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April 12, 2022

ENGROSSED HOUSE
BILL NO. 4389

By: Baker and Waldron of the
House

and

Stanley of the Senate

An Act relating to school curriculum; amending 70 O.S. 2021, Section 11-103.6, which relates to subject matter standards; including emphasis on certain topics in computer science subject matter standards; modifying computer science college preparatory curriculum requirements; excluding certain courses from eligibility; modifying computer science core curriculum requirements; excluding certain courses from eligibility; amending 70 O.S. 2021, Section 11-103.6m, which relates to computer science programs; listing additional information to be included in certain annual report; providing an effective date; and declaring an emergency.

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. AMENDATORY 70 O.S. 2021, Section 11-103.6, is amended to read as follows:

Section 11-103.6 A. 1. The State Board of Education shall adopt subject matter standards for instruction of students in the public schools of this state that are necessary to ensure there is attainment of desired levels of competencies in a variety of areas to include language, mathematics, science, social studies and communication.

1 2. School districts shall develop and implement curriculum,
2 courses and instruction in order to ensure that students meet the
3 skills and competencies as set forth in this section and in the
4 subject matter standards adopted by the State Board of Education.

5 3. All students shall gain literacy at the elementary and
6 secondary levels. Students shall develop skills in reading,
7 writing, speaking, computing and critical thinking. For purposes of
8 this section, critical thinking means a manner of analytical
9 thinking which is logical and uses linear factual analysis to reach
10 a conclusion. They also shall learn about cultures and environments
11 - their own and those of others with whom they share the earth.
12 Students, therefore, shall study social studies, literature,
13 languages, the arts, mathematics and science. Such curricula shall
14 provide for the teaching of a hands-on career exploration program in
15 cooperation with technology center schools.

16 4. The subject matter standards shall be designed to teach the
17 competencies for which students shall be tested as provided in
18 Section 1210.508 of this title, and shall be designed to prepare all
19 students for active citizenship, employment and/or successful
20 completion of postsecondary education without the need for remedial
21 coursework at the postsecondary level.

22 5. The subject matter standards shall be designed with rigor as
23 defined in paragraph 3 of subsection G of this section.
24

1 6. The subject matter standards for English Language Arts shall
2 give Classic Literature and nonfiction literature equal
3 consideration to other literature. In addition, emphasis shall be
4 given to the study of complete works of literature.

5 7. At a minimum, the subject matter standards for mathematics
6 shall require mastery of the standard algorithms in mathematics,
7 which is the most logical, efficient way of solving a problem that
8 consistently works, and for students to attain fluency in Euclidian
9 geometry.

10 8. The subject matter standards for history, social studies and
11 United States Government shall include study of important historical
12 documents, including the United States Constitution, Declaration of
13 Independence, Emancipation Proclamation, Federalist Papers and other
14 documents with significant history and heritage of the United
15 States, and the content of the United States naturalization test,
16 with an emphasis on the specific content of the test and the ideas
17 and concepts it references. Beginning with the 2022-2023 school
18 year, the United States naturalization test shall be administered in
19 accordance with subsection F of this section.

20 9. The subject matter standards for United States Government
21 shall include an emphasis on civics, the structure and relationship
22 between the national, state, county and local governments and
23 simulations of the democratic process. For the purposes of this
24 section, "civics" means the study of the rights and duties of

1 Oklahoma and United States citizens and of how those governments
2 work.

3 10. The subject matter standards for computer science shall
4 include an emphasis on computing systems, networks and the Internet,
5 data and analysis, algorithms and programming, and impacts of
6 computing.

