

CodeCombat AP CSP Syllabus

Our curriculum is designed to meet AP CSP standards and includes a combination of in-game content, in-game curriculum, and unplugged activities to cover additional CS concepts.

We will be updating and improving our curriculum throughout 2022 and 2023 so please check back to discover more resources!

CodeCombat Courses: Algorithms and Programming

CodeCombat Courses	CodeCombat Lessons	AP CSP Standards
Introduction to Computer Science	Introduction to Pair Programming Module 1 - Basic Syntax Module 2 - Loops Module 3 - Variables Module 4 - Review Lesson Slides	CRD-1.A.5, CRD-2.A.1, CRD-2.A.2 CRD-2.B.1, CRD-2.B.2, CRD-2.B.3 CRD-2.B.4, CRD-2.B.5, CRD-2.C.1 CRD-2.D.1, CRD-2.D.2, CRD-2.E.1 CRD-2.E.2, CRD-2.E.3, CRD-2.E.4 CRD-2.F.1, CRD-2.F.2, CRD-2.F.3 CRD-2.F.4, CRD-2.F.5, CRD-2.F.6 CRD-2.G.1, CRD-2.G.2, CRD-2.G.3 CRD-2.G.4, CRD-2.G.5, CRD-2.I.1 CRD-2.I.2, CRD-2.I.3, CRD-2.J.1 CRD-2.J.2, CRD-2.J.3, DAT-1.A.1 DAT-1.A.5, AAP-1.A.1, AAP-1.A.2 AAP-1.B.1, AAP-2.A.1, AAP-2.A.2 AAP-2.A.3, AAP-2.A.4, AAP-2.B.1 AAP-2.B.2, AAP-2.B.3, AAP-2.B.4 AAP-2.B.5, AAP-2.B.6, AAP-2.B.7 AAP-2.G.1, AAP-2.J.1, AAP-2.K.1 AAP-2.K.2, AAP-2.K.3, AAP-2.K.4 AAP-2.K.5, AAP-2.L.5, AAP-2.M.1 AAP-2.M.2, AAP-3.A.3
Web Development I	Wanted poster	CRD-1.A.2, CRD-2.A.1, CRD-2.B.2
Game Development 1	GD1 Project Guide Lesson 1 “Spawnables and Mechanics” Lesson 2 “Goal Changes” Lesson 3 “Changing Properties” Lesson 4 “Changing Properties” Create Task Practice Lesson Slides Documentation and Attribution	CRD-1.A.1, CRD-1.A.2, CRD-2.A.1, CRD-2.A.2, CRD-2.B.4, CRD-2.B.5, CRD-2.E.1, CRD-2.E.2, CRD-2.E.3, CRD-2.E.4, CRD-2.F.1, CRD-2.F.2, CRD-2.F.5, CRD-2.F.6, CRD-2.F.7, CRD-2.G.1, CRD-2.G.3, CRD-2.G.4, CRD-2.G.5, CRD-2.H.1, CRD-2.H.2, CRD-2.I.1, CRD-2.I.2, CRD-2.I.3, AAP-2.B.1, AAP-2.B.2, AAP-2.B.3, AAP-2.B.4, AAP-2.B.5, AAP-2.B.6, AAP-3.A.3, AAP-1.D.1, AAP-1.D.2, IOC-1.F.1 - 7, IOC-1.F.1 1
Computer Science 2	Module 5 - Conditionals (If) Module 6 - Conditionals (Else)	CRD-2.A.1, CRD-2.A.2, CRD-2.B.1, CRD-2.B.2, CRD-2.B.5, AAP-2.G.1, AAP-2.E.1, AAP-2.H.1, AAP-2.H.2 AAP-2.H.3, AAP-2.L.3, AAP-2.L.4, AAP-2.I.1, AAP-2.L.1, AAP-2.L.2,

