



Karen B. Salmon, Ph.D.
State Superintendent of Schools

TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: January 26, 2021

SUBJECT: COMAR 13A.03.02
Graduation Requirements for Public High Schools in Maryland
COMAR 13A.04.01
Requirements for Computer Science, Engineering, or Technology Education Instructional Programs
COMAR 13A.04.09
Program in Science
PERMISSION TO PUBLISH

PURPOSE:

The purpose of this item is to request permission to publish amendments to COMAR 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*, COMAR 13A.04.01 *Requirements for Computer Science, Engineering, or Technology Education Instructional Programs*, and COMAR 13A.04.09 *Program in Science*. These amendments are the result of the recommendations of the Maryland High School Graduation Task Force, as reviewed and accepted by the State Board.

REGULATION PROMULGATION PROCESS

Under Maryland law, a state agency, such as the State Board, may propose a new regulation whenever the circumstances arise to do so. After the State Board votes to propose such a regulation, the proposed regulation is sent to the Administrative, Executive, and Legislative Review (AELR) Committee for a 15-day review period. If the AELR Committee does not hold up the proposed regulation for further review, it is published in the Maryland Register for a 30-day public comment period. At the end of the comment period, the Maryland State Department of Education (MSDE) staff reviews and summarizes the public comments. Thereafter, MSDE staff will present a recommendation to the State Board of Education to either: (1) adopt the regulation in the form it was proposed; or (2) revise the regulation and adopt it as final because suggested revision is not a substantive change; or (3) revise the regulation and re-propose it because the suggested revision is a substantive change. At any time during this process, the AELR Committee may stop the promulgation process and hold a hearing. Thereafter, it may recommend to the Governor that the regulation not be adopted as a final regulation or the AELR Committee may release the regulation for final adoption.

BACKGROUND/HISTORICAL PERSPECTIVE:

The Maryland High School Graduation Task Force was first convened in January 2018 at the request of the State Board and the State Superintendent of Schools. The Task Force was to make recommendations to the Board and Superintendent on the Code of Maryland Regulations (COMAR) 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*. Specifically, the Task Force was asked to focus on three areas: credit and program requirements (number of credits, subject areas, and other requirements), assessments, and options for awarding high school diplomas. All decisions were informed by current research, data, and experts.

Twenty-four organizations and stakeholder groups were invited to have a representative sit on the Task Force. The Task Force was co-chaired by Dr. Carol Williamson, Deputy Superintendent, Office of Teaching and Learning, and Dr. Dara Shaw, Executive Director, Office of Research.

The recommended amendments to credits, beginning with the ninth grade class of 2021-2022, include an increase in the number of credits required for graduation from 21 to 22, an increase in the number of credits in mathematics from three to four, and an increase in the number of credits in health from one-half credit to one credit. Computer Science and Engineering would be added to subject of Technology Education. Advanced Technology would be deleted from the completer options. The graduation requirement that students must pass assessments in algebra, English, science, and government would move from a stand-alone assessment requirement to an end-of-course assessment requirement, which would count 20 percent of the student's final grade in the respective course. This requirement would begin in the 2022-2023 school year. Clarification of the assessment requirements for students is included. In the 2020-2021 and 2021-2022 school years, taking the Maryland Comprehensive Assessment in algebra, English, science and government will meet the graduation requirement. Students graduating in the 2020-2021 school year are not required to take the assessment in government. Students would be able to earn two State endorsements, which could be added to their diploma including a College Ready State Endorsement and/or a Career and Technical Education State endorsement. Amendments include clarification of the requirements and content in science, government, and Computer Science, Engineering, or Technology Education. Language moving from Maryland High School Assessments to the Maryland Comprehensive Assessment Program is corrected throughout the regulation.

EXECUTIVE SUMMARY:

The proposed amendments to COMAR 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*, COMAR 13A.04.01 *Requirements for Computer Science, Engineering, or Technology Education Instructional Programs*, and COMAR 13A.04.09 *Program in Science* reflect the thoughtful work of the Maryland High School Graduation Task Force and the State Board to enhance the graduation requirements, adopt increased rigor, and move from stand-alone assessments to end-of-course assessments.

ACTION:

Request permission to publish amendments to COMAR 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*, COMAR 13A.04.01 *Requirements for Computer Science, Engineering, or Technology Education Instructional Programs*, and COMAR 13A.04.09 *Program in Science*.

ATTACHMENTS:

COMAR 13A.03.02 *Graduation Requirements for Public High Schools in Maryland*
COMAR 13A.04.01 *Requirements for Computer Science, Engineering, or Technology Education Instructional Programs*
COMAR 13A.04.09 *Program in Science*.

COMAR 13A.03.02

***Graduation Requirements for Public High Schools
in Maryland***

COMAR 13A.04.01

***Requirements for Computer Science, Engineering,
or Technology Education Instructional Programs***

COMAR 13A.04.09

Program in Science



State Board of Education

January 26, 2021

Purpose

- Amend COMAR 13A.03.02 *Graduation Requirements for Public High Schools in Maryland* to reflect decisions of the State Board related to recommendations from the Maryland High School Task Force and accepted by the State Board.
- Amend COMAR 13A.04.01 *Requirements for Computer Science, Engineering, or Technology Education Instructional Programs* to reflect the addition of Computer Science and Engineering.
- Amend COMAR 13A.04.09 *Program in Science* to reflect the addition of crosscutting topics.

