HB4389 FULLPCS2 Rhonda Baker-EK 2/28/2022 4:28:55 pm

COMMITTEE AMENDMENT

HOUSE OF REPRESENTATIVES
State of Oklahoma

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	CHAIR:									
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AMEND	TITLE T	O CONFO	ORM TO AMEND	MENTS						
Adopte	ed:				Amendment	submitted	d by:	Rhonda	Baker	

Reading Clerk

1	STATE OF OKLAHOMA							
2	2nd Session of the 58th Legislature (2022)							
3	PROPOSED COMMITTEE SUBSTITUTE							
4	FOR HOUSE BILL NO. 4389 By: Baker							
5	Bill No. 1865							
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7	PROPOSED COMMITTEE SUBSTITUTE							
8	An Act relating to school curriculum; amending 70 O.S. 2021, Section 11-103.6, which relates to subject							
9	<pre>matter standards; including emphasis on certain topics in computer science subject matter standards;</pre>							
10	<pre>modifying computer science college preparatory curriculum requirements; excluding certain courses</pre>							
11	from eligibility; modifying computer science core curriculum requirements; excluding certain courses							
12	from eligibility; amending 70 O.S. 2021, Section 11-103.6m, which relates to computer science programs;							
13	listing additional information to be included in certain annual report; providing an effective date;							
14	and declaring an emergency.							
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17	BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:							
18	SECTION 1. AMENDATORY 70 O.S. 2021, Section 11-103.6, is							
19	amended to read as follows:							
20	Section 11-103.6 A. 1. The State Board of Education shall							
21	adopt subject matter standards for instruction of students in the							
22	public schools of this state that are necessary to ensure there is							
23	attainment of desired levels of competencies in a variety of areas							
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to include language, mathematics, science, social studies and communication.

- 2. School districts shall develop and implement curriculum, courses and instruction in order to ensure that students meet the skills and competencies as set forth in this section and in the subject matter standards adopted by the State Board of Education.
- 3. All students shall gain literacy at the elementary and secondary levels. Students shall develop skills in reading, writing, speaking, computing and critical thinking. For purposes of this section, critical thinking means a manner of analytical thinking which is logical and uses linear factual analysis to reach a conclusion. They also shall learn about cultures and environments their own and those of others with whom they share the earth. Students, therefore, shall study social studies, literature, languages, the arts, mathematics and science. Such curricula shall provide for the teaching of a hands-on career exploration program in cooperation with technology center schools.
- 4. The subject matter standards shall be designed to teach the competencies for which students shall be tested as provided in Section 1210.508 of this title, and shall be designed to prepare all students for active citizenship, employment and/or successful completion of postsecondary education without the need for remedial coursework at the postsecondary level.

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

- 6. The subject matter standards for English Language Arts shall give Classic Literature and nonfiction literature equal consideration to other literature. In addition, emphasis shall be given to the study of complete works of literature.
- 7. At a minimum, the subject matter standards for mathematics shall require mastery of the standard algorithms in mathematics, which is the most logical, efficient way of solving a problem that consistently works, and for students to attain fluency in Euclidian geometry.
- 8. The subject matter standards for history, social studies and United States Government shall include study of important historical documents, including the United States Constitution, Declaration of Independence, Emancipation Proclamation, Federalist Papers and other documents with significant history and heritage of the United States, and the content of the United States naturalization test, with an emphasis on the specific content of the test and the ideas and concepts it references. Beginning with the 2022-2023 school year, the United States naturalization test shall be administered in accordance with subsection F of this section.
- 9. The subject matter standards for United States Government shall include an emphasis on civics, the structure and relationship between the national, state, county and local governments and

simulations of the democratic process. For the purposes of this section, "civics" means the study of the rights and duties of Oklahoma and United States citizens and of how those governments work.

- 10. The subject matter standards for computer science shall include an emphasis on computing systems, networks and the Internet, data and analysis, algorithms and programming, and impacts of computing.
- B. Subject to the provisions of subsection C of this section, in order to graduate from a public high school accredited by the State Board of Education with a standard diploma, students shall complete the following college preparatory/work ready curriculum units or sets of competencies at the secondary level:
- 1. Four units or sets of competencies of English to include Grammar, Composition, Literature, or any English course approved for college admission requirements;
- 2. Three units or sets of competencies of mathematics, limited to Algebra I, Algebra II, Geometry, Trigonometry, Math Analysis, Calculus, Advanced Placement Statistics, or any mathematics course with content and/or rigor above Algebra I and approved for college admission requirements;
- 3. Three units or sets of competencies of laboratory science approved for college admission requirements, including one unit or set of competencies of life science, meeting the standards for

