

NEW MEXICO

Public Education Department

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High School Graduation Requirements Guidance

Updated August 2023

Attributions Page

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New Mexico Diploma of Excellence Revised 03/14/2024 [Demonstration of Competency Memo](#)

Students in New Mexico must meet both **coursework** and **competency** requirements in order to earn a New Mexico Diploma of Excellence.

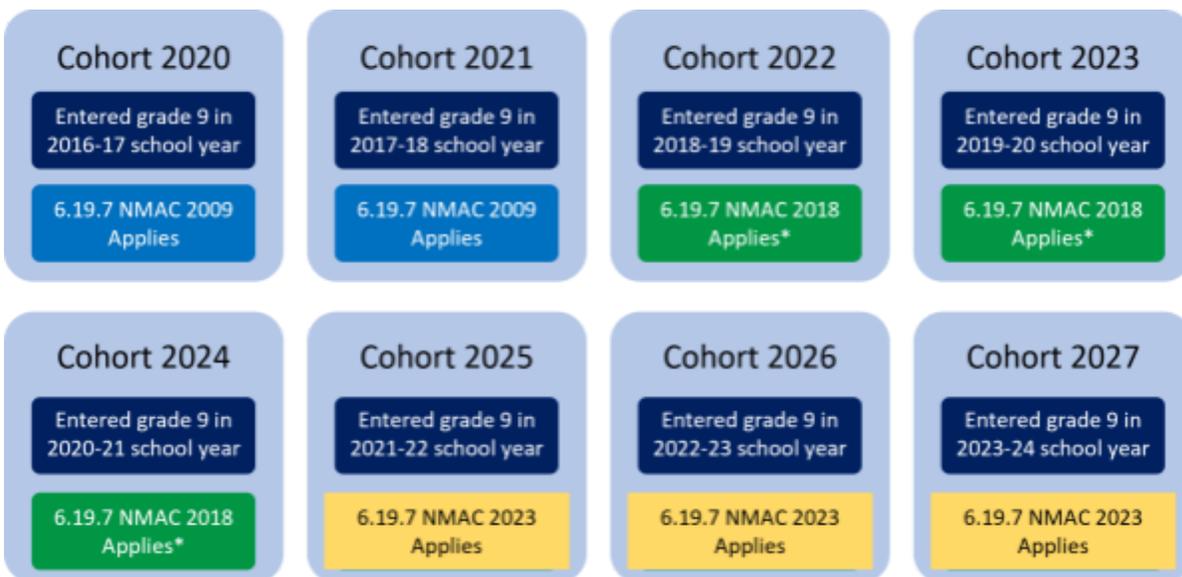


In order to graduate from high school, students in New Mexico are required to meet the graduation requirements defined in [Section 22-13-1.1 Graduation Requirements NMSA 1978](#). Students must complete a minimum of twenty-four credits with at least one of the credits being an advanced placement (AP) or honors course, or a dual-credit course, or a distance learning course.

Pursuant to 22-13-1.1 NMSA 1978, students must also demonstrate competency in the five core content areas: mathematics, reading, writing, science, and social studies.

Graduation Cohorts Demonstration of Competency

Demonstration of Competency requirements are set forth in [6.19.7 of the New Mexico Administrative Code \(NMAC\)](#), revised July 31, 2023.



*For Cohorts 2022-2024, 6.19.7 NMAC was waived due to the pandemic. For these cohorts, the passing of coursework allowed students to meet their DOC requirements.

Coursework Requirements Revised 11/29/2023 Math Courses higher than Algebra 2 - Appendix B.

