Housekeeping

- If you have not already done so, please download *Guidance on Teaching Computer Science* and *Guidance on Teaching Computer Science…Course Codes*.
  - You should have received an email last evening with these attachments.
- This presentation will be recorded and transcripted.
- If you have a question, please ask, or enter it in the Chat box, which will be monitored.
- A flyer will be posted at the end of this presentation, should you want to register for additional sessions.
- You will receive a poll after this session, which will give you an opportunity to provide feedback.

Computer Science Course Codes

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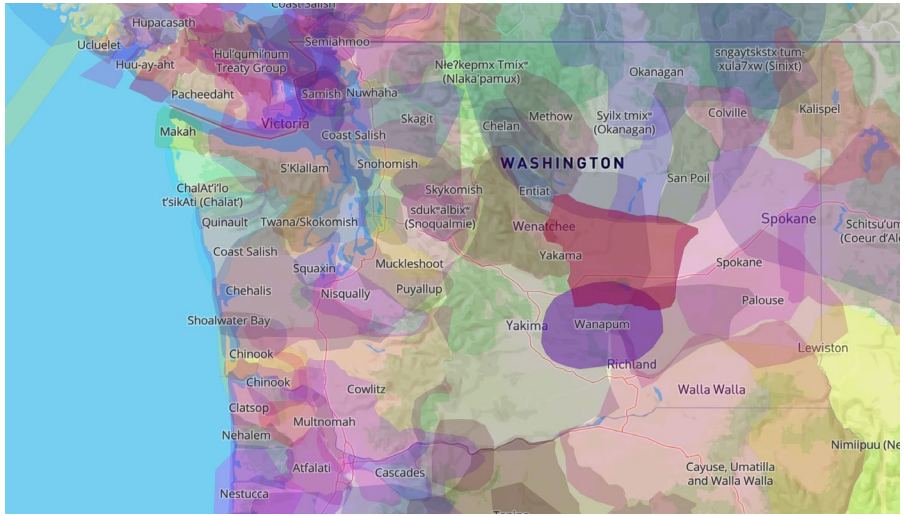
Washington Office of Superintendent of
PUBLIC INSTRUCTION

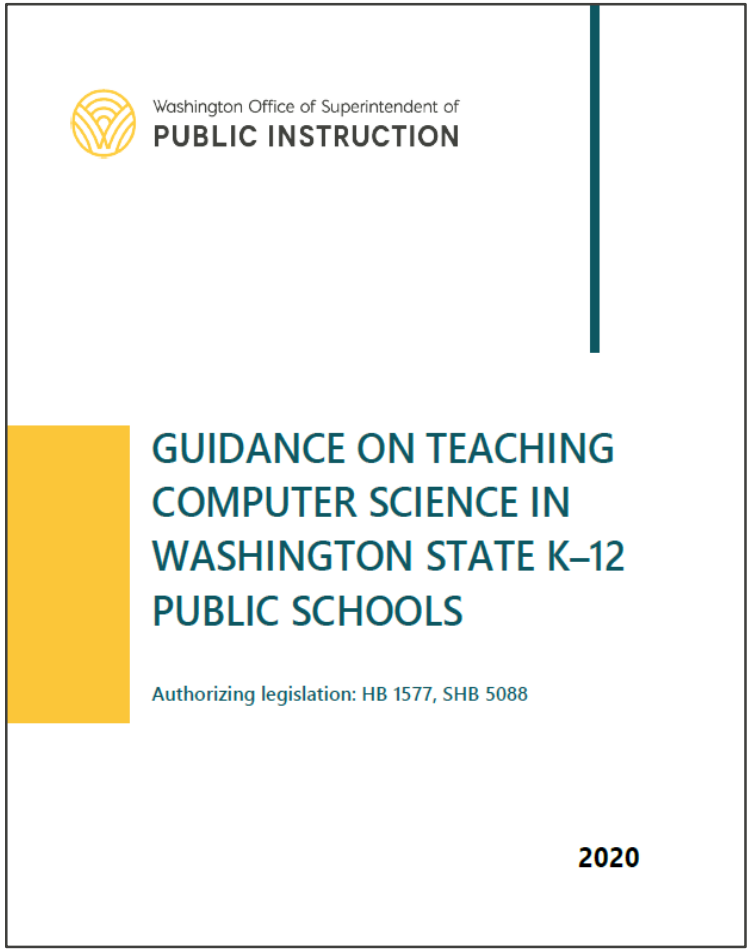
Land Acknowledgement



"I acknowledge that I am presenting today from Coast Salish ancestral homelands. The Salish have lived on and cared for this land and these waterways since time immemorial. I make this acknowledgement to open a space of recognition, inclusion, and respect for our sovereign tribal partners and all indigenous students, families, and staff in our community."

