

Board of Education Approved Courses to Satisfy Graduation Requirements for the Standard, Standard Technical, Advanced Studies, Advanced Technical, and Modified Standard Diplomas in Virginia Public Schools
(Effective with Ninth-Grade Class of 2010-2011)

Revised February 23, 2012

Background Information

Section 8 VAC 20-131-50 of *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131-10 et. seq.) (Standards of Accreditation or SOA) sets forth the requirements for the Standard, Standard Technical, Advanced Studies, Advanced Technical, and Modified Standard Diplomas. Those requirements specify which level of courses and/or subject area disciplines students must complete to earn either a standard or verified unit of credit in the areas of mathematics, laboratory science, and history and social science, as well as the credit requirements in other content disciplines. The regulations also specify that the Board of Education shall approve courses (other than those specifically named in the standards) to satisfy the requirements in those areas.

Courses Approved for the Standard, Standard Technical, Advanced Studies, and Advanced Technical Diplomas, Effective with Ninth-Grade Class of 2010-2011

In February 1998, the Virginia Board of Education approved certain courses that would satisfy the mathematics, science, and history and social science course requirements for the Standard and Advanced Studies Diplomas. Subsequent to that time, some additional courses have been approved as additions to the original list and requirements for two new diplomas, the Standard Technical and Advanced Technical Diplomas, have been adopted by the Board.

The following tables contain a list of the courses to satisfy graduation requirements for the Standard, Standard Technical, Advanced Studies, and Advanced Technical Diplomas.

Courses from this list must be selected to satisfy the content level requirements prescribed in 8VAC 20-131-50.

Courses in Mathematics

Course Title	Virginia Course Codes	SCED Codes	SOL Test(s) Required
<i>Courses at or above the level of Algebra I</i>			
Algebra I ¹	3130	02052	Algebra I
Geometry ¹	3143	02072	Geometry
Algebra, Functions, and Data Analysis	3134	99001	See Footnote #2
Computer Mathematics ³	3184	02156	None
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course I	3151	02061 (1 of 3)	See Footnote #4

Course Title	Virginia Course Codes	SCED Codes	SOL Test(s) Required
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course II	3152	02061 (2 of 3)	See Footnote #4
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course III	3153	02061 (3 of 3)	See Footnote #4
<i>Courses at or above the level of Algebra II</i>			
Algebra II	3135	02056	Algebra II
Mathematics Capstone ⁵	3136	99002	None
Algebra II and Trigonometry	3137	02106	Algebra II
Trigonometry (one-semester)	3150	02103	None
Advanced Placement Computer Science A	3185	10157	None
Advanced Placement Computer Science AB	No Virginia Code	10158	None
Probability and Statistics ⁶	3190	02201	None
Advanced Placement Statistics	3192	02203	None
Discrete Mathematics ⁶	3154	02102	None
Advanced Mathematics	3160	02057	None
Mathematical Analysis/Pre-Calculus	3162	02104	None
Elementary Mathematics Functions	3163	02109	None
Advanced Placement Calculus AB	3177	02124	None
Advanced Placement Calculus BC	No Virginia Code	02125	None
Analytic Geometry	3176	02073	None
Multivariate Calculus	3178	02122	None

¹Students who earn a mathematics unit of credit for Algebra I, Part I prior to entering the ninth grade in the 2010-2011 academic year may complete the Algebra I graduation requirement by completing an Algebra I or an Algebra I, Part II course. Students who earn a mathematics unit of credit for Geometry, Part I prior to entering the ninth grade in the 2010-2011 academic year may complete the Geometry graduation requirement by completing a Geometry or a Geometry, Part II course. Beginning with the ninth-grade class of 2010-2011, only one unit of credit each may be used to satisfy the mathematics graduation requirements by completing Algebra I or Geometry.

²The Algebra, Functions and Data Analysis SOL test development has been indefinitely delayed, pending available funding.

³Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation

requirements if the student also completes a career and technical concentration.