Content Area	Coursework Requirements	Coursework Options (STARS course code)
Mathematics	<p>4 credits of math (in high school, one of which shall be the equivalent to or higher than the level of Algebra II)</p> <p>+Courses at a higher level than Algebra II. For a full listing of courses, see Appendix B.</p>	<ul style="list-style-type: none"> • Computer Science A (0327 or 0346)+ • Computer Science Principles (0345 or 0336)+ • Data Science (2079) • Algebra I (2031) • Algebra II (2041) • Algebra II/Trig (2044) • Pathways 2 Careers Algebra 2A (2087) • Pathways 2 Careers Algebra 2B (2088) • Applied Math (2024) • Financial Literacy (2097) • Fractal Mathematics (2039)+ • Geometry (2034) • Integrated Pathway: Math I (2080) • Integrated Pathway: Math II (2081) • Integrated Pathway: Math III (2083) • Mathematical Modeling (2078)+ • Probability and Statistics (2029) • Scientific Technologies (1783)+ • AP and IB courses in Mathematics
Reading and Writing	<p>4 credits of English (with major emphasis on grammar, nonfiction writing, and literature)</p>	<ul style="list-style-type: none"> • ELA 1 (1001)/ELA-ELD I (1064)** • ELA 2 (1002)/ELA-ELD II (1065)** • ELA 3 (1003)/ELA-ELD III (1066)** • ELA 4 (1004)/ELA-ELD IV (1067)** • SREB Literacy Ready (1037) • AP and IB courses in English Language Arts
Science	<p>3 credits of science (2 credits must include a laboratory component)</p>	<ul style="list-style-type: none"> • Secondary courses under STARS codes in the 1700s (includes AP and IB courses in science) • Computer Science A (0327 or 0346)* • Computer Science Principles (0345 or 0336)* • Fractal Mathematics (2039)* • Mathematical Modeling (2078)* • Scientific Technologies (1783)*
Social Studies	<p>3.5 credits of social studies (to include U.S. history and geography, world history and geography, government and economics, and 0.5 credit of N.M. history)</p>	<ul style="list-style-type: none"> • US History and Geography (2729) • World History and Geography (2706) • 0.5 U.S. Government (2730) • 0.5 Economics (2741) • 0.5 N.M. History (2717) • AP and IB courses in Social Studies
Physical Education	<p>1 unit in physical education</p>	<p>Options vary by school. Examples include:</p> <ul style="list-style-type: none"> • Marching band • JROTC • Interscholastic sports
Career Cluster, Workplace Readiness, Language	<p>1 unit in a career cluster course, workplace readiness, or a language other than English</p>	<ul style="list-style-type: none"> • Options vary by school.
Electives	<p>7 elective units that meet department content and performance standards</p>	<p>Options vary by school. Examples include:</p> <ul style="list-style-type: none"> • Student service learning • Pre-apprenticeship programs • Media literacy • Additional courses in core subjects
Health	<p>1 course (0.5 or 1 credit) in health</p>	<ul style="list-style-type: none"> • Health (1401) as an elective unit above (E) or as completed in middle school (MS)

*Students who demonstrate proficiency on the ESSA-required mathematics assessment and meet the Algebra II graduation requirement may use a qualifying computer science course for mathematics graduation credit. Students who demonstrate proficiency in the science assessment may use a qualifying computer science course and earn a science credit. **ELD courses are intended for English learners (ELs) whose proficiency level is nearing proficiency, as measured by the PED-approved English language proficiency assessment.

Coursework Waivers

The PED **does** require waivers for any requested change to the prescribed **coursework requirements**. Graduation coursework waivers are obtained from the [PED waivers web page](#) and submitted to Waivers.PED@ped.nm.gov

Demonstration of Competency Requirements

Rule Related To Demonstration Of Competency Requirements

- [6.19.7 NMAC: DEMONSTRATION OF COMPETENCY FOR HIGH SCHOOL GRADUATION](#), revised July 31, 2023

Removed Requirements

- The PED **no longer requires** Alternate Demonstration of Competency (ADC) waivers. With the revision of 6.19.7 NMAC, primary and alternate demonstrations of competencies are no longer distinguished.
- The PED **no longer requires** waivers to use an out of state assessment score as a means of demonstrating competency. Districts and charters must file documentation locally to show that the student met the competency requirements by means of another state's assessment.

Two-Prong Requirement For Meeting Demonstration of Competency Requirements, Starting with Cohort 2025

PRONG 1: As required by federal law, all high school students must **participate** in the state ESSA, Title I state summative assessments.