	Module 7 - Nested Conditionals	AAP-2.L.5.
	Module 8 - Functions Module 9 - Events Module 10 - Review Lesson slides Syntax and Debugging	CRD-2.A.1, CRD-2.A.2, CRD-2.B.1, CRD-2.B.2, CRD-2.B.5, AAP-2.G.1, AAP-2.E.1, AAP-2.H.1, AAP-2.H.2 AAP-2.H.3, AAP-2.L.3, AAP-2.L.4, AAP-2.I.1 AAP-3.B.1, AAP-3.B.2, AAP-3.B.4, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7, AAP-3.C.1, CRD-2.C.1, CRD-2.C.2, CRD-2.C.3, CRD-2.C.4, CRD-2.C.5, CRD-2.C.6, CRD-2.I.1, CRD-2.I.5, CRD-2.I.4
Game Development 2	Module 1 - Mechanics: Spawn and Goals Module 2 - Mechanics: Time, Randomness, Defeat Module 3 - Mechanics: Manual Goals and More Events Module 4 - Integration Practice Module 5 - Arcade Game Module 6 - Game Development 2 Project Lesson Slides	CRD-1.A.1, CRD-1.A.2, CRD-2.A.1 CRD-2.A.2, CRD-2.B.1, CRD-2.B.2, CRD-2.B.3, CRD-2.B.4, CRD-2.B.5, CRD-2.C.1, CRD-2.C.2, CRD-2.C.3 CRD-2.C.4, CRD-2.C.5, CRD-2.C.6 CRD-2.D.1, CRD-2.D.2, CRD-2.E.1, CRD-2.E.2, CRD-2.E.3, CRD-2.E.4, CRD-2.F.1, CRD-2.F.2, CRD-2.F.5, CRD-2.F.6, CRD-2.F.7, CRD-2.I.1, CRD-2.I.2, CRD-2.I.3, CRD-2.J.1, CRD-2.J.2, CRD-2.J.3, AAP-2.G.1, AAP-2.H.1, AAP-2.H.2, AAP-2.H.3, AAP-2.I.1, AAP-3.A.1, AAP-3.A.2, AAP-3.A.4, AAP-3.A.5, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7, AAP-3.C.1, AAP-3.C.2, AAP-3.E.2, AAP-3.F.1, AAP-3.F.2, AAP-3.F.3, AAP-3.F.4,
Computer Science 3	Module 11 - String Concatenation Module 12 - Computer Arithmetic Module 13 - Properties	AAP-2.C.1, AAP-2.C.2, AAP-2.C.3 AAP-2.D.1,
	Getting Abstract!	DAT-1.A.5, AAP-1.A.1, AAP-1.D.4, AAP-1.D.5, AAP-3.B.1, AAP-3.B.2, AAP-3.B.4, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7, CSN-1.A.1, CSN-1.A.2, CSN-1.A.3, CSN-1.A.4, CSN-1.A.5, CSN-1.B.1, CSN-1.B.2, CSN-1.B.3, CSN-1.B.4, CSN-1.C.1, CSN-1.C.2, CSN-1.C.4, CSN-1.D.2, CSN-1.E.1.
	Predators and Prey	AAP-3.F.1, AAP-3.F.2, AAP-3.F.3, AAP-3.F.4,
	Module 14 - Functions with	AAP-3.A.1, AAP-3.A.2, AAP-3.A.3, AAP-3.A.4, AAP-3.A.5. AAP-3.A.6,

