

Software Development Syllabus

Bentonville Virtual High School
Department of Computer Science

Contact Information

Instructor(s): Darrin Brock

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Office Hours: 10:40am – 12:00pm

Course Information

Course Description and Purpose

Welcome to Programming I, a course that continues the study of computer programming concepts with a focus on the creation of software applications employing procedural programming techniques..

Units of Study

Module 1

- Introduction to Procedural Programming
- Introduction/Review of Python
- Computational Thinking

Module 2

- Variables & Functions
- Mathematical Operators
- Selection Structures
- Python Libraries

Module 3

- Iterative Loops
- Recursion
- APIs
- IDEs

Fall Semester Exams: Dec. 17-19

Module 4

- Functions
- Modularity
- Data Analysis

Module 5

- Computer Vulnerabilities
- Cryptography
- Careers in Programming

Module 6

- Capstone project
- Computational thinking
- Program development

Spring Semester Exams: May 22-27

Course Policies and Expectations

Email Communication

Please email me with any questions or concerns. I do my best to respond within 24 business hours. I have made a commitment to my family as well, so when I leave work, I do not respond to emails outside of work hours. Please be considerate of this. I will get to your email first thing in the morning though. (Unless there is an emergency)

Attendance and Participation

I follow school policy on attendance. I hold each student to the expectation that they participate in class activities and always attempt the assignment set before them.

Classroom Expectations

1. Camera on and student visible when coming to each Google Meet.
2. Be actively engaged at all times. Take notes!
3. Be respectful to classmates and teacher.
4. Be on time and prepared for class.
5. There is absolutely NO tolerance for cheating.
6. Actively work towards understanding the underlying principles of programming.
7. Let us have FUN!

Late work, Missing work, and Grading

Late/Missing Work: Late work will be accepted until we have tested (or the final module assignment is due) on the NEXT unit. For example: Sally Student is missing an assignment from Unit 1, and the class just finished everything in Unit 2. She can no longer turn in that missing assignment. It will become a permanent zero (Z).

Testing: Students will be allowed to retest. They will be required to complete the remediation assignment for that unit before allowed to retest.

Make up Work: If a student misses, they will need to check google classroom for the day's assignment. Assignments are almost always posted there. If they are not posted, please check with me on what was missed or needed to make up the work.

Grading Policy: Student's course grades will be determined entirely by their evidence of learning course standards (100% weight). Students may also receive practice/homework grades as feedback to track their progress in this course (0% weight).

Students will receive feedback in HAC (Home Access Center) on the achievement of learning habits at least quarterly. Learning habits assessed will be time management and engagement in learning. Students will receive marks of either DC (Demonstrates Consistently), IC (Progressing, but Inconsistent), or NY (Not Yet, Rarely, or Not Observed). These do not affect their percentage grade in the course.

"Code is like humor. When you have to explain it, it's bad." – Cory House