A. Federally required ESSA Title 1 Assessments Under Prong 1, include:

- SAT School Day (*Reminder: First year ELs are exempt from taking a language arts assessment, per ESSA; however first-year ELs are required to take ACCESS for ELLs (or Alternate ACCESS for ELLs if the EL is identified as having a most significant cognitive disability.)*)
- SBA Spanish Reading, for students identified as English learners
- New Mexico Assessment of Science Readiness (NM-ASR)
- Dynamic Learning Maps alternate assessments in lieu of SAT School Day, NM-ASR, or SBA Spanish Reading. (*Reminder: Only students identified by their local IEP teams as having a most significant cognitive disability participate in DLM.*)

NOTE: Grade 12 students absent during ESSA Title 1 assessment administration at Grade 11, are able to participate in state assessments. District Test Coordinators must submit an [Off-Grade Testing Waiver](#) to the [Assessment Bureau](#).

B. Clarifications for Grade 12 students:

- Grade 11 students who transfer after spring ESSA Title I assessments are provided a testing opportunity in the Grade 12 year.
- Grade 12 transfer students with prior records or evidence of having completed their federally required ESSA Title I assessments are exempt from Prong 1.
- LEAs are provided flexibility in determining demonstration of competency completion for students that transfer from private institutions based on students' academic records.

- For students graduating earlier than anticipated for their Cohort, the LEA is responsible for planning testing in advance of this anticipated graduation status, via the off grade-level testing waiver.
- For unexpected circumstances where a student is on track to graduate with their Cohort but is unable to fulfil all Prong 1 requirements, an exception may be granted by PED. Please contact PED.Assessment@ped.nm.gov. Please use “DOC Exception Request” in the email subject and explain the unexpected circumstance.

C. Use of ESSA Title 1 Assessments Results:

- There is no required minimum scale score that a student must achieve in order to be eligible for graduation; completion of the ESSA assessments is the only requirement under Prong 1.
- An ESSA assessment qualifying scale score may be used as evidence of demonstration of competency for the domains of mathematics, reading, writing, and science. (See additional information under prong 2.)

PRONG 2: In addition to Prong 1, students must demonstrate competency for graduation in five core domains.

- Reading
- Writing
- Mathematics
- Science
- Social studies

The subsequent pages provide details on allowable demonstration of competency under Prong 2, which include the State’s federally required ESSA Title 1 Assessments Under Prong 1.

Additionally, in anticipation of future innovations and opportunities that allow for the expansion of competency options, the PED reserves the right to add or approve additional competency demonstrations upon stakeholder input beyond what is presented in the table below; any new competency additions will be considered annually.

A. Overview

Revised ASVAB 11/20/2023

Students may demonstrate competency in each of the core domains using standards-based indicators. Below is a broad, at-a-glance, matrix of eligible performance-based and standardized assessments that can be used for competency for each domain. Specific details and guidance for each category are provided following the table.

	Reading	Writing	Mathematics	Science	Social Studies ¹
A.1	Standards-Based Portfolios				
A.2	Capstone Projects				
A.3	CTE Program of Study Completer or Certificate				
A.4	High Quality LEA Approved Course Finals				
A.5	Dual Credit				
A.6	SAT School Day/DLM			X	X
A.7	X	X	X	NM-ASR/DLM	X
A.8	Spanish SBA	X	X	X	X
A.9	ASVAB	X	Armed Services Vocational Aptitude Battery (ASVAB)		X
A.10	SAT Weekend Administration			X	X
A.11	American College Testing (ACT)				X
A.12	PSAT/NMSQT			X	X
A.13	ACT Aspire				X
A.14	Advanced Placement (AP)				X
A.15	International Baccalaureate (IB)				X
A.16	Accuplacer			X	X
A.17	ACT WorkKeys				X
A.18	Lexile	X	X	X	X
A.19	X	X	Quantile	X	X

1. Per 22-13-1.1. Graduation requirements for all social studies demonstrations of competencies, the DOC must include a section on the constitution of the United States and the constitution of New Mexico.