⁴ Students will take the Algebra I, Geometry, and/or Algebra II SOL test(s) when they have completed the appropriate SOL content, as determined by the local school division. Students enrolled in Course II must take at least one SOL test. Students enrolled in Course III must take the Algebra II SOL test and the Geometry SOL test if not taken in Course II.

⁵Prerequisites for the 12th-grade (senior level) course include earning at least two verified credits in mathematics, and satisfactory completion of either Algebra, Functions, and Data Analysis or Algebra II. Students seeking the Advanced Studies Diploma, whose course sequences include the Mathematics Capstone course, must also take Algebra II.

⁶May be a one-semester or two-semester course.

Courses in Science

Course Title	Virginia Course Codes	SCED Codes	SOL Test(s) Required
<i>Courses at or above the level of Earth Science</i>			
Earth Science I	4210	03001	Earth Science
Earth Science II – Advanced Survey of Earth Science Topics ¹	4220	03049	Earth Science
Earth Science II – Geology ²	4240	03002	None
Earth Science II – Oceanography ²	4250	03005	None
Earth Science II – Astronomy ²	4260	03004	None
Advanced Placement in Environmental Science ¹	4270	03207	Earth Science
<i>Courses at or above the level of Biology</i>			
Biology I	4310	03051	Biology
Biology II – Advanced Survey of Biology Topics ¹	4320	03052	Biology
Biology II – Anatomy/Physiology ²	4330	03053	None
Biology II – Ecology ²	4340	03063	None
Biology II – Genetics ²	4350	03059	None
Advanced Placement Biology ¹	4370	03056	Biology
<i>Courses at or above the level of Chemistry</i>			
Chemistry ³	4410	03101	Chemistry
Chemistry II ²	4420	03102	None
Advanced Placement Chemistry ¹	4470	03106	Chemistry

Course Title	Virginia Course Codes	SCED Codes	SOL Test(s) Required
<i>Courses at or above the level of Physics</i>			
Physics I ⁴	4510	03151	None
Physics II	4520	03152	None
Advanced Placement Physics B	4570	03155	None
Advanced Placement Physics C	4571	03156	None
Integrated Sciences – Earth Sciences/Biology/Chemistry			
Integrated Science, 3-yr Sequence, Course 1	4211	03201 (1 of 3)	See Footnote #5
Integrated Science, 3-yr Sequence, Course 2	4311	03201 (2 of 3)	See Footnote #5
Integrated Science, 3-yr Sequence, Course 3	4411	03201 (3 of 3)	See Footnote #5

¹Students who have not taken the first-level course in this discipline will take the SOL test listed.

²The prerequisite content for this course is the first-level SOL core course in this discipline.

³Students who earn a science unit of credit for Chemistry, Part I prior to entering the ninth grade in the 2010-2011 academic year may complete the Chemistry graduation requirement by completing a Chemistry or a Chemistry, Part II course. Beginning with the ninth-grade class of 2010-2011, only one unit of credit each may be used to satisfy the science graduation requirements by completing a Chemistry course.

⁴The sequence of Principles of Technology I [9811/10153 (1 of 2)] and Principles of Technology II [9812/10153 (2 of 2)] will satisfy one (1) standard unit of credit in laboratory science for physics and one (1) elective credit. Students who enroll in Principles of Technology courses for a physics credit must have completed Algebra I and two (2) other laboratory science courses as specified by the Standards of Accreditation prior to enrolling in Principles of Technology. There is no SOL test associated with Principles of Technology I and II.

⁵Students will take the Earth Science, Biology, and Chemistry test(s) when they have completed the appropriate SOL content, as determined by the local school division.

Courses in History and Social Science

Course Title	Virginia Course Codes	SCED Codes	SOL Test(s) Required
World Geography	2210	04001	World Geography
World History and Geography to 1500 AD (CE)	2215	04052 (1 of 2)	World History I
World History and Geography: 1500 AD (CE) to the Present	2216	04052 (2 of 2)	World History II
Virginia and United States History	2360	04101	Virginia and United States History
American Civilization (Must include the SOL for Virginia and United States History)	2376	04149	Virginia and United States History
Virginia and United States Government	2440	04151	None

Retired Course Codes

With the standardization of the course titles above, the following history and social science course codes are no longer in use, but there may be students who have taken these courses in the past to earn history and social science standard and verified credits.

