COURSE TITLE: COMPUTER SCIENCE PRINCIPLES (11.47100)

TEACHER: Ms. Felicia Clarke ROOM# 248

AVAILABILITY: Appointments only (Parent / Student)

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PATHWAY: Information Technology Career Cluster

PREREQUISITES:
Computer Science Principles is the second course in the pathways Programming and Computer Science in the Information Technology Cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology.

COURSE DESCRIPTION AND GOALS:
How can computing change the world? What is computer science? Engage your creativity, demonstrate and build your problem solving ability all while connecting the relevance of computer science to the society! Computer Science (CS) Principles is an intellectually rich and engaging course that is focused on building a solid understanding and foundation in computer science. This course emphasizes the content, practices, thinking and skills central to the discipline of computer science. Through both its content and pedagogy, this course aims to appeal to a broad audience. The focus of this course will fall into these computational thinking practices: connecting computing, developing computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating. Various forms of technologies will be used to expose students to resources and application of computer science. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready.

COURSE CURRICULUM CONTENT:
COURSE STANDARDS
IT-CSP-1 Demonstrate employability skills required by business and industry.
IT-CSP-2 Create digital artifacts that foster creative expression including programs, digital music, videos, images, documents, and combinations of these such as infographics, presentations, and web pages.
IT-CSP-3 Apply abstractions in digital data to explain how bits are grouped to represent higher-level abstractions such as numbers and characters.
IT-CSP-4 Design and create computer programs to process and extract information to gain insight and knowledge.
IT-CSP-5 Develop, express, implement, and analyze algorithms analytically and empirically.
IT-CSP-6 Create programs that translate human intention into computational artifacts including music, images, visualizations, and more while exploring the concepts, techniques and development used in writing programs.
IT-CSP-7 Gain insight into the operation of the Internet, study characteristics of the Internet and systems built upon it, and analyze important concerns, such as cybersecurity.
IT-CSP-8 Develop a logical argument from the many ways in which computing enables innovation and our methods for communicating, collaborating, problem solving, and doing business, and analyze the potential benefits and harmful effects of computing in the way people think, work, live, and play.
IT-CSP-9 Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events

Employability:
Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry.

INSTRUCTIONAL MATERIALS and SUPPLIES
Wide Rule Spiral Notebook, Pen or Pencil, & 16GB USB Drive

Assessment: The grading scale used will cover nine weeks for each grading quarter. All grades will be updated using the online grading system, Infinite Campus. In-class grade updates will be provided at the instructor's discretion. Students are responsible to keep track of grades and assignments. The online tool used in this course will be Schoology and Cisco Academy, which will track the student's assignments and classwork.

EVALUATION and GRADING

ASSIGNMENTS:	**GRADING WEIGHT:**	**GRADING SCALE:**
Class labs / Homework	**Formative 60%**	**A: 90 and above**
Projects	Assignments	**B: 80-89**
Discussion Questions	Daily Class Activities	**C: 74-79**
Skilled-Based Assessment	Projects, Skilled-based Assessments	**D: 70-73**
Unit Tests	**Summative 40%**	**F: 69- and below**
Final Exam	Performance	
	Objective	
	Exams	

Evaluation:
The majority of our material is generated on the computer. Students will take computerized exams, quizzes and submit projects online for a formative and/or summative evaluation. All assignments given can identified online using Schoology and/or Cisco Academy. Parents may request their own (Schoology) access codes to review students' progress and follow daily assignments.

Grades: Skilled-Based Assessment, Discussion Questions, and projects will be online; however, tests will be completed in class or at school. Students will earn points for the following:

- Classwork 10%
- Projects 40%
- Skilled-Based Assessment / Quizzes 20%
- Unit Tests 30%

Classwork: All classwork will be assigned periodically. Students will have adequate time to complete all assignments during the lab. Projects will be assigned as a group and/or individual. The projects will have deadlines and posted online for the parents to review with their children. We highly encourage the students to stay on task during lab and class to offset any incomplete assignments.

Coursework Requirements:
All submitted assignments, must have a document header included. Any assignment submitted without one will either be rejected, and/or have 5 points deducted from the final grade of the assignment. It is imperative that students identify their work. The structure of an approved document header is as noted:

First Name, Last Name (Nicknames are not allowed)
Course Title (this information can be found on the first page of this syllabus)
Submission Date
Assignment Title

Chapter Labs & Homework:
Each Chapter will have hands-on labs/homework to supplement the students' learning. Chapter Lab/Homework Assignments will be assigned with each chapter. All assignments must be submitted with a document header according to the assignment instructions. Students are responsible for submitting all assignments accordingly and by the due date. Assignments counts towards student's skills and participation grade. Most class labs are a combination of hands-on and written exercises. It is essential that your work be well written, grammatically correct, and free of typographical errors and misspellings.

Chapter Tests
There will be weekly test given to assess student learning. These test will either be take in class or given as a take home assessment. Student will submit these weekly quizzes according to the teacher instructions. Chapter test are given at the end of every chapter covered and taken online. The student will be given ample time to take the online chapter tests. All test must be taken during this scheduled time. There will be no make-ups for online chapter tests. Each week, students can expect to take a quiz to test for comprehension of content material taught. Quizzes are normally open notes and will be either taken in class or given as a pop quiz.