A.1 Standards-Based Portfolios	
Minimum Criteria	<ol style="list-style-type: none"> 1. Each district or state-chartered charter school choosing to allow standards-based portfolios as a demonstration of competency will have primary ownership over key procedural and implementation decisions. These decisions include, but are not limited to, the following: <ul style="list-style-type: none"> ● How to provide support for students when determining their options for demonstrating competency and what is best for them ● Whether to provide teacher or counselor advisement and/or create an elective to support students with compiling and finalizing portfolios ● How to recruit and select local review team members ● Whether to compensate local review team members ● All scheduling decisions, including the selection of a final submittal date that is at least 30 days prior to the graduation date ● How to store and collect student artifacts over time, so long as the requirement to store student portfolios and scoring documents for five years is met 2. Establish a rubric that identifies acceptable level of evidence for meeting competency 3. For social studies, the portfolio final must include the constitution of the United States and the constitution of New Mexico
Best Practice(s)	<ul style="list-style-type: none"> ● Clearly identify the range of instructional standards being covered and grade-level expectation being met ● Clearly identify the minimum number of artifacts
Resources/Exemplars	<ul style="list-style-type: none"> ● The following standards-based portfolio exemplars for writing, science, and social studies were developed by PED and stakeholders and field experts in 2018 and have been revised in 2023.
Evidence	<ul style="list-style-type: none"> ● Portfolio requirements and rubrics must be stored locally for a minimum of 5 years.

A.2 Capstone Projects	
Minimum Criteria	<ol style="list-style-type: none"> 1. Each district or state-chartered charter school choosing to allow capstone projects as a demonstration of competency will have primary ownership over key procedural and implementation decisions. These decisions include, but are not limited to, the following: <ul style="list-style-type: none"> ● The capstone design and implementation process, according to the New Mexico Capstone Project Quality Criteria ● How the capstone project aligns with the school or district graduate profile, designed with the New Mexico Graduate Profile Quality Criteria ● All scheduling decisions, including scheduling a final exhibition of

	<p>learning that is at least 30 days prior to the graduation date</p> <ul style="list-style-type: none"> ● How to collect a body of work throughout the capstone project, so long as the requirement to store student exhibitions and scoring documents for five years is met <ol style="list-style-type: none"> 2. Establish a rubric that aligns with the graduate profile and identifies acceptable level of evidence for meeting competency 3. <i>For social studies, the capstone project must include the constitution of the United States and the constitution of New Mexico</i>
Best Practice	School or district teams must develop the Capstone project to be student-led with community partners to assess the knowledge, skills, and attributes listed on the school or district Graduate Profile as well as core academic competencies.
Resources/Exemplars	School and district leaders can join the Innovative Assessment Community of Practice for support with developing high quality capstone projects and graduate profiles. The Equipped for Equity Initiative Capstone and Graduate Profile Toolkit also includes tools and resources developed by New Mexicans for New Mexicans.
Evidence	Capstone project exhibitions of learning should be public, including school staff and community members. The requirements and rubrics must be stored locally for a minimum of 5 years.

A.3 CTE Program of Study:	
<ol style="list-style-type: none"> I. Completer (3 Course Sequence) OR II. Concentrator (2 course sequence and industry credential) 	
Minimum Criteria	<ol style="list-style-type: none"> 1. Successful completion of an NMPED CTE Approved three course program of study from Appendix A with the final course consisting of one of the following: <ul style="list-style-type: none"> a. Advanced Placement Capstone b. Dual Credit Capstone c. Work-Based Learning Capstone d. Other CTE Approved Capstone at the completion of their CTE Program of Study. CTE Approved Programs of Study 2. Successful completion of an NMPED CTE Approved two course program of study with an industry credential/certificate Industry Recognized Credentials
Best Practice	<ol style="list-style-type: none"> 1. Successful completion <ul style="list-style-type: none"> a. Intro Course + Concentrator Course + Capstone Course from Appendix A 2. Successful completion <ul style="list-style-type: none"> a. Intro Course + Concentrator Course + Industry Credential/Certificate OR b. Concentrator Course + Concentrator Course + Industry Credential/Certificate
Resources/Exemplars	Demonstration of Competency - Programs of Study Required Coursework Option (Appendix A, page 20)