Notes:

[Bracketed language in red font] – Language to be deleted

Italicized language highlighted in yellow – New language

Language in black font – no change

State Credit Requirements

	Students entering 9 th Grade in 2020-2021 school year and before (graduate in 2023-2024 and before)		Beginning with students entering 9 th Grade in 2021-2022 school year (graduate in 2024-2025 and later)
Total	21	Total	22
English	4	English	4
Fine Arts	1	Fine Arts	1
Mathematics	3	Mathematics	4
Physical Education	.5	Physical Education	.5
Health	.5	Health	1
Science	3	Science	3
Social Studies	3	Social Studies	3
Technology Education	1	Computer Science, Engineering, or Technology Education	1
One of the following: a. Two credits of world language which may include American Sign Language; b. Two credits of advanced technology education; or c. Successfully complete a State-approved career and technology program	2 or more	One of the following: a. Two credits of world language which may include American Sign Language; or b. Successful completion of a State-approved career and technology program.	2 or more
Electives	Credits needed for a total of 21 credits	Electives	Courses needed for a total of 22 credits

State Assessment Requirements

	Students taking state assessments in the 2018-2019 school year	Students taking state assessments in the 2019-2020 school year	Students taking state assessments in the 2020-2021 and 2021-2022 school years	Beginning with students taking state assessments in the 2022-2023 school year
	State Assessment is stand-alone assessment – required for graduation	State Assessment is stand-alone assessment – required for graduation	State Assessment is stand-alone assessment – required for graduation	State Assessment is end of course assessment – accounts for 20% of final grade in respective course
Algebra	Must participate and pass the assessment	Participation and passing waived	Must participate; passing is waived	Must participate in the assessment
English	Must participate and pass the assessment	Participation and passing waived	Must participate; passing is waived	Must participate in the assessment
Science	Must participate in the assessment	Participation waived	Must participate; passing is waived	Must participate in the assessment
Government	Must participate and pass the assessment	Participation and passing waived	Must participate; passing is waived (Note: Taking and passing the assessment waived for seniors in the 2020-2021 school year)	Must participate in the assessment

Other Amendments to the Regulations

COMAR 13A.03.02 Graduation Requirements for Public High Schools in Maryland

- Amends language: High School Assessments to Maryland Comprehensive Assessments
- Explains that credits shall be awarded for dual enrollment courses
- Beginning with the 2022-2023 school year, having taken the Maryland Comprehensive Assessment for algebra, English, science, and government must be recorded on the student's performance record card
- Beginning in the 2024-2025 school year:
 - Students completing a Certificate may earn one or more endorsements in Post-secondary Education, Work-Ready/Employment/Career, and Community/Citizenship
 - Students graduating may earn a College Ready State endorsement, a Career and Technical Education (CTE) State endorsement, or both.

COMAR 13A. 04.01 Programs in *Computer Science, Engineering, or Technology Education*

- Reflects revisions to the comprehensive instruction program to include Computer Science and Engineering

COMAR 13A.04.09 Programs in Science

- Adds Crosscutting Concepts: Students shall demonstrate an understanding of the concepts that unify the study of science through their common application across fields in the major disciplines of natural science.

Title 13A STATE BOARD OF EDUCATION

Subtitle 03 GENERAL INSTRUCTIONAL PROGRAMS

Chapter 02 Graduation Requirements for Public High Schools in Maryland

Authority: Education Article, §§2-205, 4-110, 4-111, 7-203, 7-205, 7-205.1, 7-206, and 8-404, Annotated Code of Maryland

.01 Scope.

A. This chapter sets out the enrollment, credit, student service, and State assessment requirements for graduation from a public high school in Maryland.

B. It is the expectation of the State Board that each student enrolled in a public school system in Maryland shall earn a Maryland High School Diploma in accordance with the requirements set forth in this chapter.

C. Upon notifying the State Superintendent of Schools, each local school system may establish graduation requirements beyond the minimum requirements established by the State Board.

.02 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Combined score" means the sum of specific scores as established by the Department on the Maryland **Comprehensive [High School]** Assessments for algebra, science, English, and government.

(2) "Credit" means successful demonstration of a specified unit of study.

(3) "Department" means the State Department of Education.

(4) "HSA" means the high school assessments in science and government aligned with the Maryland Standards.

(5) "Individualized education program (IEP)" means a written description for a student with a disability that is developed, reviewed, and revised in accordance with 20 U.S.C. §1414 and COMAR 13A.05.01.

(6) "Maryland **[High School] Comprehensive** Assessments" means the HSA, **[PARCC]**, or other assessments in algebra, science, English, and government developed or adopted by the Department, *including those assessments formerly known as the Maryland High School Assessments*, that are aligned with and measure a student's skills and knowledge as set forth in the Maryland Standards for those subjects.

(7) "Minimum score" means an acceptable score established by the Department below the passing score on a Maryland **[High School] Comprehensive** Assessment that may be used by a student to satisfy the combined score option.

(8) "MCAP" means the Maryland Comprehensive Assessment Program which includes assessments in algebra, science, English, and government developed or adopted by the Department, specified in B(4) of this regulation.

[(8) "PARCC Assessment" means the assessments in algebra and English aligned with the Maryland Standards.]

.03 Enrollment and Credit Requirements.

A. Beginning with students entering the 9th grade class of 2014—2015 school year, each student shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of 4 years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement.