7 B. Subject to the provisions of subsection C of this section,
8 in order to graduate from a public high school accredited by the
9 State Board of Education with a standard diploma, students shall
10 complete the following college preparatory/work ready curriculum
11 units or sets of competencies at the secondary level:

12 1. Four units or sets of competencies of English to include
13 Grammar, Composition, Literature, or any English course approved for
14 college admission requirements;

15 2. Three units or sets of competencies of mathematics, limited
16 to Algebra I, Algebra II, Geometry, Trigonometry, Math Analysis,
17 Calculus, Advanced Placement Statistics, or any mathematics course
18 with content and/or rigor above Algebra I and approved for college
19 admission requirements;

20 3. Three units or sets of competencies of laboratory science
21 approved for college admission requirements, including one unit or
22 set of competencies of life science, meeting the standards for
23 Biology I; one unit or set of competencies of physical science,
24 meeting the standards for Physical Science, Chemistry or Physics;

1 and one unit or set of competencies from the domains of physical
2 science, life science or earth and space science such that the
3 content and rigor is above Biology I or Physical Science;

4 4. Three units or sets of competencies of history and
5 citizenship skills, including one unit of American History, one-half
6 unit of Oklahoma History, one-half unit of United States Government
7 and one unit from the subjects of History, Government, Geography,
8 Economics, Civics, or non-Western culture and approved for college
9 admission requirements;

10 5. Two units or sets of competencies of the same ~~foreign world~~
11 or non-English language or two units of computer ~~technology science~~
12 or technology/engineering approved for college admission
13 requirements, whether taught at a high school or a technology center
14 school, ~~including computer programming, hardware, and business~~
15 ~~computer applications, such as.~~ Beginning with the 2024-2025 school
16 year, word processing, databases, spreadsheets, and graphics,
17 excluding courses shall be excluded in addition to keyboarding or
18 typing courses;

19 6. One additional unit or set of competencies selected from
20 paragraphs 1 through 5 of this subsection or career and technology
21 education courses, concurrently enrolled courses, Advanced Placement
22 courses or International Baccalaureate courses approved for college
23 admission requirements; and
24

1 7. One unit or set of competencies of fine arts, such as music,
2 art, or drama, or one unit or set of competencies of speech.

3 C. In lieu of the requirements of subsection B of this section
4 which requires a college preparatory/work ready curriculum, a
5 student may enroll in the core curriculum as provided in subsection
6 D of this section upon written approval of the parent or legal
7 guardian of the student. For students under the age of eighteen
8 (18) school districts shall require a parent or legal guardian of
9 the student to meet with a designee of the school prior to
10 enrollment in the core curriculum. The State Department of
11 Education shall develop and distribute to school districts a form
12 suitable for this purpose, which shall include information on the
13 benefits to students of completing the college preparatory/work
14 ready curriculum as provided for in subsection B of this section.

15 D. For those students subject to the requirements of subsection
16 C of this section, in order to graduate from a public high school
17 accredited by the State Board of Education with a standard diploma,
18 students shall complete the following core curriculum units or sets
19 of competencies at the secondary level:

20 1. Language Arts - Four units or sets of competencies, to
21 consist of one unit or set of competencies of grammar and
22 composition, and three units or sets of competencies which may
23 include, but are not limited to, the following courses:

24 a. American Literature,

- b. English Literature,
- c. World Literature,
- d. Advanced English Courses, or
- e. other English courses with content and/or rigor equal to or above grammar and composition;

2. Mathematics - Three units or sets of competencies, to consist of one unit or set of competencies of Algebra I or Algebra I taught in a contextual methodology, and two units or sets of competencies which may include, but are not limited to, the following courses:

- a. Algebra II,
- b. Geometry or Geometry taught in a contextual methodology,
- c. Trigonometry,
- d. Math Analysis or Precalculus,
- e. Calculus,
- f. Statistics and/or Probability,
- g. Computer Science or acceptance and successful completion of one (1) year of a full-time, three-hour career and technology program leading to an industry credential/certificate or college credit. The State Board of Career and Technology Education shall promulgate rules to define the provisions of this act related to the accepted industry-valued credentials

1 which are industry-endorsed or industry-aligned. The
2 list of accepted industry-valued credentials shall be
3 reviewed annually and updated at least every three (3)
4 years by the Board,

5 h. (1) contextual mathematics courses which enhance
6 technology preparation, or

7 (2) a science, technology, engineering and math
8 (STEM) block course meeting the requirements for
9 course competencies listed in paragraph 2 of
10 subsection B of this section, whether taught at
11 a:

12 (a) comprehensive high school, or

13 (b) technology center school when taken in the
14 tenth, eleventh or twelfth grade, taught by
15 a certified teacher, and approved by the
16 State Board of Education and the independent
17 district board of education,

18 i. mathematics courses taught at a technology center
19 school by a teacher certified in the secondary subject
20 area when taken in the tenth, eleventh or twelfth
21 grade upon approval of the State Board of Education
22 and the independent district board of education, or
23 j. any other mathematics course with content and/or rigor
24 equal to or above Algebra I;

1 3. Science - Three units or sets of competencies, to consist of
2 one unit or set of competencies of Biology I or Biology I taught in
3 a contextual methodology, and two units or sets of competencies in
4 the areas of life, physical, or earth science or technology which
5 may include, but are not limited to, the following courses:

- 6 a. Chemistry I,
- 7 b. Physics,
- 8 c. Biology II,
- 9 d. Chemistry II,
- 10 e. Physical Science,
- 11 f. Earth Science,
- 12 g. Botany,
- 13 h. Zoology,
- 14 i. Physiology,
- 15 j. Astronomy,
- 16 k. Applied Biology/Chemistry,
- 17 l. Applied Physics,
- 18 m. Principles of Technology,
- 19 n. qualified agricultural education courses,
- 20 o. (1) contextual science courses which enhance
21 technology preparation, or
22 (2) a science, technology, engineering and math
23 (STEM) block course meeting the requirements for
24 course competencies listed in paragraph 3 of

subsection B of this section, whether taught at

a:

(a) comprehensive high school, or

(b) technology center school when taken in the tenth, eleventh or twelfth grade, taught by a certified teacher, and approved by the State Board of Education and the independent district board of education,

p. science courses taught at a technology center school by a teacher certified in the secondary subject area when taken in the tenth, eleventh or twelfth grade upon approval of the State Board of Education and the independent district board of education, or

q. other science courses with content and/or rigor equal to or above Biology I;

4. Social Studies - Three units or sets of competencies, to consist of one unit or set of competencies of United States History, one-half to one unit or set of competencies of United States Government, one-half unit or set of competencies of Oklahoma History, and one-half to one unit or set of competencies which may include, but are not limited to, the following courses:

a. World History,

b. Geography,

c. Economics,

1 d. Anthropology, or

2 e. other social studies courses with content and/or rigor
3 equal to or above United States History, United States
4 Government, and Oklahoma History;

5 5. Arts - One unit or set of competencies which may include,
6 but is not limited to, courses in Visual Arts and General Music; and

7 6. Computer Education or World Language - One unit or set of
8 competencies of computer ~~technology~~ science or

9 technology/engineering, whether taught at a high school or a

10 technology center school, ~~including computer programming, hardware~~

11 ~~and business computer applications, such as~~ and beginning with the

12 2024-2025 school year shall exclude word processing, ~~databases,~~

13 ~~spreadsheets and graphics, excluding~~ courses in addition to

14 keyboarding or typing courses, or one unit or set of competencies of

15 ~~foreign~~ world or non-English language.

16 E. 1. In addition to the curriculum requirements of either

17 subsection B or D of this section, in order to graduate from a

18 public high school accredited by the State Board of Education

19 students shall complete the requirements for a personal financial

20 literacy passport as set forth in the Passport to Financial Literacy

21 Act and any additional course requirements or recommended elective

22 courses as may be established by the State Board of Education and

23 the district school board. School districts shall strongly

24 encourage students to complete two units or sets of competencies of

1 ~~foreign~~ world languages and two units or sets of competencies of
2 physical and health education.

3 2. No student shall receive credit for high school graduation
4 more than once for completion of the same unit or set of
5 competencies to satisfy the curriculum requirements of this section.

6 3. A school district shall not be required to offer every
7 course listed in subsections B and D of this section, but shall
8 offer sufficient courses to allow a student to meet the graduation
9 requirements during the secondary grade years of the student.