Evidence	<p>Any of the following can be provided as evidence and records must be retained for a minimum of 5 years.</p> <ul style="list-style-type: none"> A. Proof/copy of credential and/or certificate. B. NOVA Completer Status Report with student information and three course sequence. C. Transcript with successful completion of a three course sequence. D. Transcript with successful completion of two course sequence and copy of industry credential. E. NOVA report template.
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A.4 High Quality LEA Approved Course Finals	
Minimum Criteria	<ul style="list-style-type: none"> ● District approved blueprint & established cut score ● Writing DOC must include an extended constructed response ● A cross-section of content standards from across the instructional sequence must be represented ● For social studies, the course final must include a section on the constitution of the United States and the constitution of New Mexico
Best Practice(s) & Possible Practices	<ul style="list-style-type: none"> ● Course finals should be developed from credible sources such as PED reviewed high-quality instructional materials, etc.... ● A course final may include combinations for domains (e.g., Reading and Writing; Social Studies, Reading, & Writing) ● For a year long courses, semester exams scores can be combined
Resources/Exemplars	<ul style="list-style-type: none"> ● <i>Sample blueprints for PED developed end-of-course exams, which were publicly released in 2020. Because these prior EOC exams been exposed, the existing forms NOT be used to meet this demonstration of competency; however, the blueprints serve as a model for LEAS to develop local high quality exams.</i>
Evidence	<ul style="list-style-type: none"> ● <i>Current test blueprints & scoring guides must be available for auditing.</i> ● <i>Copy of test materials must be maintained for 5 years</i>

A.5 Dual Credit	
Minimum Criteria	<p>Prior to dual credit enrollment, students must:</p> <ol style="list-style-type: none"> 1. Complete a career interest inventory; and, 2. Choose a high school pathway; and, 3. Choose a corresponding postsecondary pathway; and, 4. Complete a Next Step Plan that includes a selected dual credit course. <p>Provisional Enrollment: Students not demonstrating readiness for their college coursework may enroll provisionally in one dual credit course per semester, as determined by the HEI. (Provisional students must enroll in a partnered support mechanism at the LEA or HEI, such as tutoring or grade checks.)</p> <p>Students retain provisional status until meeting the full academic requirements of the pathway. Students with provisional dual credit eligibility may register and enroll</p>

	<p>in one course (different from one already taken) in their pathway (one course per semester).</p> <p>First Semester Enrollment: Students demonstrating readiness for their college coursework may enroll in any one first-term course in the pathway.</p> <p>To obtain/maintain full dual credit eligibility, students must:</p> <ol style="list-style-type: none"> 1. Demonstrate readiness for college coursework; (AND) 2. Progress towards high school graduation; (AND) 3. Maintain half-time, high school enrollment until graduation requirements are completed; (AND) 4. Obtain a course grade of C or better for each course taken; (AND) 5. Not obtain withdrawals (WP & WF) for transcribed dual credit courses.
Best Practice(s) & Possible Practices	<p>For students who demonstrate readiness for the college coursework in their pathway: Students may</p> <ol style="list-style-type: none"> 1. enroll in one dual credit course; 2. register and enroll in any first-term course of the pathway (identified in the HEI term-by-term sequence plan). <p>For students who do NOT demonstrate readiness for the college coursework in their pathway: Students</p> <ol style="list-style-type: none"> 1. may enroll in one dual credit course; 2. may register and enroll in a course in their pathway that does not require college mathematics and/or college English courses as prerequisites; and must continue to pursue readiness for college coursework by completing high school ELA and mathematics courses with a grade of C or higher. <p>In order to transition from First Semester and Provisional status to Ongoing Enrollment status, students must</p> <ol style="list-style-type: none"> 1. demonstrate readiness for college coursework; (and) 2. progress towards high school graduation; (and) 3. maintain half-time, high school enrollment until graduation requirements are completed; (and) 4. obtain a course grade of C or better for each dual credit course taken; (and) 5. not obtain withdrawals (W, WP, WF) for transcribed dual credit courses; (and) 6. not obtain incompletes (I, INC) for transcribed dual credit courses; (and) 7. not enroll in a dual credit course to audit or for Pass/Fail credit.
Resources/Exemplars	<p>https://webnew.ped.state.nm.us/bureaus/college-career-readiness/college-acceleration/dual-credit/SY 2021-22: Annual Report</p>
Evidence	<p>Evidence of students’ dual credit enrollment and course grades must be on file for 5 years.</p>