	Returns Module 15 - Not Equals* Module 16 - Boolean Or	AAP-3.A.7, AAP-3.A.8, AAP-3.A.9 AAP-2.E.1, AAP-2.E.2 , AAP-2.F.1, AAP-2.F.5.
	Module 17 - Boolean And Module 18 - Relative Movement Module 19 - Time and Health Module 20 - Break and Continue Module 21 - Review Lesson Slides	AAP-2.E.1 , AAP-2.E.2 , AAP-2.F.1, AAP-2.F.5, AAP-2.B.3, AAP-2.B.4, AAP-2.B.5, AAP-2.C.1, AAP-2.C.2, AAP-2.C.3, CRD-2.B.3 , CRD-2.C.1, CRD-2.C.4, CRD-2.C.6, AAP-3.F.1, AAP-3.F.2, AAP-3.F.3, AAP-3.F.4, AAP-2.B.1, AAP-2.B.6, CRD-2.A.1, CRD-2.A.2, CRD-2.B.1, CRD-2.B.2, CRD-2.B.5, AAP-2.G.1, AAP-2.H .1, AAP-2.H .2, AAP-2.H .3, AAP-2.L.3, AAP-2.L.4, AAP-2.I.1 AAP-3.B.1, AAP-3.B.2, AAP-3.B.4, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7, AAP-3.C.1, CRD-2.C.2, CRD-2.C.3, CRD-2.C.5.
Game Development 3	Module 1 - On Update and Setting Position Module 2 - Animations*	AAP-2.J.1, AAP-2.K.1, AAP-2.K.3, AAP-2.K.4, AAP-2.K.5, AAP-2.C.1, APP-2.C.2,
	Module 3 - Runner Module 4 - Game Development 3 Project Create task practice 3 guide	DAT-1.A.5, AAP-1.A.1, AAP-1.D.4, AAP-1.D.5, AAP-3.B.1, AAP-3.B.2, AAP-3.B.4, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7, AAP-3.F.1, AAP-3.F.2, AAP-3.F.3, AAP-3.F.4, CSN-1.A.1, CSN-1.A.2, CSN-1.A.3, CSN-1.A.4, CSN-1.A.5, CSN-1.B .1, CSN-1.B .2, CSN-1.B .3, CSN-1.B .4, CSN-1.C.1, CSN-1.C.2, CSN-1.C.4, CSN-1.D.2, CSN-1.E.1.
Computer Science 4	Module 21 - While Conditionals Module 22 - Arrays Module 23 - Nested While Loops (Optional) Module 24 - Optimization Module 25 - Objects (Optional) Module 26A - For Loops (Python) Module 26B - For Loops (JavaScript) Lesson Slides	AAP-1.C.1, AAP-1.C.2, AAP-1.C.3, AAP-2.B.1, AAP-2.B.2, AAP-2.B.3, AAP-2.B.4, AAP-2.B.5, AAP-2.E.1, AAP-2.G.1, AAP-2.J.1, AAP-2.K.1, AAP-2.K.3, AAP-2.K.4, AAP-2.K.5, AAP-2.N.2, AAP-2.O.1, AAP-2.O.2, AAP-2.O.3, AAP-2.O.4, AAP-2.O.5, AAP-1.D.1, AAP-1.D.2, AAP-1.D.3, AAP-1.D.4, AAP-1.D.5, AAP-1.D.6, AAP-1.D.7, AAP-1.D.8, AAP-4.A.1, AAP-4.A.2, AAP-4.A.3, AAP-4.A.4, AAP-4.A.6, AAP-4.A.9, AAP-2.K.2,