B. To be awarded a diploma, a student *who entered the 9th grade class in the 2020-2021 school year or earlier*, shall be enrolled in a Maryland public school system and shall have earned a minimum of 21 credits that include the following specified credits:

(1) English — four credits of organized instruction in comprehension of literary and informational text, writing, speaking and listening, language, and literacy, of which one credit shall be aligned with the Maryland **[High School] Comprehensive** Assessment for English;

(2) Fine arts — one credit in visual arts, music, theater, or dance, or a combination of these;

(3) Mathematics — three credits, including one with instruction in algebra aligned with the Maryland **[High School] Comprehensive** Assessment for algebra or one or more credits in subsequent mathematics courses for which Algebra I is a prerequisite, and one with instruction in geometry aligned with the content standards for geometry;

(4) Physical education — one-half credit;

(5) Health education — one-half credit;

(6) Science — three credits of organized instruction which includes a laboratory component engaging in the application of the science and engineering practices, the crosscutting concepts, and disciplinary core ideas including Earth/space science, life science, physical science (chemistry and physics), engineering, and technology, aligned to the Maryland **[High School] Comprehensive** Assessment for science;

(7) Social studies — three credits including one credit in United States history, one credit in world history, and one credit in local, State, and national government aligned with the Maryland **[High School] Comprehensive** Assessment for government;

(8) Technology education — one credit that includes the application of knowledge, tools, and skills to solve practical problems and extend human capabilities; and

(9) One of the following:

- (a) Two credits of world language, which may include American Sign Language;
- (b) Two credits of advanced technology education; or
- (c) Successfully complete a State-approved career and technology program.

C. Beginning with students entering the 9th grade class in the 2021-2022 school year, to be awarded a diploma, a student shall be enrolled in a Maryland public school system and shall have earned a minimum of 22 credits that include the following specified credits:

(1) English — four credits of organized instruction in comprehension of literary and informational text, writing, speaking and listening, language, and literacy, of which one credit shall be aligned with the Maryland Comprehensive Assessment for English;

(2) Fine arts — one credit in visual arts, music, theater, or dance, or a combination of these;

(3) Mathematics — four credits, including one with instruction in algebra aligned with the Maryland Comprehensive Assessment for algebra or one or more credits in subsequent mathematics courses for which Algebra I is a prerequisite, and one with instruction in geometry aligned with the content standards for geometry;

(4) Physical education — one-half credit;

(5) Health education — one credit;

(6) Science — three credits, designed to develop scientific literacy with all courses integrating the application of the science and engineering practices, crosscutting concepts, and each containing a laboratory component, including one credit in life science aligned to the Maryland Comprehensive Assessment for Life Science; one credit in physical science (including chemistry, physics, or integrated physical science); and one credit in Earth/space science or a course with the topics of Earth/space science integrated;

(7) Social studies — three credits including one credit in United States history, one credit in world history, and one credit in local, State, and national government aligned with the Maryland Comprehensive Assessment for government;

(8) Computer Science, Engineering, or Technology education — one credit that includes the study of computers and algorithmic processes or the application of knowledge, tools, and skills to solve practical problems and extend human capabilities; and

(9) One of the following:

(a) Two credits of the same world language, which may include two credits of American Sign Language; or

(b) Successful completion of a State-approved career and technical education program.

[C] (D). Elective programs and instruction shall be developed at the discretion of the local school system, open to enrollment for all students, and shall focus on in-depth study in required subject areas, exploration, or application and integration of what has been learned.

[D] (E). All students must complete a locally designed high school program of environmental literacy as set forth in COMAR 13A.04.17 that is approved by the State Superintendent of Schools.

.04 Other Provisions for Earning Credit.

A. In addition to earning credits during the regular school day and year, credits may be earned, at the discretion of the local school system, through the means specified in §§B—I of this regulation.

B. Summer School.

(1) Each local school system may provide summer school programs for original and review credit as determined by the needs of students.

(2) Credit instruction shall meet the aggregate time requirements specified by the local school system.

(3) Consistent with local school system policy and procedure, credit may be given for acceptable summer study offered by approved public and nonpublic institutions in or outside of Maryland.

C. Evening School. A local school system may provide evening school programs for credit as an extension of the regular school day as determined by the needs of students.

D. Online Courses.

(1) Consistent with local school system policy and procedure, credit may be given for Department-approved online courses.

(2) If credit is to be applied toward minimum graduation requirements, the Department-approved online course shall be provided by the local school system *or through a Maryland Higher Education Institution as part of Dual Enrollment, as set forth in Education Article, §18-14-01.*

E. Tutoring.

(1) Tutoring may be considered only after all the resources of the school system have been used fully and when it is determined that the best interests of the students are being served.

(2) If tutoring is recommended by the school and approved by the local school system for credit to be applied toward minimum graduation requirements, then the tutor, the program of study, and examination shall be provided by the local school system.

F. Work Study Programs, Job Entry Training Programs, or Experience Outside the School.

(1) Consistent with local school system policy and procedure, actual time spent in work study, job entry training, or other experience may be counted for credit when identified as an integrated part of a planned study program.

(2) For work or experience outside the school which is approved and supervised by the local school system, not more than nine elective credits toward meeting graduation requirements may be granted to a student.

G. College Courses. Consistent with the payment requirement of Education Article, §§ 18-14A-04 and 18-14A-05, Annotated Code of Maryland, local school system policies and procedures, [and with] prior approval of the local superintendent of schools or the superintendent's designee, *and aligned with the Maryland College and Career Ready Standards or an elective credit for graduation requirements*, credit toward high school graduation [may] shall be given for courses offered by accredited colleges.

H. Independent Study/Internship. Consistent with local school system policy and procedure, credit toward high school graduation may be earned for independent study or internships in which a student successfully demonstrates pre-established curricular objectives.

I. Credit through Examination.

(1) Credit toward high school graduation may be earned by passing an examination that assesses student demonstration of local school system curricular objectives, *which are based on the Maryland State Standards*.

(2) A student who would be eligible to graduate but for attaining credit in English 12 may obtain that credit by taking a State-approved examination and achieving a passing score as defined by the Maryland State Department of Education.

(3) Notwithstanding any other provision of law, a county board shall award credit to a middle school student for any course for which a high school student would be awarded credit if the middle school student meets the same requirements as the high school student.