CS Guidance Document

Acknowledging that the spirit of the legislation (SB 5088) is for all students to successfully engage with technology in both their personal and career life, the committee offered their expertise for districts to develop a healthy computer science "ecosystem" that offers access points to traditionally underserved and diverse students.



WASHINGTON STATE DEFINITION OF COMPUTER SCIENCE

The state definition of computer science includes, but is not limited to, the following ideas:

- The design of both computer equipment and digital systems, and the interface between the hardware and software required for these systems.
- How algorithms, data structures, and modules are used to implement computer software and hardware.
- Problem-solving skills for designing computer software and hardware such as pattern recognition, decomposition, debugging, and software troubleshooting.
- How hardware and software are used to implement computers, networks, and other digital systems.
- The use of computer programs to collect, analyze, store, transform, model, and visualize data.
- How networking devices enable communication and organization and increase the need for cybersecurity.
- Using computers to collect, analyze, transform and store data to create visualizations, models, and inferences.
- How the privacy and security of data can be protected with computers.
- How computers affect people and society.

SB5088 (2019)

By the **2022-23 school year**, each district that operates a high school must provide the **opportunity to access an elective computer science course** that is available to **all** high school students.

Computer Science Guidance Document

This document offers the CS definition, guidance, and other informational resources for districts to comply with legislation and further support CS initiatives in every district across the state.

Link: Guidance Document

A report required by SHB 1577 for the preceding academic year that must include the following data:

- Number of computer science courses offered in each school.
- Number and percentage of students.
- Disaggregated by gender, race and ethnicity, special education status, English learner status, eligibility for the free and reduced-price lunch program, and grade level.
- Number of computer science instructors at each school, disaggregated by certification, if applicable, gender, and highest academic degree.

Link: Guidance Document - Course Codes

Table 1 (p. 4)
Lists the state course codes that will meet the legislative requirement.

New course codes are in red.

COMPUTER SCIENCE STATE COURSE CODES

* New State Course Codes Starting 2021–22

Table 1: Computer Science State Course Codes

State Course Code	Course Name
10011	Computer Science Principles
10012	Exploring Computer Science
10013	PLTW Computer Science Essentials*
10014	PLTW Computer Science A*
10015	PLTW Computer Science Principles*
10016	PLTW Cybersecurity*
10019	AP Computer Science Principles
10020	Cybersecurity*
10052	Database Management and Data Warehousing
10053	Database Applications
10054	Data Systems/Processing
10097	Management Information Systems—Independent Study
10098	Management Information Systems—Workplace Experience
10099	Information Technology-Other*
10101	Network Technology
10102	Networking Systems
10108	Network Security
10109	Essentials of Network Operating Systems
10148	Networking Systems—Workplace Experience
10149	Networking System – other
10152	Computer Programming
10153	Visual Basic (VB) Programming

State Course Code	Course Name
10154	C++ Programming
10155	Java Programming
10156	Computer Programming—Other Language
10157	AP Computer Science A
10159	IB Computer Science
10160	Particular Topics in Computer Programming
10197	Computer Programming Independent Study
10198	Computer Programming— Workplace Experience
10199	Computer Programming — Other
10201	Web Page Design
10203	Interactive Media
10205	Computer Gaming and Design
10206	Mobile Applications
10251	Computer Technology
10253	Information Support and Services
10254	IT Essentials: PC Hardware and Software
10297	Information Support Services Independent Study
10298	Information Support and Services—Workplace Experience
10301	Computer Forensics*

Table 2 (p. 5-10) Contains the CTE CIP codes and recommended state course codes. If you are offering any courses using the following CIP codes, please review the State Course Code and Course Name in the table.