World History Part I and World Geography (one semester each course)	2222	Not crosswalked to SCED	—World History I or World Geography
World History Part II and World Geography (one semester each course)	2223	Not crosswalked to SCED	—World History II or World Geography
World History	2340	Not crosswalked to SCED	See Footnote #1
World Studies (Typically a two-year program; Must include the SOL from either World History and Geography Part I or World History and Geography Part II and World Geography.)	2351	Not crosswalked to SCED	The appropriate World History test and World Geography
World Civilization (Typically a two-year program; Must include the SOL from two of the following: World History and Geography Part I, World History and Geography Part II, or World Geography.)	2375	Not crosswalked to SCED	See Footnote #1

Advanced Placement Courses

8 VAC 20-131-50 M - Students who complete Advanced Placement courses, college-level courses, or courses required for an International Baccalaureate Diploma shall be deemed to have completed the requirements for graduation under these standards provided they have earned the standard units of credit and earned verified units of credit in accordance with the requirements of subsections B and C of this section.

The use of courses that meet the provisions of 8 VAC 20-131-50 M but are not listed below is a school division decision.

Advanced Placement U.S. History	2319	04104	See Footnote #2
International Baccalaureate US History (Higher Level)	IB2360	04054 (1 of 2)	See Footnote #2
Advanced Placement World History	2380	04057	See Footnote #2
Advanced Placement European History	2399	04056	See Footnote #2
International Baccalaureate History of Europe	IB2219	04054 (2 of 2)	See Footnote #2
Advanced Placement Human Geography	2212	04004	See Footnote #2
International Baccalaureate Geography	IB2210	04003	See Footnote #2
Advanced Placement Government and Politics: United States	2445	04157	None
Advanced Placement Government and Politics: Comparative	2450	04158	None

¹This course must cover the prescribed SOL from two of the following courses: World History and Geography Part I, World History and Geography Part II, or World Geography in order for students to receive a verified credit. Students will take the corresponding end-of-course test when they have completed the SOL content, as determined by the school division.

²If students have not taken a lower level course and/or the associated test earlier, the approved end-of-course test or an approved substitute assessment test will be required at the completion of the Advanced Placement or International Baccalaureate course.

**Courses Approved for the Modified Standard Diploma,
Effective with Ninth-Grade Class of 2010-2011**

The *Regulations Establishing Accrediting Standards for Public Schools in Virginia* provide the option of a Modified Standard Diploma for "...certain students at the secondary level who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student's Individual Education Program (IEP) team and the student, where appropriate, at any point after the student's eighth grade year." (8 VAC 20-131-50.F.1). At its November 30, 2000, meeting, the Board of Education approved the list of mathematics, science, and history and social science courses to satisfy the standard units of credit that are required for the Modified Standard Diploma. Subsequent to that time, some additional courses have been approved as additions to the original list and requirements for two new diplomas, the Standard Technical and Advanced Technical Diplomas, have been adopted by the Board.

The approved list and the provisions identified for certain courses on the following list apply only to the Modified Standard Diploma. This list of courses provides students with options for satisfying the content requirements specified for the Modified Standard Diploma. To encourage and facilitate students' transition from a Modified Standard Diploma program to a Standard or Advanced Diploma program, the list includes some of the courses approved by the Board of Education for the Standard, Standard Technical, Advanced Studies, and Advanced Technical Diplomas.

While students are not required to pass Standards of Learning end-of-course tests to earn a Modified Standard Diploma, they must take the tests that are required for any courses in which they are enrolled. Instruction provided in these courses, as well as the Standards of Learning tests associated with them, would be subject to any accommodations required in a student's Individual Education Program (IEP).