.05 Student Service.

To graduate, students shall complete one of the following:

A. 75 hours of student service that includes preparation, action, and reflection components and that, at the discretion of the local school system, may begin during the middle grades; or

B. A locally designed program in student service that has been approved by the State Superintendent of Schools.

.06 Maryland [High School] Comprehensive Assessments.

A. A student shall take the requisite Maryland [High School] *Comprehensive* Assessment during its next regular administration if the student received credit for taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland [High School] *Comprehensive* Assessment:

- (1) Algebra;
- (2) Science;
- (3) English; or
- (4) Government.

B. To be awarded the Maryland High School Diploma, all students, including elementary and middle school students who take high school level courses, shall take the Maryland [High School] *Comprehensive* Assessment for algebra, science, English, and government after the student completes the required course or courses.

C. Each local school system shall provide appropriate assistance to strengthen areas of weaknesses for students who have not achieved satisfactory scores on the Maryland [High School] *Comprehensive* Assessments.

D. Bridge Plan for Academic Validation.

(1) Eligibility Criteria. A student is eligible to satisfy the graduation assessment requirement through the Bridge Plan for Academic Validation if the student has:

- (a) Failed one or more Maryland [High School] *Comprehensive* Assessments;
- (b) Received credit in the course or courses related to the assessment or assessments;
- (c) Demonstrated overall satisfactory attendance in the most recent school year completed; and
- (d) Demonstrated satisfactory progress toward achieving the high school diploma requirements specified in COMAR 13A.03.02.09B(1) and (2); and

(e) Participated successfully in appropriate assistance as defined in §C of this regulation after having failed one or more of the Maryland [High School] *Comprehensive* Assessments.

(2) A student may begin a Bridge Project after one failure of a Maryland [High School] *Comprehensive* Assessment.

(3) A student may use the score on the Bridge Project to meet the graduation requirement only after the student has taken the Maryland [High School] *Comprehensive* Assessment twice and failed twice.

(4) The Bridge Plan for Academic Validation shall consist of:

(a) Specific modules developed by the Department in each of the Maryland [High School] *Comprehensive* Assessments content areas;

(b) The assignment by the local school system of one or more modules for completion by each student meeting the eligibility criteria;

(c) Scoring by the local review panels of the completed modules according to State-developed, Statewide scoring protocols;

(d) A recommendation from the local review panels to the local superintendent as to the outcome of the scoring of each student's module or modules;

(e) Acceptance or rejection by the local superintendent of the local review panel's recommendations; and

(f) An opportunity for the student to appeal the local superintendent's decision to the State Superintendent of Schools.

E. Reporting Student Performance.

(1) A school system shall state on the student's performance record card only that the student has or has not met all assessment requirements and shall not describe the option used to meet the requirement.

(2) For the purpose of this section, except for students identified in §F of this regulation, “met all assessment requirements” means achieving a passing score on all Maryland [High School] Comprehensive Assessments, or meeting the requirements of the combined score option, or successfully completing a Bridge Project in those assessment areas that the student did not pass.

F. For the 2020-2021 and 2021-2022 school years, a student will have met the assessment requirement for Algebra I, English 10, and Government if:

(1) The student has passed the Algebra I course, English 10 course, and Government course, and,

(2) The student takes the Algebra I, English 10, and American Government Maryland Comprehensive Assessment aligned with the course. [If the student is graduating in the school year 2017—2018 and is a first time test taker of Algebra I or English 10 in that school year and has passed the courses but failed the Maryland High School Assessment aligned with those courses, that student is exempt from completing a Bridge Project and will have met the assessment requirement for Algebra I and/or English 10.]

G. Students graduating in school year 2020-2021 are exempt from taking the MCAP American Government Assessment

H. Beginning with the 2022-2023 school year:

(1) A student shall take the requisite Maryland Comprehensive Assessment during its regular administration if the student is taking, by the methods identified in Regulations .03 and .04 of this chapter, any of the following courses aligned with the Maryland Comprehensive Assessment:

(a) Algebra;

(b) Science;

(c) English; or

(d) Government.

(2) The Maryland Comprehensive Assessment for algebra, English, science, and government shall account for 20 percent of the student's final grade in the respective high school level algebra, English, science, and government course.

I. Reporting Student Performance.

(1) A school system shall state on the student's performance record card only that the student has or has not taken the respective assessment in algebra, English, science and government.

(2) Except for students identified in §F of this regulation, “met all assessment requirements” means having taken the assessments in algebra, English, science, and government as a part of the respective course.

.07 Notice to Parents or Guardians and Students.

Each principal shall inform all students and their parents or guardians annually at a minimum of the following:

- A. Maryland's graduation requirements;
- B. The student's progress on fulfilling the credit, Maryland [High School] Comprehensive Assessment, service, and applicable IEP requirements for graduation;
- C. The results of each Maryland [High School] Comprehensive Assessment taken or Bridge Project completed by the student;
- D. A plan for appropriate assistance, if applicable; and
- E. The Department's schedule for the Maryland [High School] Comprehensive Assessment administration.

F. Beginning with the 2022-2023 school year, the student's progress on completing the course credit, which includes the end of course Maryland Comprehensive Assessment in algebra, English, science, and government, service, and applicable IEP requirements for graduation.

.08 Grading and Reporting.

A. Each school system in Maryland shall recognize and accept any and all credits a student earned toward graduation in any other public school in Maryland.