10 F. 1. In addition to the curriculum requirements of either
11 subsection B or D of this section, beginning with ninth graders in
12 the 2021-22 school year, in order to graduate from a public high
13 school accredited by the State Board of Education, students shall
14 pass the United States naturalization test pursuant to the
15 provisions of this subsection.

16 2. School districts shall offer the United States
17 naturalization test to students at least once per school year,
18 beginning as early as eighth grade at the discretion of the school
19 district; provided, any student may retake the exam upon request,
20 and as often as desired, until earning a passing score. For
21 purposes of this subsection, a passing score shall be 60 out of 100
22 questions.

23 3. School districts shall exempt students with disabilities
24 whose individualized education program (IEP), consistent with state

1 law, indicates that the student is to be assessed with alternate
2 achievement standards through the Oklahoma Alternate Assessment
3 Program (OAAP).

4 G. For purposes of this section:

5 1. "Contextual methodology" means academic content and skills
6 taught by utilizing real-world problems and projects in a way that
7 helps students understand the application of that knowledge;

8 2. "Qualified agricultural education courses" means courses
9 that have been determined by the State Board of Education to offer
10 the sets of competencies for one or more science content areas and
11 which correspond to academic science courses. Qualified
12 agricultural education courses shall include, but are not limited
13 to, Horticulture, Plant and Soil Science, Natural Resources and
14 Environmental Science, and Animal Science. The courses shall be
15 taught by teachers certified in agricultural education and comply
16 with all rules of the Oklahoma Department of Career and Technology
17 Education;

18 3. "Rigor" means a level of difficulty that is thorough,
19 exhaustive and accurate and is appropriate for the grade level;

20 4. "Sets of competencies" means instruction in those skills and
21 competencies that are specified in the subject matter standards
22 adopted by the State Board of Education and other skills and
23 competencies adopted by the Board, without regard to specified
24 instructional time; and

1 5. "Unit" means a Carnegie Unit as defined by the North Central
2 Association's Commission on Schools.

3 H. 1. The State Board of Education shall adopt a plan to
4 ensure that rigor is maintained in the content, teaching
5 methodology, level of expectations for student achievement, and
6 application of learning in all the courses taught to meet the
7 graduation requirements as specified in this section.

8 2. The State Board of Education shall allow as much flexibility
9 at the district level as is possible without diminishing the rigor
10 or undermining the intent of providing these courses. To accomplish
11 this purpose, the State Department of Education shall work with
12 school districts in reviewing and approving courses taught by
13 districts that are not specifically listed in subsections B and D of
14 this section. Options may include, but shall not be limited to,
15 courses taken by concurrent enrollment, advanced placement, or
16 correspondence, or courses bearing different titles.

17 3. The State Board of Education shall approve an advanced
18 placement computer science course to meet the requirements of course
19 competencies listed in paragraph 2 of subsection B of this section
20 if the course is taken in a student's senior year and the student is
21 concurrently enrolled in or has successfully completed Algebra II.

22 4. Technology center school districts may offer programs
23 designed in cooperation with institutions of higher education which
24 have an emphasis on a focused field of career study upon approval of

1 the State Board of Education and the independent district board of
2 education. Students in the tenth grade may be allowed to attend
3 these programs for up to one-half (1/2) of a school day and credit
4 for the units or sets of competencies required in paragraphs 2, 3
5 and 6 of subsection B or D of this section shall be given if the
6 courses are taught by a teacher certified in the secondary subject
7 area; provided, credit for units or sets of competencies pursuant to
8 subsection B of this section shall be approved for college admission
9 requirements.

10 5. If a student enrolls in a concurrent course, the school
11 district shall not be responsible for any costs incurred for that
12 course, unless the school district does not offer enough course
13 selection during the student's secondary grade years to allow the
14 student to receive the courses needed to meet the graduation
15 requirements of this section. If the school district does not offer
16 the necessary course selection during the student's secondary grade
17 years, it shall be responsible for the cost of resident tuition at
18 an institution in The Oklahoma State System of Higher Education,
19 fees, and books for the concurrent enrollment course, and providing
20 for transportation to and from the institution to the school site.