Mathematics

Mathematics Course Title	Virginia Course Codes	SCED Codes	SOL Test
<i>Courses that will satisfy the mathematics requirement for the Modified Standard Diploma shall include content from among applications of algebra, geometry, personal finance, and probability and statistics. Any of the following courses can be used to satisfy the mathematics content requirement.</i>			
Personal Living and Finance ¹	3120	02003	None
Economics and Personal Finance ¹	6120	22210	None
<i>Courses at or above the level of Algebra</i>			
Algebra I, 2-yr. Sequence, Part I ²	3131	02053	None
Algebra I, 2-yr. Sequence Part II	3132	02054	See Footnote #3

Mathematics Course Title	Virginia Course Codes	SCED Codes	SOL Test
Algebra I	3130	02052	See Footnote #3
Geometry, 2-yr. Sequence, Part I ²	3144	02079 (1 of 2)	None
Geometry, 2-yr. Sequence, Part II	3145	02079 (2 of 2)	See Footnote #3
Geometry	3143	02072	See Footnote #3
Algebra/Geometry, 3-yr. Sequence, Course I	3146	02074 (1 of 3)	See Footnote #4
Algebra/Geometry, 3-yr. Sequence, Course II	3147	02704 (2 of 3)	See Footnote #4
Algebra/Geometry, 3-yr. Sequence, Course III	3148	02074 (3 of 3)	See Footnote #4
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course I	3151	02061 (1 of 3)	See Footnote #4
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course II	3152	02061 (2 of 3)	See Footnote #4
Algebra I/Geometry/Algebra II, 3-yr. Sequence, Course III	3153	02061 (3 of 3)	See Footnote #4
Algebra, Functions, and Data Analysis	3134	99001	See Footnote #5
Computer Mathematics	3184	02156	None
<i>Courses at or above the level of Algebra II</i>			
Algebra II	3135	02056	See Footnote #3
Algebra II and Trigonometry	3137	02106	See Footnote #3
Trigonometry (one semester)	3150	02103	None
Advanced Placement Computer Science A	3185	10157	None
Advanced Placement Computer Science AB	No Virginia Code	10158	None
Probability and Statistics ⁶	3190	02201	None
Advanced Placement Statistics	3192	02203	None

Mathematics Course Title	Virginia Course Codes	SCED Codes	SOL Test
Discrete Mathematics ⁶	3154	02102	None
Mathematics Capstone ⁷	3136	99002	None
Advanced Mathematics	3160	02057	None
Mathematical Analysis/Pre-Calculus	3162	02104	None
Elementary Mathematics Functions	3163	02109	None
Advanced Placement Calculus AB	3177	02124	None
Advanced Placement Calculus BC	No Virginia Code	02125	None
Analytic Geometry	3176	02073	None
Multivariate Calculus	3178	02122	None

¹A personal living and finance course has been approved to meet a mathematics requirement for the Modified Standard Diploma. The personal living and finance course (3120/02003) may not be used to satisfy the mathematics requirement or the Economics and Personal Finance requirement for the Standard, Standard Technical, Advanced Studies, or Advanced Technical Diplomas. For the purpose of satisfying this requirement for the Modified Standard Diploma, one of the following options may be used: 1) a locally developed personal living and finance course based on the *Objectives for Personal Living and Finance* approved by the Board of Education in April 1999, and revised in 2006; 2) a course based on the 2006 *Economics Education and Financial Literacy: Objectives and Correlations to Mathematics and History and Social Science Standards of Learning and Career and Technical Education Competencies*; or 3) an economics and personal finance course based on the Standards of Learning for Economics and Personal Finance for a course to satisfy the requirements for the Standard, Standard Technical, Advanced Studies, and Advanced Technical Diplomas.

²Students may earn one mathematics credit for the Modified Standard Diploma by successfully completing this course.

³Students who are enrolled in a course that requires an end-of-course SOL test must take the test, but they do not have to pass the SOL test to satisfy the requirement for the Modified Standard Diploma.

⁴Students will take the Algebra I, Geometry, and/or Algebra II SOL test(s) when they have completed the appropriate SOL content, as determined by the local school division, but they do not have to pass the test(s) to satisfy the requirement for the Modified Standard Diploma.