Additional Big Idea Lessons

Big Idea/Concept	CodeCombat Lesson Plan/Slides	AP CSP Standards
Program Design and Development	Create a Computing Lesson	CRD-1.A.1, CRD-1.A.2, CRD-1.B.2, CRD-2.A.1, DAT-1.A.5,
Program Design and Development	Technology Usability Review	IOC-1.A.1, IOC-1.A.3, IOC-1.B.3, IOC-1.B.4, CRD-2.E.1, CRD-2.E.2, CRD-2.E.3, CRD-2.F.1, CRD-2.F.2, CRD-2.F.3, CRD-2.F.4, CRD-2.F.5, CRD-2.F.6, CRD-2.F.7, CRD-2.G.1
Program Design and Development	Emerging Technology	CRD-1.A.1, CRD-1.A.2, CRD-2.A.1, CRD-2.B.1, CRD-2.B.3, CRD-2.B.4, CRD-2.B.5, CRD-2.C.1, CRD-2.C.4, CRD-2.C.6, CRD-2.D.1, CRD-2.D.2, CRD-2.F.1, CRD-2.F.2, CRD-2.F.3, CRD-2.F.4, CRD-2.F.5, CRD-2.F.6, CRD-2.F.7, DAT-2.A.1, DAT-2.A.2, DAT-2.A.4, DAT-2.C.1, DAT-2.D.1, DAT-2.D.2, DAT-2.D.3, DAT-2.E.1, AAP-2.M.1, AAP-3.F.3, CSN-1.A.1, IOC-1.A.1, IOC-1.A.2, IOC-1.A.3, IOC-1.A.4, IOC-1.A.5, IOC-1.B.2, IOC-1.C.1, IOC-1.C.2, IOC-1.C.3, IOC-1.C.4, IOC-1.C.5, IOC-1.E.5, IOC-1.F.10, IOC-2.B.10
Developing Algorithms	Searching & Sorting	DAT-2.D.1, DAT-2.D.3, DAT-2.D.4, DAT-2.D.6, DAT-2.E.1, DAT-2.E.2, AAP-4.A.1, AAP-4.A.6, AAP-4.A.7, AAP-4.A.8.
Developing Algorithms	Collaborative Algorithm Design	CRD-1.B.2, CRD-2.B.1, CRD-2.B.2, AAP-2.L.5, AAP-2.M.1, AAP-2.M.2, AAP-2.M.3
Developing Algorithms	Introduction to Refactoring	DAT-1.A.5, AAP-3.B.1, AAP-3.B.2, AAP-3.B.4, AAP-3.B.5, AAP-3.B.6, AAP-3.B.7.
Developing Algorithms	Algorithms - Hitchhiker's Guide	AAP-2.A.1, AAP-2.A.2, AAP-2.A.3, AAP-4.B.1, AAP-4.B.2, AAP-4.B.3.
Computer Systems and Networks	How the Internet Works	CSN-1.A.1, CSN-1.A.2, CSN-1.A.3, CSN-1.A.4, CSN-1.A.5, CSN-1.B.1, CSN-1.B.2, CSN-1.B.3, CSN-1.B.4, CSN-1.C.1, CSN-1.C.2, CSN-1.C.4, CSN-1.D.2, CSN-1.E.1, CSN-1.E.2, CSN-1.E.3, CSN-1.E.4, CSN-1.E.5, CSN-1.E.6, CSN-1.E.7

Data	Introduction to Big Data	DAT-1.A.2, DAT-2.A.1, DAT-2.A.2, DAT-2.A.3, DAT-2.A.4, DAT-2.D.1, DAT-2.D.2, DAT-2.D.3, DAT-2.E.4, DAT-2.E.5, IOC-1.E.1, IOC-2.A.2, IOC-2.A.3, IOC-2.A.4, IOC-2.A.5, IOC-2.A.10.
Data	Data Encoding	DAT-1.A.2, DAT-1.A.3, DAT-1.A.4, DAT-1.A.6, DAT-1.A.7, DAT-1.A.8, DAT-1.A.9, DAT-1.A.10, DAT-1.B.1, DAT-1.B.2, DAT-1.B.3, DAT-1.C.1, DAT-1.C.2, DAT-1.C.3, DAT-1.C.4, DAT-1.C.5
Data	Introduction to Data Analysis	CRD-2.E.1, CRD-2.E.2, CRD-2.E.3, CRD-2.E.4, CRD-2.A.1, AAP-2.A.4, CRD-1.A.3, DAT-2.A.1, DAT-2.A.2, DAT-2.D.1, DAT-2.D.2, DAT-2.D.3, DAT-2.D.5, DAT-2.D.6, DAT-2.E.1, DAT-2.E.3, DAT-2.E.4, DAT-2.E.5
Data	Lossy & Lossless compression	DAT-1.D.1, DAT-1.D.4, DAT-1.D.5, DAT-1.D.6, DAT-1.D.7
Impact of Computing	Innovations And Society	IOC-1.A.4, IOC-1.B.2, IOC-1.C.1, IOC-1.C.2, IOC-1.C.3, IOC-1.C.4, IOC-1.C.5, IOC-1.D.1.
Impact of Computing	Innovations and Crowdsourcing	IOC-1.E.1, IOC-1.E.2, IOC-1.E.3, IOC-1.E.4, IOC-1.E.5, IOC-1.E.6.
Impact of Computing	The Impact Of Computing On Industries	IOC-1.A.1, IOC-1.A.2, IOC-1.A.3, IOC-1.A.4, IOC-1.A.5, IOC-1.B.1, IOC-1.B.2, IOC-1.B.5.
Impact of Computing	Accessibility and Bias	DAT-2.C.5, CRD-1.A.4, AAP-3.F.5
Computer Systems and Networks	Chat Room Simulation	AAP-3.F.1, AAP-3.F.2, AAP-3.F.3, AAP-3.F.4, AAP-3.F.7.
Computer Systems and Networks	Introduction to Cybersecurity Personal Security Physical and Digital Security	IOC-1.F.8, IOC-1.F.9, IOC-2.A.1, IOC-2.A.2, IOC-2.A.5, IOC-2.A.7, IOC-2.A.8, IOC-2.A.9, IOC-2.A.10, IOC-2.A.11, IOC-2.A.12, IOC-2.A.13, IOC-2.A.14, IOC-2.B.1, IOC-2.C.1, IOC-2.C.3, IOC-2.C.5, IOC-2.C.6, IOC-2.C.7., IOC-2.B.2, IOC-2.B.3, IOC-2.B.4, IOC-2.B.5, IOC-2.B.6, IOC-2.B.7, IOC-2.B.10, IOC-2.B.11, IOC-2.C.2, IOC-2.C.3, IOC-2.C.4.
Computer Systems and Networks	Simulate the Internet	AAP-3.F.1, AAP-3.F.2, CSN-1.A.1, CSN-1.A.2, CSN-1.A.3, CSN-1.A.4, CSN-1.A.5, CSN-1.A.6, CSN-1.A.7, CSN-1.A.8, CSN-1.B.1, CSN-1.B.2, CSN-1.B.3, CSN-1.B.4, CSN-1.B.5, CSN-1.B.6, CSN-1.B.7, CSN-1.C.1, CSN-1.C.2, CSN-1.C.3.