State ESSA Title 1 Assessments		
A.6	SAT School Day /DLM*	Math: 480

		Evidenced-Based Reading & Writing: 430 (<i>PSAT Grade 10 Benchmarks are applied</i>)
A.7	NM-Assessment of Science Readiness/DLM Science*	Science: 1160 (ASR Performance Level: Proficient)
A.8	Standards-Based Assessment Spanish/DLM*	Spanish Reading: 1140 (SBA Performance Level: Proficient)

*Dynamic Learning Maps is an alternate assessment administered to students with the *most significant cognitive disabilities*. IEP teams should consult the following definition of most significant cognitive disability to determine whether a student qualifies for taking alternate assessments:

A. For a local education agency to classify a student as having a “most significant cognitive disability,” all of the following must be true:

1. Student is already determined eligible for special education and has an IEP;
2. Student demonstrates cognitive functioning and adaptive behavior which are significantly below age expectations even with program modifications and accommodations (typically characterized as having IQ or adaptive behavior scores 2.5 or more standard deviations below the mean);
3. Student requires intensive, repeated, and direct individualized instruction and substantial supports in order to learn and generalize academic, functional, and adaptive behavior skills across multiple settings;
4. Student requires substantial modifications to access the general education curriculum; and
5. Student has a disability that results in dependence on others for meeting their daily living needs and they are expected to require considerable ongoing support into adulthood.

B. A local education agency shall not classify a student as having a most significant cognitive disability based solely on:

1. disability classification;
2. below grade level academic achievement;
3. expected poor performance on the general assessment;
4. anticipated impact of student’s scores on accountability system;
5. anticipated disruptive behavior if student takes general assessment;
6. poor attendance;
7. English learner status; or
8. need for accommodations to participate in the general assessment.

	Other Standardized Assessments	Minimum Score for DOC utilized by national programs or acceptable placement into military service
A.9	Armed Services Vocational Aptitude Battery (ASVAB)	Math: AFQT 31 Reading: AFQT 31 Science: AFQT 31
A.10	SAT (Non-School Day)	Math: 480 Evidenced-Based Reading & Writing: 430 (<i>PSAT Grade 10 Benchmarks are applied</i>)
A.11	ACT	Math: 20 Reading: 21

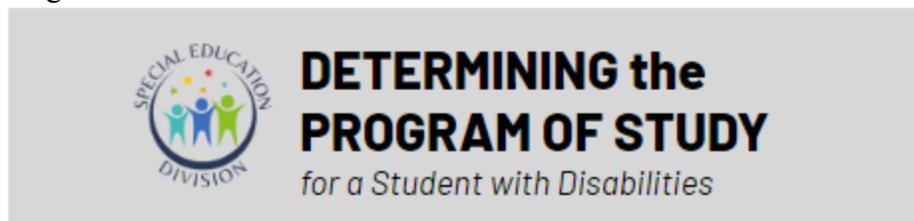
		<p>English Language Arts (Writing, English & Reading): 18 English (Writing): 15 Science: 20 ACT STEM (Math & Science): 23 <i>(Concorded to ACT Aspire Summative)</i></p>
A.12	PSAT/NMSQT	<p>Math: 480 Evidenced-Based Reading & Writing: 430 <i>(PSAT Grade 10 Benchmarks are applied)</i></p>
A.13	ACT Aspire Summative	<p>ACT Benchmarks for Grade 10 Math: 432 Reading: 428 Science: 432 English (Writing): 428 English Language Arts (Writing, English & Reading): 430 Science: 431 ACT STEM (Math & Science): 437</p>
A.14	Advanced Placement	<p><i>Note: Score of 2 demonstrates college and career readiness benchmark for high school.</i></p> <p>Mathematics: 2</p> <ul style="list-style-type: none"> AP Precalculus, Calculus AB, Calculus BC or Statistics <p>Reading/Writing: 2</p> <ul style="list-style-type: none"> AP English Language & Composition, English Literature & Composition, Seminar, or Research <p>Science: 2</p> <ul style="list-style-type: none"> AP Biology, Chemistry, Environmental Science, or Physics (1, 2, or C) <p>Social Studies: 2</p> <ul style="list-style-type: none"> AP Art History, European History, Government & Politics (Comparative), Government & Politics (US), Human Geography, Microeconomics, Macroeconomics, Psychology, US History, or World History
A.15	International Baccalaureate	<p><i>Note: Score of 4 demonstrates college and career readiness benchmark for high school.</i></p> <p>Mathematics: 4</p> <ul style="list-style-type: none"> IB Mathematics <p>Reading: 4</p> <ul style="list-style-type: none"> IB Language & Literature <p>Writing: 4</p> <ul style="list-style-type: none"> IB Language & Literature <p>Science: 4</p> <ul style="list-style-type: none"> Biology Chemistry Physics Environmental Systems & Societies <p>Social Studies: 4</p> <ul style="list-style-type: none"> Geography Global Politics History Economics