B. Each local school system shall develop a written policy on grading and reporting that complies with the student record requirements as set forth in COMAR 13A.08.02 and that includes:

(1) An explanation of the grading scale at the elementary and secondary levels;

(2) An explanation of the calculation of the final grade for a course;

(3) An explanation of weights of honors, Advanced Placement, International Baccalaureate, [and/or] and dual enrollment courses;

(4) An explanation of how attendance factors into the student's grade;

(5) An explanation of grade changing procedures, including:

(a) A timeline for final grade changes that cannot exceed 45 school days following the last day of the grading period.

For a change of grade for the fourth marking period, the timeline would begin on the first day of school in the new school year.

(b) The names of personnel at the school and central office level authorized to make final grade changes;

(c) Documentation that authorized personnel are required to maintain to support the final grade changes, including, at a minimum the:

(i) Name of teacher requesting grade change;

(ii) Reason for the grade change;

(iii) Signature of person approving the grade change;

(iv) Reason for the approval;

(v) Date of the approval; and

- (vi) Signature of the principal;
 - (d) How and when the school system will audit the validity of the grade changes each year; and
 - (e) Appeal procedures.
- C. On October 1 of each school year, each local school system shall:
- (1) File its policy on grading and reporting with State Superintendent of Schools; and
 - (2) Submit a copy of the grade change validity audit in accordance with §B(5)(d) of this regulation to the State Superintendent of Schools.
- D. Upon submission of the items contained in §C of this regulation, the Maryland State Department of Education will:
- (1) Verify that the local school system has met the requirements of this regulation; or
 - (2) Direct the local school system to develop a corrective action plan to bring it into compliance with this regulation and monitor the school system's progress in completing its corrective action.

.09 Diplomas and Certificates.

- A. The types of diplomas and certificates specified in §§B—D of this regulation shall be awarded to any student who meets the requirements for award.
- B. Maryland High School Diploma. Except as provided in Regulation .12 of this chapter, and in §C of this regulation, to be awarded a Maryland high school diploma, a student shall:
- (1) Complete the enrollment, credit, and service requirements as specified in this chapter;
 - (2) Complete local school system requirements; and
 - (3) Meet the graduation assessment requirements in the following ways:
 - (a) Achieve a passing score on the Maryland [High School] *Comprehensive* Assessments for Algebra I, science, government, and English 10;
 - (b) Achieve a combined score(s) as established by the Department on the Maryland [High School] *Comprehensive* Assessments;
 - (c) Achieve a passing score on an approved alternative assessment as established by the Department, such as Maryland [High School] *Comprehensive* Assessment for Algebra II, Advanced Placement examinations, SAT, ACT, or International Baccalaureate examinations; or
 - (d) Except for students described in Regulation .06F of this chapter, if a student is unable to meet the requirements in §B(3)(a)—(c) of this regulation, then the student shall satisfactorily complete the requirements of the Bridge Plan for Academic Validation as set forth in Regulation .06D of this chapter.
- C. Exception To Passing Score Requirement.
- (1) [For students who are graduating in school year 2016—2017 and 2017—2018] For the 2020 – 2021 and 2021 – 2022 school years [and who are first time test takers during those school years of the Maryland High School Assessment in Algebra I or English 10] students taking the Algebra I, [and] English 10, and Government Maryland [High School] *Comprehensive* Assessment [for the first time] will meet the graduation assessment requirement for Algebra I, [and] English 10, and Government.
 - (2) *Students who pass the Algebra I, English 10, and Government courses are exempt from completing a Bridge Project, as set forth in Regulation .06 of this chapter.*
 - [(2) For all students taking the HSA biology assessment in the 2016—2017 school year, taking the HSA biology assessment will meet the graduation assessment requirement for biology.]**
 - (3) For all students taking the Maryland Integrated Science Assessment in the 2017—2018, 2018—2019, 2019-2020, and 2020-2021 school years, taking the Maryland Integrated Science Assessment will meet the graduation assessment requirement for science.
- D. Maryland High School Diploma by Examination.
- (1) General Educational Development Testing Program. A Maryland High School Diploma by Examination may be awarded for satisfactory performance on approved general educational development tests if the student meets those requirements as defined in Labor and Employment Article, §11-808, Annotated Code of Maryland, and COMAR 09.37.01.04.
 - (2) Maryland Adult External High School Diploma Program. A Maryland High School Diploma by Examination may be awarded for demonstrating competencies in general life skills and individual skills on applied performance tests if the student meets those requirements as defined in COMAR 09.37.01.20.
- E. Maryland High School Certificate of Program Completion.
- (1) This certificate shall be awarded only to students with disabilities who cannot meet the requirements for a diploma but who meet the following standards:
 - (a) The student is enrolled in an education program for at least 4 years beyond grade 8 or its age equivalent, and is determined by an IEP team, with the agreement of the student and the parents of the student, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life, with the world of work including but not limited to:
 - (i) Gainful employment;
 - (ii) Post-secondary education and training;
 - (iii) Supported employment; and
 - (iv) Other services that are integrated in the community; or

(b) The student has been enrolled in an education program for 4 years beyond grade 8 or its age equivalent and will have reached age 21 by the end of the student's current school year.

(2) The Maryland Summary of Performance that describes the student's skills shall accompany the Maryland High School Certificate of Program Completion.

(3) The final decision to award a student with disabilities a Maryland High School Certificate of Program Completion will not be made until after the beginning of the student's last year in high school.

(4) A student with significant cognitive disability may not meet high school graduation requirements, in accordance with §B of this regulation, if a student:

(a) Participates in an Alternative Assessment based on Alternative Academic Achievement Standards (AA-AAAS); and

(b) Continues to receive instruction based on Alternative Academic Achievement Standards through high school.

(5) If a student participates in a graduation ceremony prior to the completion of the student's education program, at the ceremony the school system shall issue to the student a Certificate of Achievement or other similarly titled certificate in place of a diploma.

