Cyber Literacy

Course Syllabus

Instructor Information
Name: David Moon
Email: dmoon@northidahostem.org

Course Description

Cyber Literacy is a hands-on curriculum that builds a strong cyber foundation for middle school students. The course introduces students to cyber by blending robotics, programming, electricity, and elements of liberal arts. Students will learn about the opportunities, threats, responsibilities, and legal constraints associated with operating in cyberspace. Throughout the course, students learn the basics of electricity, python programming, and networking as well as develop critical thinking skills. Cyber Literacy lays a foundation for further exploration into STEM and Cyber related topics.

Curricular Information

Required Reading: iRobot by Isaac Asimov, PDF copy will be distributed through Google Classroom

Additional Resources: NA

Supplies Required for this Course: NA

Daily Time and Effort Expectations: Students will be following tutorials to learn skills, and then using those skills to make programs of their own. There is a substantial amount of independent self-paced work. Students are expected to manage their time and stay on task.

Google Classroom: All assignments will be accessed and submitted through Google Classroom.

Course Schedule

Topics	Major Assignments	Timeframe
Electricity	*Introduction to electrical components and circuits*	*2-3 weeks*
Programming	*Various programming tutorials and projects using python and microbit boards*	*3-4 weeks*
	Various programming tutorials and projects using Arduino	*1-2 weeks*

	boards	
Robotics	*Programming tutorials and projects using the Cyberbot and python*	*5-6 weeks*
Humanities and Liberal Arts Related to technology	*Reading articles related to Artificial Intelligence and cybersecurity*	*Throughout the semester*
	Reading Isaac Asimov's book iRobot	

Course Evaluation:

The percentage breakdown for semester grade calculation will be as follows:

Skills Practice……..35%

Skills Practice will consist of individual assignments and daily work.

Assessments……50%

Assessments will include quizzes and final programs.

Final Exam or Project……15%

The Final will consist of the creation of a final robotics project using given criteria.

Grading Scale

Grade	***Percentage***	***Proficiency descriptors***
A+	**97-100**	*Assignments are fully completed in a timely manner and of excellent quality; the student shows superior level of initiative and seeks to go beyond the minimum requirements. Errors are rare or nonexistent.*
A	**93-96**	
A-	**90-92**	
B+	**87-89**	*Assignments are fully completed in a timely manner and typically of above average quality; the student is conscientious and meets all requirements with few errors.*
B	**83-86**	
B-	**80-82**	
C+	**77-79**	*Assignments are generally complete (met minimum requirements) and of good quality; assigned tasks have occasional errors.*
C	**73-76**	
C-	**70-72**	
D+	**67-69**	*Assignments are generally incomplete or of poor quality; the student makes frequent errors in work.*
D	**63-66**	
D-	**60-62**	

F	**0-59**	*Work is poorly done, if at all. Overall performance is inadequate to pass the course.* *Note: No name = No credit* *Illegible = No credit* *Late = No credit (*will STILL complete and submit the assignment)*

Classroom Policies and Expectations: Students are expected to adhere to the classroom rules set by the teacher in their assigned classroom, and in accordance with expectations found in the North Idaho STEM Charter Academy Student Handbook and Technology Policy.

Academic Honesty Code of Conduct:
"On my honor, I will maintain the highest possible standards of honesty, integrity, and personal responsibility. This means I will not lie, cheat, or steal, and as a member of this academic community, I am committed to creating an environment of respect and mutual trust."

Violations of this code include, but are not limited to:

- Copying another person's work or allowing your work to be copied (plagiarism)
- Allowing someone other than yourself to complete work in your name
- Using unauthorized assistance on an assessment or assignment
- Falsifying or manipulating data
- Submitting the same work for multiple courses without instructor's permission
- Giving answers to other students
- Lying to an instructor
- Tampering with or destroying the work of another student
- Using responses found on the internet, or created with the use of technological means (ex artificial intelligence, etc)

Any outside sources used on an assignment should be referenced and cited appropriately.

Consequences for Academic Dishonesty: At the instructor's discretion, the student **will** lose partial or full credit for the assignment. The student will be on notice that the incident will be recorded in the gradebook and his/her parent(s) will be informed. Future academic dishonesty incidents will result in a grade of zero for the assignment, a meeting with the principal, and possible loss of credit, suspension, or expulsion. Direct copying is plagiarism. Only original work may be submitted for this (and any other) academic course. If you have any questions about avoiding plagiarism, please visit the **OWL at Purdue's "Avoiding Plagiarism" web page.**