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MEMORANDUM

TO: School District Superintendents

FROM: Hershel Lyons
Rod Duckworth

DATE: March 3, 2017

SUBJECT: **Course and CTE Programs that Include the New Computer Science Standards for the 2017-2018 School Year**

Contact Information:

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DPS: 2017-26

With the adoption of computer science standards in 2016, there will be new courses, both general education and career and technical education (CTE), available for the 2017-2018 school year. The following general education courses have already been approved, and the course descriptions are available on CPALMS.

- [STEM Lab Kindergarten](#)
- [STEM Lab Grade 1](#)
- [STEM Lab Grade 2](#)
- [STEM Lab Grade 3](#)
- [STEM Lab Grade 4](#)
- [STEM Lab Grade 5](#)
- [Meteorology Honors for Grades 9-12](#)

Two additional courses are currently awaiting State Board of Education approval—Introduction to Computer Science 1 for students in kindergarten through grade 2 and Introduction to Computer Science 2 for students in grades 3 through 5. These courses include all of the computer science standards for each grade band. Coding concepts appear throughout these courses, especially in the standards of problem solving and algorithms, data analysis, computer programming basics and programming applications.

For more information about the computer science standards and general education courses that contain the standards, visit www.cpalms.org or contact Ashley Palelis via email at Ashley.Palelis@fldoe.org.

Many high school acceleration courses such as Advanced Placement (AP), Advanced International Certificate in Education (AICE), International Baccalaureate (IB) and Dual Enrollment courses contain aspects of computer science including coding. A list of these courses is provided in Attachment A.

CTE programs, courses and industry certifications also contain computer science. The following CTE courses contain the new computer science standards.

New programs in draft until approved by the SBE include:

- Computer Science Principles 9007600
 - Advanced Information Technology 9007610
 - Foundations of Programming 9007210
 - Procedural Programming 9007220
 - Object-Oriented Programming Fundamentals 9007230
- Integrated Information Technology 9003500
 - Programming Fundamentals 9003550

Programs reviewed with computer science standards updated include:

- Database Application Development and Programming 9007300
 - Foundations of Programming 9007210
 - Procedural Programming 9007220
 - Object-Oriented Programming Fundamentals 9007230
- Java Development and Programming 9007200
 - Foundations of Programming 9007210
 - Procedural Programming 9007220
 - Object-Oriented Programming Fundamentals 9007230
- .NET Application Development and Programming 9007400
 - Foundations of Programming 9007210
 - Procedural Programming 9007220
 - Object-Oriented Programming Fundamentals 9007230
- Web Application Development & Programming 9007500
 - Foundations of Programming 9007210
 - Procedural Programming 9007220
 - Object-Oriented Programming Fundamentals 9007230

For more information about CTE curriculum frameworks, visit <http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/curriculum-frameworks/> or contact Kathleen Taylor via email at Kathleen.Taylor@fldoe.org. Additionally, many industry certifications incorporate computer science concepts including coding. A list of industry certifications integrating aspects of computer science is provided in Attachment B. For more information about industry certification, visit <http://www.fldoe.org/core/fileparse.php/8904/urlt/1617icfl-SBE.pdf> or contact Debra Perdue via email at Debra.Perdue@fldoe.org.

In addition to offering computer science courses, staffing these courses will be a consideration. There are several pathways that may be utilized. The following is a list of general categories for any teacher of record to be considered in-field for a course taught.

- Holds an educator's certificate with the appropriate coverage as per the Course Code Directory
- Holds an educator's certificate in another subject but with a minor field of study in the subject taught (s. 1012.42, F.S.)
- Holds an educator's certificate in another subject and has demonstrated subject area expertise (s. 1012.42, F.S.)

- Is a part-time instructional staff member who holds an adjunct teaching certificate in the subject area (s. 1012.57, F.S.)
- Is a non-degreed teacher of career and technical education employed under the provisions of s. 1012.39, F.S.
- Is a non-certificated teacher possessing expert skill in or knowledge of the subject as per Rule 6A-1.0502, F.A.C.

For more information about educator certification, visit <http://www.fldoe.org/teaching/certification/> or contact David LaJeunesse via email at David.Lajeunesse@fldoe.org.

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Attachments

cc: School Principals
CTE Directors
Curriculum Directors