(6) Certificate Endorsement:

(a) Beginning with the 2024-2025 school year, students completing a Certificate may earn one or more endorsements.

(b) The endorsements include a Post-secondary Education endorsement, a Work-Ready/Employment/Career endorsement, and a Community/Citizenship endorsement.

(c) Requirements for the endorsements will be identified by the Department.

F. Local Endorsements. Consistent with procedures established by the Department, each local school system may add endorsements to the diploma as incentives for students to meet locally established requirements and outcomes in instruction beyond the minimums specified by the State.

G. At least yearly, through the end of the implementation, the State Board will review and assess updated information on the graduation assessment requirements and scores.

H. Maryland High School Diploma. Beginning with the 2022-2023 school year, except as provided in Regulation .12 of this chapter, and in §C of this regulation, to be awarded a Maryland high school diploma, a student shall:

(1) Complete the enrollment, credit, assessment and service requirements as specified in this chapter; and

(2) Complete local school system requirements.

I. State Endorsements.

(1) Beginning with the 2024-2025 school year, students graduating may earn a College Ready State endorsement, a Career and Technical Education (CTE) State endorsement, or both.

(2) The Department will establish the requirements for the endorsements.

.09-1 Appeal of Denial of Diploma for Failure to Meet Maryland [High School] Comprehensive Assessment Requirement.

A. A school system shall notify each senior and the senior's parents or guardians on or before the end of February of the senior year if a student may not graduate. The notice shall explain:

(1) The reasons the student may not graduate;

(2) The options available to meet all graduation requirements;

(3) That a waiver of the Maryland [High School] Comprehensive Assessment graduation requirement may be one of the options, if the student meets the criteria set forth in §§C and E of this regulation;

(4) The waiver process and timeline; and

(5) That parents or guardians may submit information in writing to the principal concerning eligibility of their child for the waiver.

B. On or before the end of February, the principal shall report to the local superintendent the name and student identification number of each student identified in the February notice.

C. On or before April 1, the school system shall identify each student who may fail to graduate because:

(1) The student has taken none of the required Maryland [High School] Comprehensive Assessments; or

(2) The student has taken some or all of the Maryland [High School] Comprehensive Assessments and failed some or all of them.

D. On or before April 1, the principal shall report to the local superintendent the name and student identification number of each student identified as meeting the criteria in §C of this regulation.

E. By April 1, for each senior identified in §C of this regulation, the school principal shall consider whether to recommend to the local superintendent a waiver of the Maryland [High School] Comprehensive Assessment graduation requirements that the student has not fulfilled to date if:

(1) The student meets the following criteria:

(a) The student has or will meet all other graduation requirements;

(b) The student has or will take all required Maryland [High School] Comprehensive Assessments before the graduation date; and

(c) If the student had an opportunity to participate in one or more interventions, or remediation opportunities, including the Bridge Plan, the student participated in them; and

(2) The student is prevented from meeting the Maryland [High School] Comprehensive Assessment graduation requirements because:

- (a) Of a decision made by the local school system concerning the provision of appropriate assistance as required by Regulation .06C of this chapter;
- (b) The student experienced a special, extraordinary, or extenuating circumstance or combination of circumstances preceding the administration of the most recent Maryland [High School] *Comprehensive* Assessment, such as a recent death in the immediate family, a serious or prolonged illness or pregnancy with medical complications, an accident causing serious injury, or a destructive house fire;
- (c) The student moved to the United States in the junior or senior year and the student is literate in the student's native language but not literate in English; or
- (d) The student moved to Maryland in the senior year, has passed all the Maryland [High School] *Comprehensive* Assessment courses, but has failed the related Maryland [High School] *Comprehensive* Assessment, and has had no adequate opportunity for intervention.

F. On or about April 1, the principal shall notify the student and the student's parents or guardians that the student is being considered for a waiver of the Maryland [High School] *Comprehensive* Assessment graduation requirements that the student has not fulfilled to date. The notice shall explain the waiver decision-making process.

G. On or before May 1, the principal of the high school shall make a Maryland [High School] *Comprehensive* Assessment waiver recommendation to the local superintendent for each student who meets the criteria set forth in §E of this regulation with the participation of:

- (1) The student's IEP team, if the student is a student with disabilities;
- (2) The English Language Learner staff, if the student is an English Language Learner;
- (3) Other school personnel; or
- (4) One or more of them.

H. The principal shall explain the reason for each recommendation under §G of this regulation, whether the recommendation is to grant or deny the waiver.

I. The local superintendent shall review each recommendation and shall:

- (1) Grant or deny the waiver;
- (2) Promptly notify the student and the student's parent or guardian of the decision; and
- (3) If the waiver is granted, include in the notification the local procedures and requirements that must be met for a diploma to be awarded.

J. The superintendent's decision in this matter is not appealable to the local board of education, but may be appealed to the State Superintendent of Schools.

K. A student or the student's parents or guardians may appeal the waiver denial to the State Superintendent by sending a written appeal letter explaining why the waiver denial was an arbitrary or unreasonable decision. The State Superintendent may affirm or reverse the local superintendent's decision and shall inform the student, the student's parents or guardians, the local superintendent, and the State Board in writing of the decision.

L. The decision of the State Superintendent may be appealed to the circuit court pursuant to Maryland Rules 7-201, et seq. On appeal:

- (1) If the State Superintendent has reversed the local superintendent's decision to deny the Maryland [High School] *Comprehensive* Assessment waiver and the local school system appeals that decision, the State Superintendent shall defend the decision on appeal; or
- (2) If the State Superintendent has affirmed the local superintendent's decision and the aggrieved student appeals, the local superintendent shall defend the State Superintendent's decision on appeal.