		<ul style="list-style-type: none"> • Psychology
A.16	Accuplacer	Math: Quantitative Reasoning 252 Reading: 241 Writing: 236
A.17	ACT WorkKeys	Math (Graphic Literacy; Applied Math): 3 Reading (Workplace Documents): 3 Writing (Business Writing): 3 Science (Applied Technology): 3
A.18	Lexile	Reading: 1300L
A.19	Quantile	Mathematics: 1220Q
A.9- A.19	Evidence	Evidence of student achievement results must be retained on file for 5 years.

Graduation Requirements for Students with Disabilities

Students with disabilities have the ability to obtain a Diploma of Excellence through one of three programs of study. The determination of the appropriate program of study is based entirely on the student's individualized needs and the requirements of Paragraph 13 of Subsection J of 6.29.1 of the New Mexico Administrative Code. The determination of a student's appropriate program of study should be made by the student's IEP team before the end of the student's eighth grade school year and reviewed annually thereafter until the student obtains a diploma or the end of the academic year in which the student reaches 22 years of age. The IEPs for students with disabilities shall specify which assessments each student will participate in and what, if any, accommodations are needed to enable the student to participate.

Students with disabilities that obtain a diploma through the modified or ability programs of study are entitled to continue receiving a Free Appropriate Public Education (FAPE) (regular and special education services) from their respective charter schools or school districts until they receive a diploma through the standard program of study or the end of the academic year in which the student turns 22 years of age.



PROCESS FOR DETERMINING PROGRAM OF STUDY

THE IEP TEAM DETERMINES THE APPROPRIATE PROGRAM OF STUDY FOR THE STUDENT

The Program of Study

- MUST be determined by the end of the student's 8th grade year.
- MUST be reviewed annually until the student receives a diploma OR reaches the age of 22.
- MAY be altered up to the 20th day of the student's final year of high school. The "final year" may be later than the student's senior/4th year of high school.