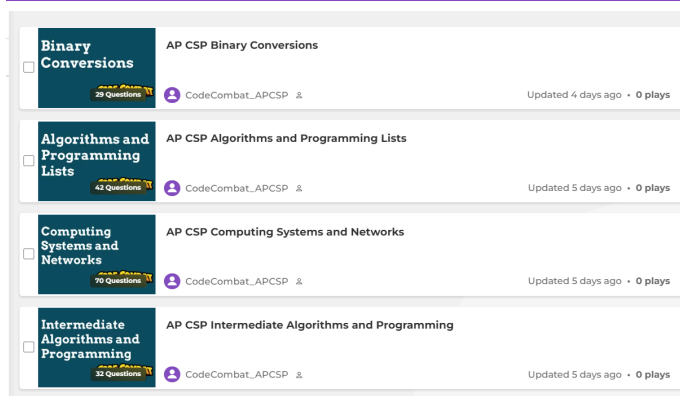
Create Performance Task Prep Content

Note: We will be continually adding to and improving our create performance task prep content. Please check back for more resources!

Rep.Lit	Performance Task Warm-Up	Exclusively created for our CodeCombat curriculum, these lessons will walk your students through practicing example performance tasks. We will be updating these working drafts with more teacher notes and graphics throughout 2022.
	Full Performance Task	
Code.org	Unit 8: Create PT Prep	

Exam Prep Content

We offer access to **Kahoot AP CSP Exam Prep Quizzes** to all CodeCombat license accounts. Please contact your AE or charlotte@codecombat.com to get access!



Suggested Code.org Content

Here are links to additional Code.org curriculum that we highly suggest using for additional review of specific concepts.

Unit 1: Digital Information	Additional Binary Practice	DAT-1.A.2, DAT-1.A.3, DAT-1.A.4,
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		DAT-1.A.6, DAT-1.A.7, DAT-1.A.8, DAT-1.A.9, DAT-1.A.10, DAT-1.B.1, DAT-1.B.2, DAT-1.B.3, DAT-1.C.1, DAT-1.C.2, DAT-1.C.3, DAT-1.C.4, DAT-1.C.5
Unit 6: Algorithms	Lesson 5: Parallel and Distributed Algorithms	CSN-2.A, CSN-2.B