21 It is the intent of the Legislature that for students enrolled
22 in a concurrent enrollment course which is paid for by the school
23 district pursuant to this paragraph, the institution charge only the
24 supplementary and special service fees that are directly related to

1 the concurrent enrollment course and enrollment procedures for that
2 student. It is further the intent of the Legislature that fees for
3 student activities and student service facilities, including the
4 student health care and cultural and recreational service fees, not
5 be charged to such students.

6 6. Credit for the units or sets of competencies required in
7 subsection B or D of this section shall be given when such units or
8 sets of competencies are taken prior to ninth grade if the teachers
9 are certified or authorized to teach the subjects for high school
10 credit and the required rigor is maintained.

11 7. The three units or sets of competencies in mathematics
12 required in subsection B or D of this section shall be completed in
13 the ninth through twelfth grades. If a student completes any
14 required courses or sets of competencies in mathematics prior to
15 ninth grade, the student may take any other mathematics courses or
16 sets of competencies to fulfill the requirement to complete three
17 units or sets of competencies in grades nine through twelve after
18 the student has satisfied the requirements of subsection B or D of
19 this section.

20 8. All units or sets of competencies required for graduation
21 may be taken in any sequence recommended by the school district.

22 I. As a condition of receiving accreditation from the State
23 Board of Education, all students in grades nine through twelve shall
24 enroll in a minimum of six periods, or the equivalent in block

scheduling or other scheduling structure that allows for instruction in sets of competencies, of rigorous academic and/or rigorous vocational courses each day, which may include arts, vocal and instrumental music, speech classes, and physical education classes.

J. 1. Academic and vocational-technical courses designed to offer sets of competencies integrated or embedded within the courses that provide for the teaching and learning of the appropriate skills and knowledge in the subject matter standards, as adopted by the State Board of Education, may, upon approval of the Board, in consultation with the Oklahoma Department of Career and Technology Education if the courses are offered at a technology center school district, be counted for academic credit and toward meeting the graduation requirements of this section.

2. Internet-based courses offered by a technology center school that are taught by a certified teacher and provide for the teaching and learning of the appropriate skills and knowledge in the subject matter standards may, upon approval of the State Board of Education and the independent district board of education, be counted for academic credit and toward meeting the graduation requirements of this section.

3. Internet-based courses or vocational-technical courses utilizing integrated or embedded skills for which no subject matter standards have been adopted by the State Board of Education may be approved by the Board, in consultation with the Oklahoma Department

1 of Career and Technology Education if the courses are offered at a
2 technology center school district, if such courses incorporate
3 standards of nationally recognized professional organizations and
4 are taught by certified teachers.

5 4. Courses offered by a supplemental education organization
6 that is accredited by a national accrediting body and that are
7 taught by a certified teacher and provide for the teaching and
8 learning of the appropriate skills and knowledge in the subject
9 matter standards may, upon approval of the State Board of Education
10 and the school district board of education, be counted for academic
11 credit and toward meeting the graduation requirements of this
12 section.

13 K. The State Board of Education shall provide an option for
14 high school graduation based upon attainment of the desired levels
15 of competencies as required in tests pursuant to the provisions of
16 Section 1210.508 of this title. Such option shall be in lieu of the
17 amount of course credits earned.

18 L. The State Board of Education shall prescribe, adopt and
19 approve a promotion system based on the attainment by students of
20 specified levels of competencies in each area of the core
21 curriculum.

22 M. Children who have individualized education programs pursuant
23 to the Individuals with Disabilities Education Act (IDEA), and who
24 satisfy the graduation requirements through the individualized

1 education program for that student shall be awarded a standard
2 diploma.

3 N. Students who enter the ninth grade in or prior to the 2007-
4 08 school year who are enrolled in an alternative education program
5 and meet the requirements of their plans leading to high school
6 graduation developed pursuant to Section 1210.568 of this title
7 shall be awarded a standard diploma.

8 O. Any student who completes the curriculum requirements of the
9 International Baccalaureate Diploma Program shall be awarded a
10 standard diploma.