M. By August 1, the local superintendent shall send a report to the State Superintendent or the State Superintendent's designee on waiver decisions rendered under this regulation.

N. Nothing in this regulation is intended to establish any right to participate in the graduation ceremony while an appeal is pending. Participation in the graduation ceremony remains at the discretion of the local superintendent.

.10 Alternatives to 4-year Enrollment Requirement.

A. In recognition of the fact that 4-year enrollment in a public high school may not serve the best interests of some students, the alternatives in §§B and C of this regulation shall be made available.

B. Early College Admission Program. A student may receive a Maryland High School Diploma through acceptance in the early college admission program, if:

- (1) The student is accepted for early admission to an accredited college before high school graduation;
- (2) All Maryland [High School] *Comprehensive* Assessments and student service requirements have been met;
- (3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;
- (4) The student's program for the first year of college is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and
- (5) At the conclusion of the program or after 1 year, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the college to the high school principal indicating that the student has successfully completed a year of college work.

C. Early Admission to Approved Vocational, Technical, or Other Postsecondary School Program. A student may receive a Maryland High School Diploma through acceptance in an early admission program of an approved vocational, technical, or postsecondary school program if:

- (1) The student is accepted for early admission by an approved vocational, technical, or postsecondary school program before high school graduation;
- (2) All Maryland [High School] Comprehensive Assessments and student service requirements have been met;
- (3) A written request by the student and parent or guardian is made to and approved by the local superintendent of schools certifying the early admission acceptance;
- (4) The student's program for the first year of the postsecondary program is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and
- (5) At the conclusion of a full year of study, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the postsecondary school to the high school principal indicating that the student has successfully completed a year of postsecondary school work.

.11 Alternatives for Structuring Programs.

A. Each local school system shall be permitted to develop alternative ways for individual or groups of students to fulfill graduation requirements.

B. An alternative plan may include a waiver of the fourth year enrollment requirement if all credit, assessments, and student service requirements are met and if the local superintendent of schools or designee determines that the waiver is in the best interest of the student.

C. Procedures for implementing these alternative programs leading to high school diplomas are as follows:

- (1) Development and approval of a curricular plan which assures that the content of the specified credits is included and the standards for graduation are met pursuant to the requirements of this chapter with the plan containing a program description, performance requirements, and evaluation procedures; and
- (2) The local superintendent of schools is responsible for approving any plan and shall notify the State Superintendent of Schools once approval has been given.

.12 General Provisions.

A. Length of School Year. Maryland public high schools shall be open for at least 180 school days and a minimum of 1,170 school hours during a 10-month period in each school year.

B. Graduation Requirements for Transfer Students.

(1) Attendance Requirements.

(a) To receive a diploma, a student shall be in attendance at a Maryland public high school one full semester immediately preceding graduation in addition to meeting the other diploma requirements.

(b) In cases where this requirement creates an undue hardship for a student transferring to or from a Maryland nonpublic school or from an out-of-State school and wishing to receive a Maryland high school diploma, the local superintendent of schools may waive the one full semester attendance requirement.

(c) Exception shall be made for a student with disabilities in a State-approved nonpublic program.

(d) Students transferring from one Maryland public high school to another during the second semester of their senior year and meeting all requirements for graduation shall be given the option of graduating from either high school by agreement of the local superintendent of schools or the respective local superintendents when more than one local school system is involved.

(2) Maryland [High School] Comprehensive Assessment Exemption Requirements.

(a) A student who transfers from a nonpublic school or a school out of State is exempt from one or more of the Maryland [High School] Comprehensive Assessments if, consistent with local school system policy and procedure, the local superintendent determines that the course taken is aligned with the relevant Maryland [High School] Comprehensive Assessment and awards the student credit for taking any of the courses aligned with the Maryland [High School] Comprehensive, that is, algebra, science, English, or government, or all of these, in accordance with the principles set forth in §B(2)(c) of this regulation.

(b) A student who transfers from a nonpublic school or a school out of State and has not received credit for algebra but has demonstrated mastery of the Maryland College and Career Ready Standards for algebra either through an evaluation or successful completion of subsequent mathematics courses for which algebra is a prerequisite is exempt from the Maryland [High School] Comprehensive Assessment for algebra.

(c) To award credit for taking any of the courses aligned with the Maryland [High School] Comprehensive Assessments, that is, algebra, science, English, or government, a principal shall determine through the following considerations whether the transfer student demonstrates subject matter knowledge aligned with the content standards for the subject:

(i) Administration of standardized tests and examinations;

(ii) Observation of the student in the classroom;

(iii) Use of interviews that are focused around the student's demonstration of course content knowledge and performance levels; and

(iv) Inspection of transcripts, report cards, and other documentation.

(d) A student who transfers from a nonpublic school or from a school out of State into a local school system after the first semester of his or her senior year is exempt from the Maryland [High School] Comprehensive Assessment Requirements.

(e) The exemption provided in §B(2)(d) of this regulation does not apply to a student with disabilities in a State-approved nonpublic program.

(3) Local Graduation Requirements. A student who enters a local school system in his or her senior year shall be granted a waiver from locally established graduation requirements unless the student chooses to fulfill the requirements.

(4) Unavailability of Official Transcript. If the transcript of record is not available, a local superintendent of schools or designee shall determine the appropriate placement of the student within the high school program by an evaluation of the student that shall include one or more of the following:

- (a) Administration of standardized tests and examination;
- (b) Observation of the student in a classroom setting;
- (c) Use of interviews that are focused around the student's demonstration of course content knowledge and performance levels;
- (d) Inspection of report cards and other documentation.