Biology I; one unit or set of competencies of physical science,

meeting the standards for Physical Science, Chemistry or Physics;

and one unit or set of competencies from the domains of physical

science, life science or earth and space science such that the

content and rigor is above Biology I or Physical Science;

- 4. Three units or sets of competencies of history and citizenship skills, including one unit of American History, one-half unit of Oklahoma History, one-half unit of United States Government and one unit from the subjects of History, Government, Geography, Economics, Civics, or non-Western culture and approved for college admission requirements;
- 5. Two units or sets of competencies of the same foreign world or non-English language or two units of computer technology science or technology/engineering approved for college admission requirements, whether taught at a high school or a technology center school, including computer programming, hardware, and business computer applications, such as. Beginning with the 2024-2025 school year, word processing, databases, spreadsheets, and graphics, excluding courses shall be excluded in addition to keyboarding or typing courses;
- 6. One additional unit or set of competencies selected from paragraphs 1 through 5 of this subsection or career and technology education courses, concurrently enrolled courses, Advanced Placement

courses or International Baccalaureate courses approved for college admission requirements; and

- 7. One unit or set of competencies of fine arts, such as music, art, or drama, or one unit or set of competencies of speech.
- C. In lieu of the requirements of subsection B of this section which requires a college preparatory/work ready curriculum, a student may enroll in the core curriculum as provided in subsection D of this section upon written approval of the parent or legal guardian of the student. For students under the age of eighteen (18) school districts shall require a parent or legal guardian of the student to meet with a designee of the school prior to enrollment in the core curriculum. The State Department of Education shall develop and distribute to school districts a form suitable for this purpose, which shall include information on the benefits to students of completing the college preparatory/work ready curriculum as provided for in subsection B of this section.
- D. For those students subject to the requirements of subsection C of this section, in order to graduate from a public high school accredited by the State Board of Education with a standard diploma, students shall complete the following core curriculum units or sets of competencies at the secondary level:
- Language Arts Four units or sets of competencies, to consist of one unit or set of competencies of grammar and

1 composition, and three units or sets of competencies which may
2 include, but are not limited to, the following courses:
3 a. American Literature,

- b. English Literature,
- c. World Literature,

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- 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

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Board of Career and Technology Education shall promulgate rules to define the provisions of this act related to the accepted industry-valued credentials which are industry-endorsed or industry-aligned. The list of accepted industry-valued credentials shall be reviewed annually and updated at least every three (3) years by the Board,

- h. (1) contextual mathematics courses which enhance technology preparation, or
 - (2) a science, technology, engineering and math (STEM) block course meeting the requirements for course competencies listed in paragraph 2 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,
- i. mathematics courses taught at a technology center school by a teacher certified in the secondary subject area when taken in the tenth, eleventh or twelfth

1 grade upon approval of the State Board of Education 2 and the independent district board of education, or j. any other mathematics course with content and/or rigor 3 4 equal to or above Algebra I; 5 Science - Three units or sets of competencies, to consist of one unit or set of competencies of Biology I or Biology I taught in 6 7 a contextual methodology, and two units or sets of competencies in 8 the areas of life, physical, or earth science or technology which 9 may include, but are not limited to, the following courses: 10 a. Chemistry I, 11 b. Physics, 12 Biology II, C. 1.3 d. Chemistry II, 14 Physical Science, е. 15 f. Earth Science, 16 Botany, g. 17 h. Zoology, 18 i. Physiology, 19 j. Astronomy, 20 k. Applied Biology/Chemistry, 21 1. Applied Physics, 22 Principles of Technology, m. 23 qualified agricultural education courses, n.

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- o. (1) contextual science courses which enhance technology preparation, or
 - (2) a science, technology, engineering and math (STEM) block course meeting the requirements for 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,
- d. Anthropology, or
- e. other social studies courses with content and/or rigor equal to or above United States History, United States Government, and Oklahoma History;
- 5. Arts One unit or set of competencies which may include, but is not limited to, courses in Visual Arts and General Music; and
- 6. Computer Education or World Language One unit or set of competencies of computer technology science or technology/engineering, whether taught at a high school or a technology center school, including computer programming, hardware and business computer applications, such as and beginning with the 2024-2025 school year shall exclude word processing, databases, spreadsheets and graphics, excluding courses in addition to keyboarding or typing courses, or one unit or set of competencies of foreign world or non-English language.
- E. 1. In addition to the curriculum requirements of either subsection B or D of this section, in order to graduate from a public high school accredited by the State Board of Education students shall complete the requirements for a personal financial

literacy passport as set forth in the Passport to Financial Literacy
Act and any additional course requirements or recommended elective
courses as may be established by the State Board of Education and
the district school board. School districts shall strongly
encourage students to complete two units or sets of competencies of
foreign world languages and two units or sets of competencies of
physical and health education.