11 P. Any student who successfully completes an advanced
12 mathematics or science course offered pursuant to Section 1210.404
13 of this title shall be granted academic credit toward meeting the
14 graduation requirements pursuant to paragraph 2 or 3, as
15 appropriate, of subsection B or D of this section.

16 Q. For purposes of this section, the courses approved for
17 college admission requirements shall be courses which are approved
18 by the Oklahoma State Regents for Higher Education for admission to
19 an institution within The Oklahoma State System of Higher Education.

20 R. Students who have been denied a standard diploma by the
21 school district in which the student is or was enrolled for failing
22 to meet the requirements of this section may re-enroll in the school
23 district that denied the student a standard diploma following the
24 denial of a standard diploma. The student shall be provided

1 remediation or intervention and the opportunity to complete the
2 curriculum units or sets of competencies required by this section to
3 obtain a standard diploma. Students who re-enroll in the school
4 district to meet the graduation requirements of this section shall
5 be exempt from the hourly instructional requirements of Section 1-
6 111 of this title and the six-period enrollment requirements of this
7 section.

8 S. The State Department of Education shall collect and report
9 data by school site and district on the number of students who
10 enroll in the core curriculum as provided in subsection D of this
11 section.

12 SECTION 2. AMENDATORY 70 O.S. 2021, Section 11-103.6m,
13 is amended to read as follows:

14 Section 11-103.6m A. The State Department of Education shall
15 develop by December 31, 2019, a rubric for computer science programs
16 in elementary, middle and high schools to serve as a guide to
17 schools for implementing quality computer science programs.

18 B. The rubric shall include but not be limited to the following
19 recommendations:

20 1. No less than one computer science course taught by a teacher
21 with a computer science certification at each school site, which may
22 include core content courses where computer science concepts are
23 integrated; and
24

1 2. Allowing all students to have access to career exploration
2 activities that address how computer science skills are utilized.

3 C. 1. Beginning in the 2024-2025 school year, all public high
4 schools and public charter high schools in this state shall offer a
5 minimum of one computer science course to students.

6 2. Beginning in the 2024-2025 school year, all public middle
7 and elementary schools and public charter middle and elementary
8 schools in this state shall offer instruction aligned to the
9 Oklahoma Academic Standards for Computer Science. Instruction may
10 be offered through stand-alone computer science courses or through
11 integration in other courses.

12 D. Each course or offering required by subsection C of this
13 section shall:

14 1. Be aligned to the Oklahoma Academic Standards for Computer
15 Science and current research-based instructional practices;

16 2. Be of high quality, as defined by the State Board of
17 Education; and

18 3. Be offered in an in-person setting or as a virtual or
19 distance course option only when a traditional classroom setting is
20 not feasible.

21 E. By June 30, 2025, and by June 30 each year thereafter, the
22 State Department of Education shall publish on its website a report
23 regarding computer science courses or content offered at each school
24

1 and district during the previous school year. The report shall
2 include ~~the~~, at a minimum:

3 1. The names and course codes of computer science courses
4 offered in each school including a course description, to the extent
5 such information is available;

6 2. The course delivery mode, such as in-person school, career
7 and technology education, virtual school, and other variations or
8 combinations;

9 3. Educator qualifications including, but not limited to, area
10 of certification, micro-credential, endorsement, highest academic
11 degree, and National Board certification; and

12 4. Aggregate data on the following:

13 a. the number and percentage of students who enrolled in
14 each computer science course, disaggregated by
15 demographics including, but not limited to, special
16 education status, English language learner status,
17 eligibility for free and reduced-price meals, race,
18 and ethnicity, and

19 b. the number of computer science instructors at each
20 school and demographic information, as available.

21 SECTION 3. This act shall become effective July 1, 2022.

22 SECTION 4. It being immediately necessary for the preservation
23 of the public peace, health or safety, an emergency is hereby
24

1 declared to exist, by reason whereof this act shall take effect and
2 be in full force from and after its passage and approval.

3 COMMITTEE REPORT BY: COMMITTEE ON EDUCATION
4 April 12, 2022 - DO PASS
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