Project:
A project will be required with each chapter. Students will research chapter related topics. The project topics will be provided for students in the chapter folders located in Schoology.

Skill-Based Assessments/Quizzes:
A skill-based assessment/Quiz will be given at the end of every Unit. This will assess students' technical knowledge of curriculum material presented from each chapter.

Discussion Questions:
There will be weekly discussion question postings for each chapter covered. Students will be given a topic related to the chapter covered during the week. Students are to complete the Discussion Questions by the due date.

Final Exam:
Students will be given a comprehensive exam at the end of the semester. The exam will cover all topics and activities/labs taught during class. The Final exam is a closed book/notes exam. The final exam will be in class, If the student is to miss the final examinations, the student must inform the teacher prior to the exam date/time and supply an official excuse.

EXPECTATIONS and ADDITIONAL REQUIREMENTS / RESOURCES

- Complete Daily classwork
- Participate class discussions
- Participate as a team player
- Problem solve and accept challenges
- Must utilize the internet

Cheating:
It is expected that students will conduct themselves with integrity. If you cheat or assist others in cheating, you violate a trust. Cheating includes, but is not limited to, the following:

- copy files or lend your storage device to another student
- copy answers on exams or glance at nearby exams
- turn in assignments that have been used in other classes

If you cheat, some or all of the following actions will be taken:

- You will receive a lower point score, or no points, for that particular assignment or exam.

Best Practices for Success:

- Pay attention in class – assignments are explained in detail and usually with an example.
- Review assignments with others before submitting to ensure clarity
- If you do not have access to technology at home please notify the teacher, this way it is logged for future homework assignments.
- Be resourceful and take initiative.
- Try to stay organized – being on time and prepared is a great start.

Cell Phone Policy:

- Please review the RCBOE Bring Your Own Technology (BYOT) policy.
- Electronic devices must be registered with the media center.
- Only use your devices for classroom activities, if found using your cell phone without permission, you are in violation of this policy.
- Headphone use is only allowed at the teacher's discretion.

Food and Drink Policy: Students may not eat or drink near the computers.

Expectations: Be prepared; Be on time; Be respectful all the time

- Students will enter the classroom with instructor at the door. Students will review and know where the fire drills and emergency procedures are posted (on exit door).
- The teacher will take role during the induction activity/exercise to allow students a chance to prepare for the lesson. Daily learning objectives will be posted on the promethean board upon entry into the classroom.
- Students will be able to take a seat where they choose; however, this will be their seat throughout the year unless teacher instructs them to move. Once seated, students will review classroom instructions written on the promethean board, gather the needed material as required.
- Students are highly encouraged to go to the restroom before class begins. Once class starts, students are not permitted to leave during the first and last 15 minutes of class (School policy) lecture unless in an emergency.

Disciplinary Consequences:

1st Offense – Student will receive a verbal warning from the instructor of an unnecessary occurrence/incident, act or classroom disruption. All incidents will be recorded in the student's record in Infinite Campus and the parent / guardian will be contacted.

2nd Offense – Student will be reminded of the 1st offense and the parent / guardian will be contacted to request a parent/teacher conference.

3rd Offense – Teacher, student and parent will have a conference with the administration to discuss further actions.

Fire Safety Rules: All rules are posted in the front of the classroom by the door. In case of a fire drill students will move out of the classroom as a group to a predesignated location. No student is allowed to leave the premises once outside. All students will wait for the teacher to take a headcount outside before returning back to the classroom. In case of a substitute, please take the class roster during the drill.

Materials/Supplies: Each student is required to bring at the minimum a 16GB Flash drive, notebook and paper, with pen/pencil.

- Be prepared, review posted class material on promethean board.
- Students' are required to bring a daily journal/notebook and pencil/pen to class.
- Students' study guides are online and available daily. Each student has the opportunity to review the study guides before class.
- Students are required to bring a flash drive to save all classwork.

Resources: Canvas Learning Management System and Code.org CSP Curriculum

Absent: You must complete all assignments. Expect to take exams as soon as you return to class (prepare during absence). All assignments are online and the students will have access to classwork via the Internet. If you know you are going to be absent and you do not have a computer at home, please notify the teacher.

Unexcused absences on the due dates of the tests, quizzes, projects, presentations, and so forth will result in a zero. If you have an excused absence, please provide the teacher with documentation on the first day returning to school.

Tardiness: The student must have a tardy pass to enter into the classroom.

Messages: The student has the responsibility to ensure he or she reads all messages and documents posted or distributed. We will be using minimum paper for this class and most of our communications will be electronic "online".

Computer Science Principles Syllabus Parent Signature Form
Please detach and return

Student: _____ (please print) _____ (signature)

Parent:_____(please print) _____ (signature)

Contact Information: _____(day phone)_____(evening phone)

Email:_____(I prefer this form of contact)