⁵The Algebra, Functions and Data Analysis SOL test development has been indefinitely delayed, pending available funding.

⁶May be a one-semester or two-semester course.

⁷Prerequisites for the 12th-grade (senior level) course include earning at least two verified credits in mathematics, and satisfactory completion of either Algebra, Functions, and Data Analysis or Algebra II. Students seeking the Advanced Studies Diploma, whose course sequences include the Mathematics Capstone course, must also take Algebra II.

Science

Science Course Title	Virginia Course Codes	SCED Codes	SOL Test
<i>Courses that will satisfy the science requirement for the Modified Standard Diploma shall include content from at least two of the following: applications of earth science, biology, chemistry, or physics.</i>			
<i>Courses at or above the level of Earth Science</i>			
Earth Science I, 2-Year Sequence, Part I ¹	4200	03049 (1 of 2)	None
Earth Science I, 2-Year Sequence, Part II	4201	03049 (2 of 2)	See Footnote #2
Earth Science I	4210	03001	See Footnote #2
Earth Science II – Advanced Survey of Earth Science Topics	4220	03049	***
Advanced Placement Environmental Science	4270	03207	***
Earth Science II – Geology	4240	03002	None
Earth Science II – Oceanography	4250	03005	None
Earth Science II – Astronomy	4260	03004	None
<i>Courses at or above the level of Biology</i>			
Biology I, 2-Year Sequence, Part I ¹	4300	03099 (1 of 2)	None
Biology I, 2-Year Sequence, Part II	4301	03099 (2 of 2)	See Footnote #2
Biology I	4310	03051	See Footnote #2
Biology II – Advanced Survey of Biology Topics	4320	03052	See Footnote #3
Advanced Placement Biology	4370	03056	See Footnote #3
Biology II – Anatomy/Physiology	4330	03053	None
Biology II – Ecology	4340	03063	None

Science Course Title	Virginia Course Codes	SCED Codes	SOL Test
Biology II – Genetics	4350	03059	None
<i>Courses at or above the level of Chemistry</i>			
Chemistry I, 2-Year Sequence, Part I ¹	4400	03149 (1 of 2)	None
Chemistry I, 2-Year Sequence, Part II	4401	03149 (2 of 2)	See Footnote #2
Chemistry I	4410	03101	See Footnote #2
Advanced Placement Chemistry	4470	03106	See Footnote #3
Chemistry II	4420	03102	None
<i>Courses at or above the level of Physics</i>			
Physics I	4510	03151	None
Advanced Placement Physics B	4570	03155	None
Advanced Placement Physics C	4571	03156	None
Physics II	4520	03152	None
Principles of Technology I ⁵	9811	10153(1 of 2)	None
Principles of Technology II	9812	10153 (2 of 2)	None
<i>Integrated Sciences - Earth Sciences/Biology/Chemistry</i>			
Integrated Science, 3-Year Sequence, Course 1	4211	03201 (1 of 3)	See Footnote #4
Integrated Science, 3-Year Sequence, Course 2	4311	03201 (2 of 3)	See Footnote #4
Integrated Science, 3-Year Sequence, Course 3	4411	03201 (3 of 3)	See Footnote #4

¹Students may earn one science credit towards the Modified Standard Diploma by successfully completing this course.

²Students who are enrolled in a course that requires an end-of-course SOL test must take the test, but they do not have to pass the SOL test to satisfy the requirement for the Modified Standard Diploma.

³Students who have not already taken a course in this discipline where a SOL test is required will take the SOL test associated with this discipline, but they do not have to pass the test to satisfy the requirement for the Modified Standard Diploma.

⁴Students will take the Earth Science, Biology, and Chemistry test(s) when they have completed the appropriate SOL content, as determined by the local school division, but they do not have to pass the test to satisfy the requirement for the Modified Standard Diploma.