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- 2. No student shall receive credit for high school graduation more than once for completion of the same unit or set of competencies to satisfy the curriculum requirements of this section.
- 3. A school district shall not be required to offer every course listed in subsections B and D of this section, but shall offer sufficient courses to allow a student to meet the graduation requirements during the secondary grade years of the student.
- F. 1. In addition to the curriculum requirements of either subsection B or D of this section, beginning with ninth graders in the 2021-22 school year, in order to graduate from a public high school accredited by the State Board of Education, students shall pass the United States naturalization test pursuant to the provisions of this subsection.
- 2. School districts shall offer the United States
 naturalization test to students at least once per school year,
 beginning as early as eighth grade at the discretion of the school
 district; provided, any student may retake the exam upon request,

- and as often as desired, until earning a passing score. For purposes of this subsection, a passing score shall be 60 out of 100 questions.
 - 3. School districts shall exempt students with disabilities whose individualized education program (IEP), consistent with state law, indicates that the student is to be assessed with alternate achievement standards through the Oklahoma Alternate Assessment Program (OAAP).
 - G. For purposes of this section:

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- 1. "Contextual methodology" means academic content and skills taught by utilizing real-world problems and projects in a way that helps students understand the application of that knowledge;
- 2. "Qualified agricultural education courses" means courses that have been determined by the State Board of Education to offer the sets of competencies for one or more science content areas and which correspond to academic science courses. Qualified agricultural education courses shall include, but are not limited to, Horticulture, Plant and Soil Science, Natural Resources and Environmental Science, and Animal Science. The courses shall be taught by teachers certified in agricultural education and comply with all rules of the Oklahoma Department of Career and Technology Education;
- 3. "Rigor" means a level of difficulty that is thorough, exhaustive and accurate and is appropriate for the grade level;

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

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- 5. "Unit" means a Carnegie Unit as defined by the North Central Association's Commission on Schools.
- H. 1. The State Board of Education shall adopt a plan to ensure that rigor is maintained in the content, teaching methodology, level of expectations for student achievement, and application of learning in all the courses taught to meet the graduation requirements as specified in this section.
- 2. The State Board of Education shall allow as much flexibility at the district level as is possible without diminishing the rigor or undermining the intent of providing these courses. To accomplish this purpose, the State Department of Education shall work with school districts in reviewing and approving courses taught by districts that are not specifically listed in subsections B and D of this section. Options may include, but shall not be limited to, courses taken by concurrent enrollment, advanced placement, or correspondence, or courses bearing different titles.
- 3. The State Board of Education shall approve an advanced placement computer science course to meet the requirements of course competencies listed in paragraph 2 of subsection B of this section

if the course is taken in a student's senior year and the student is concurrently enrolled in or has successfully completed Algebra II.

- 4. Technology center school districts may offer programs designed in cooperation with institutions of higher education which have an emphasis on a focused field of career study upon approval of the State Board of Education and the independent district board of education. Students in the tenth grade may be allowed to attend these programs for up to one-half (1/2) of a school day and credit for the units or sets of competencies required in paragraphs 2, 3 and 6 of subsection B or D of this section shall be given if the courses are taught by a teacher certified in the secondary subject area; provided, credit for units or sets of competencies pursuant to subsection B of this section shall be approved for college admission requirements.
- 5. If a student enrolls in a concurrent course, the school district shall not be responsible for any costs incurred for that course, unless the school district does not offer enough course selection during the student's secondary grade years to allow the student to receive the courses needed to meet the graduation requirements of this section. If the school district does not offer the necessary course selection during the student's secondary grade years, it shall be responsible for the cost of resident tuition at an institution in The Oklahoma State System of Higher Education,

fees, and books for the concurrent enrollment course, and providing for transportation to and from the institution to the school site.

It is the intent of the Legislature that for students enrolled in a concurrent enrollment course which is paid for by the school district pursuant to this paragraph, the institution charge only the supplementary and special service fees that are directly related to the concurrent enrollment course and enrollment procedures for that student. It is further the intent of the Legislature that fees for student activities and student service facilities, including the student health care and cultural and recreational service fees, not be charged to such students.

- 6. Credit for the units or sets of competencies required in subsection B or D of this section shall be given when such units or sets of competencies are taken prior to ninth grade if the teachers are certified or authorized to teach the subjects for high school credit and the required rigor is maintained.
- 7. The three units or sets of competencies in mathematics required in subsection B or D of this section shall be completed in the ninth through twelfth grades. If a student completes any required courses or sets of competencies in mathematics prior to ninth grade, the student may take any other mathematics courses or sets of competencies to fulfill the requirement to complete three units or sets of competencies in grades nine through twelve after

the student has satisfied the requirements of subsection B or D of this section.

