Course Information Sheet

Course Name: Computer Science I

Instructional Material: CompuScholar

Software (if required):

Semester One:

Week	Topic
1	Introduction to Computer Science I
2	Digital Citizenship and Acceptable Use Policies
3	Problem Solving and Computational Thinking
4	Algorithms and Program Design
5	Variables, Data Types, and Expressions
6	Introduction to a Programming Language
7	Sequential Programming
8	Conditional Statements (If-Else)
9	Relational and Logical Operators
10	Iteration and Loops (For, While)
11	Functions and Procedural Abstraction
12	Debugging and Error Handling
13	Data Representation and Number Systems (Binary, Decimal)
14	Introduction to Data Structures: Lists and Arrays
15	Basic Input and Output (I/O)
16	File Operations
17	Program Documentation and Style
18	Mid-Term Review and Examination

Semester Two:

Week	Topic
19	Object-Oriented Programming (OOP) Concepts
20	Classes and Objects
21	Inheritance and Polymorphism
22	Introduction to Software Development Life Cycle
23	User Interface (UI) Design and Implementation
24	Cybersecurity Fundamentals and Practices
25	Networking Concepts and Protocols
26	The Societal Impact of Computing
27	Ethical Issues in Computer Science
28	Collaborative Programming and Version Control
29	Capstone Project: Planning and Design
30	Capstone Project: Development and Coding
31	Capstone Project: Testing and Refinement
32	Capstone Project: Documentation and Finalizing
33	Project Presentations and Peer Review
34	Career Exploration in Computer Science
35	Final Review
36	Final Examination