⁵The sequence of Principles of Technology I [9811/03153 (1 of 2)] and Principles of Technology II [9812/03153 (2 of 2)] will satisfy one (1) standard unit of credit in laboratory science for physics and one (1) elective credit. Students who enroll in Principles of Technology courses for a physics credit must have completed Algebra I and two (2) other laboratory science courses as specified by the Standards of Accreditation prior to enrolling in Principles of Technology. There is no SOL test associated with Principles of Technology I and II.

History and Social Science

History and Social Science Course Title	Virginia Course Code	SCED Codes	SOL Test
<i>Courses that will satisfy the history and social science requirement for the Modified Standard Diploma shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S and Virginia Government.</i>			
<i>Courses at or above the level of U.S. and Virginia History</i>			
Virginia and United States History, 2-Year Sequence, Part I ¹	2361	04102	None
Virginia and United States History, 2-Year Sequence, Part II	2362	04103	See Footnote #2
Virginia and United States History	2360	04101	See Footnote #2
Advanced Placement U.S. History	2319	04104	See Footnote #2
American Civilization (must include the SOL for U.S. History)	2376	04149	See Footnote #2
<i>Courses at or above the level of U.S. and Virginia Government</i>			
Virginia and United States Government	2440	04151	None
Advanced Placement Government and Politics: United States	2445	04157	None

¹Students may earn one credit in Virginia and U.S. History for the Modified Standard Diploma by successfully completing this course. This course may be treated as a survey course of Virginia and U.S. History topics in the SOL.

²Students who are enrolled in a course that requires an end-of-course SOL test must take the test, but they do not have to pass the SOL test to satisfy the requirement for the Modified Standard Diploma.

Other Requirements

Sequential Electives – Effective with the graduating class of 2003, students who wish to receive a Standard or Modified Standard Diploma must successfully complete two sequential electives. On February 5, 2002, the Board of Education approved *Guidelines for Sequential Electives for the Standard and Modified Standard Diploma*. These guidelines are available at:

http://www.doe.virginia.gov/administrators/superintendents_memos/2002/int001a.pdf.

Economics and Personal Finance – Effective with the *entering 9th-grade class of 2011-2012*, Economics and Personal Finance is a required course. Various options exist to satisfy the Economics and Personal Finance graduation requirement for the Standard, Standard Technical, Advanced, and Advanced Technical Diplomas, including the following:

- Economics and Personal Finance (6120/22210 (1 of 2)), 36 weeks (formerly named Finance)
- Semester options:
 - Finance 6121/22210 (2 of 2), 18 weeks ALONG WITH
 - Economics 2801/04249, 18 weeks
- Other courses that are aligned with the Economics and Personal Finance Standards of Learning.

The Personal Finance course (3120/02003) designated as a mathematics credit for the Modified Standard Diploma may not satisfy the Economics and Personal Finance requirement for the Standard, Standard Technical, Advanced, and Advanced Technical Diplomas. However, the Economics and Personal Finance course (6120/22210 (1 of 2)) may satisfy a mathematics credit for the Modified Standard Diploma.

Fine Arts, Career and Technical Education, and Foreign Language - The Standard, Standard Technical, Advanced Studies, Advanced Technical, and Modified Standard Diplomas each contain options or requirements in Fine Arts, Career and Technical Education, and/or Foreign Language.

The Standards of Accreditation do not require that courses used to satisfy the requirements in these subject areas be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy the specific credit requirements in Fine Arts, Career and Technical Education, or Foreign Language for the Standard, Standard Technical, Advanced Studies, Advanced Technical, and Modified Standard Diplomas.

Foreign Language - The Advanced Studies Diploma and the Advanced Technical Diploma contain a requirement for either three years of one foreign language or two years of two languages. In March 1998, the Board of Education approved the provision of three years of instruction in American Sign Language (ASL) for foreign language credit toward meeting graduation requirements; other foreign languages will satisfy this requirement as well. Details of this action are available in Superintendent's Memorandum, Interpretive, No. 1, June 12, 1998

http://www.doe.virginia.gov/administrators/superintendents_memos/1998/int001.html).