- 8. All units or sets of competencies required for graduation may be taken in any sequence recommended by the school district.
- I. As a condition of receiving accreditation from the State Board of Education, all students in grades nine through twelve shall 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 of Career and Technology Education if the courses are offered at a technology center school district, if such courses incorporate standards of nationally recognized professional organizations and are taught by certified teachers.
- 4. Courses offered by a supplemental education organization that is accredited by a national accrediting body and 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 school district board of education, be counted for academic credit and toward meeting the graduation requirements of this section.
- K. The State Board of Education shall provide an option for high school graduation based upon attainment of the desired levels of competencies as required in tests pursuant to the provisions of Section 1210.508 of this title. Such option shall be in lieu of the amount of course credits earned.

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

- M. Children who have individualized education programs pursuant to the Individuals with Disabilities Education Act (IDEA), and who satisfy the graduation requirements through the individualized education program for that student shall be awarded a standard diploma.
- N. Students who enter the ninth grade in or prior to the 2007-08 school year who are enrolled in an alternative education program and meet the requirements of their plans leading to high school graduation developed pursuant to Section 1210.568 of this title shall be awarded a standard diploma.
- O. Any student who completes the curriculum requirements of the International Baccalaureate Diploma Program shall be awarded a standard diploma.
- P. Any student who successfully completes an advanced mathematics or science course offered pursuant to Section 1210.404 of this title shall be granted academic credit toward meeting the graduation requirements pursuant to paragraph 2 or 3, as appropriate, of subsection B or D of this section.
- Q. For purposes of this section, the courses approved for college admission requirements shall be courses which are approved

by the Oklahoma State Regents for Higher Education for admission to an institution within The Oklahoma State System of Higher Education.

- R. Students who have been denied a standard diploma by the school district in which the student is or was enrolled for failing to meet the requirements of this section may re-enroll in the school district that denied the student a standard diploma following the denial of a standard diploma. The student shall be provided remediation or intervention and the opportunity to complete the curriculum units or sets of competencies required by this section to obtain a standard diploma. Students who re-enroll in the school district to meet the graduation requirements of this section shall be exempt from the hourly instructional requirements of Section 1-111 of this title and the six-period enrollment requirements of this section.
 - S. The State Department of Education shall collect and report data by school site and district on the number of students who enroll in the core curriculum as provided in subsection D of this section.
- 19 SECTION 2. AMENDATORY 70 O.S. 2021, Section 11-103.6m,
 20 is amended to read as follows:
 - Section 11-103.6m A. The State Department of Education shall develop by December 31, 2019, a rubric for computer science programs in elementary, middle and high schools to serve as a guide to schools for implementing quality computer science programs.

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

- 1. No less than one computer science course taught by a teacher with a computer science certification at each school site, which may include core content courses where computer science concepts are integrated; and
- 2. Allowing all students to have access to career exploration activities that address how computer science skills are utilized.
- C. 1. Beginning in the 2024-2025 school year, all public high schools and public charter high schools in this state shall offer a minimum of one computer science course to students.
- 2. Beginning in the 2024-2025 school year, all public middle and elementary schools and public charter middle and elementary schools in this state shall offer instruction aligned to the Oklahoma Academic Standards for Computer Science. Instruction may be offered through stand-alone computer science courses or through integration in other courses.
- D. Each course or offering required by subsection C of this section shall:
- 1. Be aligned to the Oklahoma Academic Standards for Computer Science and current research-based instructional practices;
- 2. Be of high quality, as defined by the State Board of Education; and

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

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- E. By June 30, 2025, and by June 30 each year thereafter, the State Department of Education shall publish on its website a report regarding computer science courses or content offered at each school and district during the previous school year. The report shall include the, at a minimum:
- 1. The names and course codes of computer science courses offered in each school including a course description, to the extent such information is available;
- 2. The course delivery mode, such as in-person school, career and technology education, virtual school, and other variations or combinations;
- 3. Educator qualifications including, but not limited to, area of certification, micro-credential, endorsement, highest academic degree, and National Board certification; and
 - 4. Aggregate data on the following:
 - a. the number and percentage of students who enrolled in each computer science course, disaggregated by demographics including, but not limited to, special education status, English language learner status, eligibility for free and reduced-price meals, race, and ethnicity, and

1	b. the number of computer science instructors at each
2	school and demographic information, as available.
3	SECTION 3. This act shall become effective July 1, 2022.
4	SECTION 4. It being immediately necessary for the preservation
5	of the public peace, health or safety, an emergency is hereby
6	declared to exist, by reason whereof this act shall take effect and
7	be in full force from and after its passage and approval.
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