much experience and will be that much further behind on the next assignment.
- **If you would agree that "he/she and I worked together" on implementing a program, then we would consider it cheating.**
- If you and your roommate share a computer, be VERY careful. Your work MUST be your OWN. Discuss your design or algorithm or logic in GENERAL terms, but write your own design, your own test cases and your own code, your own implementation. Advice: if it makes you uneasy, then it's probably NOT ok. When in doubt, ASK me before submitting work.
- **Do not show your source code (implementation) to ANY other student.**
- It may seem an easy way to "show them how it's done" or "help them understand the problem". It is a recipe for trouble. It is a temptation to copy the other person's work without figuring out how to solve the problem.
- It is just as dishonest to allow someone to represent your work as their own as to do the reverse. This also means YOU are responsible for making sure that your code does not accidentally fall into someone else's hands. Don't leave memory sticks or printouts in a lab; don't leave source code files on a hard drive somewhere. If someone else finds your code and turns it in, YOU are responsible too!
- **Do not post your code on the Internet.** This is an open invitation for someone else in the class to copy it and turn it in as theirs!
- If you get help from a person who is not in the class, be extremely careful. Do not take code from anyone! Make sure the help you get is using the material covered in THIS class. You can be penalized in this situation also. If you work with a tutor, make sure you understand what the tutor is telling you. If they just "transplant" code into your program, (meaning either they wrote it for you or they dictated while you typed) you are being cheated of the understanding you need to do the next program and to take the Lecture tests. This is also considered cheating.
- If you cheat on an assignment, you are cheating yourself. You are not getting the experience of working the problem out on your own, and you are not really learning the knowledge you are supposed to get from the assignment. This means that you are that much further behind on the next assignment, on the quizzes and tests. You are hurting your chances of getting the grade you want from the class.
- If you are enrolled in this class, you are NOT allowed to be a tutor (either paid or unpaid) in this class. This has caused problems in the past and will not be allowed.
- If you get stuck at a point in the assignment, that is when you ask for help from the approved sources, TAs or me. Googling the problem is NOT the best way to find a solution! All assignments are designed to use the material covered in class. If you cannot figure out how

to solve the problem with that, then it shows that there is something you do not understand about that material. It is a red flag to start asking questions! If you find something on the Net which 'solves the problem' but you do NOT understand it, you have cheated yourself of the understanding you need. When the next quiz or test or programming assignment comes along, you will not have the knowledge you need.

- All programs will be checked by plagiarism detection software. This software works across ALL sections of the class.

### **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](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.

### **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](mailto: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.

### **Electronic Communication**

The best way to communicate in this class is through email:

- For a prompt response, type the **CS170 Section 780** in the subject line of the email. (Replace X with your section number).
- I check my email several times a day during the weekdays, Give me at most **48 hours** to respond to your email.
- **I don't check my email on Saturday.**
- Class announcements other than those published on the class schedule are done through email, please check your email regularly! If you don't want to use your University account, forward it to somewhere you DO read. YOU are responsible for all emails sent to your

University account. Check your email often!

Please check the course webpage (<https://www.vlab.academy>) during the semester to see the latest updates, uploaded materials and example and the class announcements. If you have trouble accessing it or find a broken link, then please let me know as soon as possible. The syllabus, schedule, and class material will be posted there during the entire semester. This site is subject to change as necessary.

### **Withdrawing from Class**

If you decide to leave the class, **please** do it officially. There is a date on the Academic Calendar past which you are not allowed to drop for academic reasons, **Thursday, April 9<sup>th</sup> 2020**. We'd much rather give a **W grade than an E**. Don't just stop coming to class - **you WILL get an E!** Take care of your transcript!

**All policies associated with this course are subject to revision. Reasonable notification will be provided to students before any major changes are made.**