

	AP Computer Science Principles									
	Unit 1 Digital Information	Unit 2 The Internet	Unit 3 Intro to App Design	Unit 4 Variables, Conditionals, and Functions	Unit 5 Data	Unit 6 Lists, Loops, and Traversals	Unit 7 Parameters, Return, and Libraries	Unit 8 Cybersecurity and Global Impacts	Unit 9 Create PT Prep	Unit 10 Algorithms and AP CSP Exam Review
Objective(s) / Essential Question(s)	end(8/14)	8 days (end 8/25)	7 days (end 9/3)	18 days (end 9/30)	18 days (end 10/2)	14 days (end 10/30)	3 days (end 11/3)	mixed with with Unit 8; 10 days (end 12/2)	mixed with Unit 8; 9 days (end 11/23)	12 days (end 12/18)
	Objective: Explain how computers represent information with bits, binary, text, images, and compression, and consider tradeoffs of digital information. Essential Question: How can information be represented digitally, and what tradeoffs result?	Objective: Explain how networks and the Internet communicate reliably using addresses, protocols, routing, packets, and redundancy. Essential Question: How does the Internet reliably move information from one device to another?	Objective: Design and build simple event-driven apps while using collaboration, user-centered design, testing, and debugging. Essential Question: How does a development process help us create apps that meet users' needs?	Objective: Use variables, expressions, conditionals, and functions to build programs that respond to user input and make decisions. Essential Question: How do programming structures help us build more complex and useful apps?	Objective: Organize, clean, visualize, and analyze data to identify patterns, draw conclusions, and understand limitations and bias. Essential Question: How can data be used to create information and support decisions?	Objective: Use lists, loops, and traversals to store and process collections of data and develop more complex programs. Essential Question: How can data abstraction and iteration make programs more powerful and manageable?	Objective: Use parameters, return values, procedures, libraries, and APIs to create reusable abstractions and manage program complexity. Essential Question: How can procedural abstraction make code more reusable and easier to manage?	Objective: Evaluate beneficial and harmful impacts of computing while examining privacy, security, data collection, bias, and ethical concerns. Essential Question: How can we use computing innovations safely, responsibly, and ethically?	Objective: Plan, develop, test, document, and submit an AP Create Performance Task program that demonstrates required programming concepts. Essential Question: How can I demonstrate computational thinking through a complete program and explain my work clearly?	Objective: Compare algorithms, analyze efficiency, use heuristics when appropriate, and explain limits of computation. Essential Question: How do we decide whether an algorithm is efficient—or whether a problem can be solved at all?
INSTRUCTIONAL MATERIALS	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials	Code.org, AP Classroom, and teacher-created materials
MAJOR TASKS, ASSESSMENTS, and FIELD TRIPS	Digital Information Dilemmas Project; Unit 1 Test	Internet Dilemmas Project; Unit 2 Test	App Design Project; Unit 3 Test	Decision Maker App Project; Unit 4 Test	Tell a Data Story Project; Unit 5 Test	Hackathon Project; Unit 6 Test	Library Project; Unit 7 Test	Innovation Simulation / Innovation One-Pager Project; Unit 8 Test	Create PT Deep Dive and Planning; AP Create Performance Task (9 hours); Mock Exam	Algorithm Efficiency / Limits of Algorithms activities; Unit 10 Test
STANDARDS ADDRESSED	DAT-1.A, DAT-1.B, DAT-1.C, DAT-1.D, IOC-1.F	CSN-1.A, CSN-1.B, CSN-1.C, CSN-1.D, CSN-2.A, CSN-2.B, CSN-1.E	CRD-1.A, CRD-1.B, CRD-1.C, CRD-2.A, CRD-2.B, CRD-2.C, CRD-2.D, CRD-2.E, CRD-2.F, CRD-2.G, CRD-2.H, CRD-2.I, CRD-2.J	AAP-1.A, AAP-1.B, AAP-2.A, AAP-2.B, AAP-2.C, AAP-2.D, AAP-2.E, AAP-2.F, AAP-2.G, AAP-2.H, AAP-3.A, CRD-2.I, CRD-2.J	DAT-2.A, DAT-2.B, DAT-2.C, DAT-2.D, DAT-2.E, IOC-1.B, IOC-1.C, IOC-1.D, IOC-1.E	AAP-1.C, AAP-1.D, AAP-2.J, AAP-2.K, AAP-2.L, AAP-2.M, AAP-2.O, CRD-2.I, CRD-2.J, AAP-2.I, AAP-2.N, AAP-2.P	AAP-3.A, AAP-3.B, AAP-3.C, AAP-3.D, CRD-2.G, CRD-2.H, CRD-2.I, CRD-2.J, AAP-3.E, AAP-3.F	IOC-1.A, IOC-1.B, IOC-1.C, IOC-1.D, IOC-1.E, IOC-1.F, IOC-2.A, IOC-2.B, IOC-2.C	CRD-1.A, CRD-1.B, CRD-1.C, CRD-2.A, CRD-2.B, CRD-2.C, CRD-2.D, CRD-2.E, CRD-2.F, CRD-2.G, CRD-2.H, CRD-2.I, CRD-2.J, AAP-1.D, AAP-2.E, AAP-2.F, AAP-2.H, AAP-2.J, AAP-2.K, AAP-2.L, AAP-2.M, AAP-2.O, AAP-3.B, AAP-3.C	AAP-4.A, AAP-4.B