CIP Code	Teacher Cert V-Code	State Course Code	Course Name	SUBJECT	Course Description
110204 Preparatory	V070000 V078000 V141000 V210100 V470110 V521206	10205	Computer Gaming and Design	Computer Game Programming	A program that prepares individuals to apply the knowledge and skills of design and computer programming to the development of computer games. Includes training in character and story development, computer programming, computer graphics, game design, game physics, human-computer interaction, human-centered design, and usability.
		10253	Information Support and Services		
110701 Exploratory	V07000 V07800 V141000 V210100 V521206 V470110	10012	Exploring Computer Science	Introduction to Computer Science	A program that focuses on computer theory, computing problems and solutions, and the design of computer systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational science, computer development and programming, and applications to a variety of end-use situations.
		10013	*PLTW Computer Science Essentials		
		10152	Computer Programming		
		10160	Particular Topics in Computer Programming		
110801 Preparatory	V070000 V078000 V100100 V470110 V521206	10201	Web Page Design	Webpage/ Digital/ Multimedia and Information Design CIW Foundations	A course that prepares individuals to apply HTML, XML, JavaScript, graphic applications, and other authoring tools to the design, editing, and publishing (launching) of documents, images, graphics, sound, and multimedia products on the World Wide Web. Includes instruction in internet theory; web page standards and policies; elements of web page design; user interfaces; vector tools; special effects; interactive and multimedia components; search engines; navigation; morphing; e-commerce tools; and emerging web technologies.
		10203	Interactive Media		
		11151	**♦Digital Media Technology**		
		11153	**♦Digital Media Design and Production**		

Table 3 (p. 11-21)
Contains the Course Descriptions to help determine where the course you are teaching fits the best.

Course Descriptions

* New State Course Codes Starting 2021–22

Table 3: Course Descriptions

Course Code	Course Name	Description	Computer Science Standards
10011	Computer Science Principles	Computer Science Principles courses provide students the opportunity use programming, computational thinking, and data analytics to create digital artifacts and documents representing design and analysis in areas including the Internet, algorithms, and the impact that these have on science, business, and society. Computer Science Principles courses teach students to use computational tools and techniques including abstraction, modeling, and simulation to collaborate in solving problems that connect computation to their lives.	CS topics include subjects and standards in these core areas: 1. Computing Systems 2. Networks & the Internet 3. Data & Analysis 4. Algorithms & Programming 5. Impacts of Computing
10012	Exploring Computer Science	Exploring Computer Science courses present students with the conceptual underpinnings of computer science through an exploration of human computer interaction, web design, computer programming, data modeling, and robotics. While these courses include programming, the focus is on the computational practices associated with doing computer science, rather than just a narrow focus on coding, syntax, or tools. Exploring Computer Science courses teach students the computational practices of algorithm design, problem solving, and programming within a context that is relevant to their lives.	CS topics include subjects and standards in these core areas: 1. Computing Systems 2. Networks & the Internet 3. Data & Analysis 4. Algorithms & Programming 5. Impacts of Computing
10013	*PLTW Computer Science Essentials	Following Project Lead the Way's suggested curriculum, PLTW Computer Science Essentials (formerly known as PLTW Introduction to Computer Science) courses introduce students to computational thinking concepts, fundamentals, and tools. Students will increase their understanding of programming languages through the use of visual and text-based programming. Projects will include the creation of apps and websites to address real-life topics and problems.	CS topics include subjects and standards in these core areas: 1. Computing Systems 2. Networks & the Internet 3. Data & Analysis 4. Algorithms & Programming 5. Impacts of Computing

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- **Twitter**
  - More transparent and forward facing
  - Continued collaboration
  - Event Sharing
  - Networking
  - Resource sharing
  - Updates
  - Community questions
  - Sharing success and growth opportunities

Questions?

Webinars: Guidance on Teaching Computer Science

Legislation SB5088 & HB1577 require high schools to offer the opportunity for all students to take a computer science course and report specific data, including the state course code, CIP code, and demographics of students enrolled in the courses.

The *Guidance on Teaching Computer Science in K–12 Public Schools* document (on the OSPI CS webpage and linked below) is a comprehensive guide offering three sections to assist schools in implementing CS courses and reporting accurate data: (1) Computer Science Course Code Guidance; (2) Computer Science Course Descriptions; and (3) Computer Science Standards and Practices by Grade Band.

Visit the OSPI Computer Science webpage.

Register for one of the revised dates below.

Computer Science Guidance: Course Codes

Thursday, February 18
10:00–11:00 am
Register

Monday, February 22
3:00–4:00 pm
Register

Computer Science Guidance: Standards & Practices

Tuesday, February 23
10:00–11:00 am
Register

Wednesday, February 24
3:00–4:00 pm
Register

What to expect

- Review the updated definition of Computer Science
- Identify Computer Science course codes
- Examine definitions of course codes
- Review standards and practices

Who should attend?

- ESD partners
- Curriculum Directors
- Teachers/Instructional Coaches/TOSA
- District and Building Administrators
- IT Directors/Technology Specialists

Guidance on Teaching Computer Science

Guidance on Computer Science Course Codes

Washington Office of Superintendent of
PUBLIC INSTRUCTION

Questions? Please email Shannon.Thissen@k12.wa.us

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