KAREN B. SALMON, Ph.D.
State Superintendent of Schools

Title 13A STATE BOARD OF EDUCATION

Subtitle 04 SPECIFIC SUBJECTS

Chapter 01 Programs in **Computer Science, Engineering, or Technology** Education

Authority: Education Article, §2-205(c) and (h), Annotated Code of Maryland

.01 Requirements for **Computer Science, Engineering, or Technology** Education Instructional Programs.

A. Each local school system shall offer a **computer science, engineering, or** technology education program in grades 9—12 which shall enable students to:

- (1) Meet graduation requirements; and
- (2) Select **[advanced technology]** **computer science, engineering, or technology** electives **or career and technical education (CTE) programs of study.**

B. Maryland **Computer Science, Engineering, or** Technology Education Program. The comprehensive instructional program shall:

- (1) Provide for the diversity of student needs, abilities, and interests in the high school learning years; and
- (2) Include the Maryland **[Technology Education Content]** **K-12 Computer Science** Standards or the **Standards for Technological and Engineering Literacy, or both.**

[C. The Nature of Technology. Students shall develop an understanding of the nature of technology through:

- (1) Its characteristics, scope, and core concepts;**
- (2) The relationships among technologies; and**
- (3) The connections between technology and other fields of study.**

D. Impacts of Technology. Students shall develop abilities to assess the impacts of technology by:

- (1) Identifying its cultural, social, economic, political, and environmental effects; and**
- (2) Understanding the role of society in the development and use of technology.**

E. Engineering Design and Development. Students shall demonstrate knowledge of and apply the engineering design and development process through:

- (1) Research and development;**
- (2) Invention and innovation;**
- (3) Problem solving; and**
- (4) Using and maintaining technological products and systems.**

F. Core Technologies. Students shall demonstrate knowledge of and skills related to the core technologies (biotechnology, electrical, electronics, fluid, materials, mechanical, optical, structural, and thermal), the building blocks of the designed world, by studying their functions and applying them in common technology systems.

G. The Designed World. Students shall demonstrate knowledge of the major enterprises that produce the goods and services of the designed world, which include:

- (1) Medical, agricultural, and biotechnology;**
- (2) Energy and power;**

- (3) Information and communication;
- (4) Transportation; and
- (5) Manufacturing and construction technologies.

H. Maryland Advanced Technology Education Electives. An instructional program that meets the credit requirement specified in COMAR 13A.03.02.04 for advanced technology education in which students in the high school learning years shall develop in-depth skills and understanding related to one or more of the following:

- (1) Impacts of technology;
- (2) Technological issues; and
- (3) Engineering design.]

[I]C. Curriculum Documents. Consistent with Education Article, §4-111, Annotated Code of Maryland, each local school system shall provide *computer science, engineering, or* technology education curriculum documents for the secondary schools under its jurisdiction that:

- (1) Include the content standards set forth in §§[C—G] B of this regulation; and
- (2) Are aligned with the State [Curriculum] *standard(s)*, as developed by the Maryland State Department of Education in collaboration with local school systems.

[J]D. Student Participation. Each student shall have the opportunity to participate in the *computer science, engineering, or* technology education program required by this chapter.

.02 Certification Procedures.

By September 1, 2007, and each 5 years after that, each local superintendent of schools shall have certified to the State's Superintendent of Schools that the instructional programming within grades 9—12 meets, at a minimum, the requirements set forth in Regulation .01[C—G] B-C of this chapter.

Title 13A

STATE BOARD OF EDUCATION

Subtitle 04 SPECIFIC SUBJECTS

Chapter 09 Program in Science

.01 Science Instructional Programs for Grades Prekindergarten — 12.

- A. Each local school system shall:
 - (1) Provide in public schools an instructional program in science each year for all students in grades prekindergarten—8; and
 - (2) Offer in public schools a science program in grades 9—12 which enables students to meet graduation requirements and to select science electives.
- B. Maryland Science Program. The comprehensive instructional program shall provide for the diversity of student needs, abilities, and interests at the early, middle, and high school learning years, and shall include *all* the Maryland College- and Career-Ready Next Generation Science Standards (NGSS) *for all students as* set forth in §§C—[G]H of this regulation.
- C. Science and Engineering Practices. Students shall demonstrate an understanding by engaging in scientific investigation that requires not only skill but also knowledge that is specific to each practice.

D. Crosscutting Concepts. Students shall demonstrate an understanding of the concepts that unify the study of science through their common application across fields in the major disciplines of natural science.
- [D.]E. Earth/Space Science. Students shall demonstrate an understanding of the processes that operate on Earth and address its place in the solar system and galaxy.
- [E.]F. Life Science [including **Biology and Environmental Science**]. Students shall demonstrate an understanding of the key concepts that make sense of the life sciences which focus on patterns, processes, and relationships of living organisms.
- [F.]G. Physical Science. Students shall demonstrate an understanding that there are mechanisms of cause and effect in all systems and processes that can be understood through a common set of physical and chemical principles.
- [G.]H. Engineering, Technology, and Applications of Science. Students shall demonstrate an understanding by engaging in solving complex problems that include issues of social and global significance with an emphasis on identifying the best solution to a problem, which often involves researching how others have solved it before in complex problems.
- [H.]I. Curriculum Documents. Consistent with Education Article, §4-111, Annotated Code of Maryland, each local system

shall provide science curriculum documents for the elementary and secondary schools under its jurisdiction that:

- (1) Include the Maryland College- and Career-Ready Next Generation Science Standards (NGSS) set forth in §§C—[G]H of this regulation; and
 - (2) Are aligned with the Maryland College- and Career-Ready Next Generation Science Standards (NGSS), as developed by the Maryland State Department of Education in collaboration with local school systems.
- [1.] Student Participation. Each student shall participate in the comprehensive science program required by this chapter.