STANDARD
Program of Study

MODIFIED
Program of Study

ABILITY
Program of Study

See Standard Pathway

See Modified and Ability Pathway

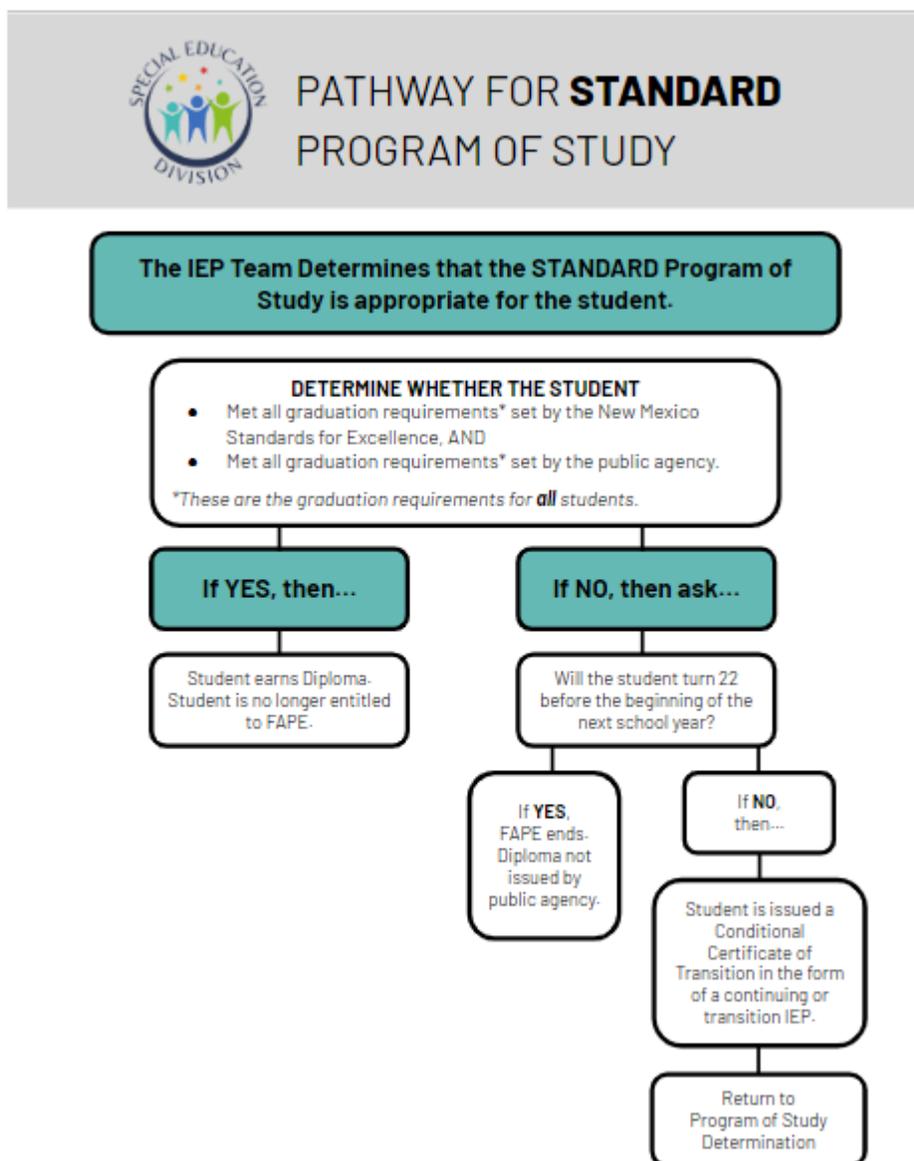
Please note that these flow charts, while comprehensive, do not account for unusual circumstances. Additional guidance may be required to address such circumstances.

Programs of Study and Demonstration of Competency Requirements

Standard Program of Study

To receive a diploma through the standard program of study, a special education student must meet or exceed all requirements for graduation based on the New Mexico Standards for Excellence with or without reasonable accommodations of delivery and assessment methods. In addition, a student must meet all standard demonstration of competency requirements with standard administration or state-approved accommodations of the state graduation examination. In addition, the student must meet all of the other standard graduation requirements of the public agency.

A student who obtains a diploma through the Standard Program of Study is no longer entitled to receive a FAPE from their charter school or school district.



Modified Program of Study (formerly career readiness)

The modified program of study is an alternative program based on a student's career interest in relation to one of the career clusters. A student may use standard or alternative courses that address employability and career development standards with benchmarks and performance standards determined by the IEP team.

The student must take the current state graduation exam with state-approved accommodations or under standard administration. The students must achieve a level of competency pre-determined by the IEP team after initially attempting the exam. Students using End of Course (EOC) exams to demonstrate graduation competency are allowed an additional attempt at the EOC (up to four attempts per EOC). The first attempt may be used to establish passing scores that define a passing grade for that student.

For students who use competency-based options to demonstrate competency, modifications may be made by the IEP team to the standards-based portfolio passing score.

A student who obtains a diploma through the modified program of study may choose to exit high school after receiving the diploma, but continues to have an entitlement to receive a FAPE from their charter school or school district. A student may elect to resume their high school education until the student either meets the requirements to obtain a diploma through the standard program of study or until the end of the academic year in which the student becomes 22 years of age.

Ability Program of Study

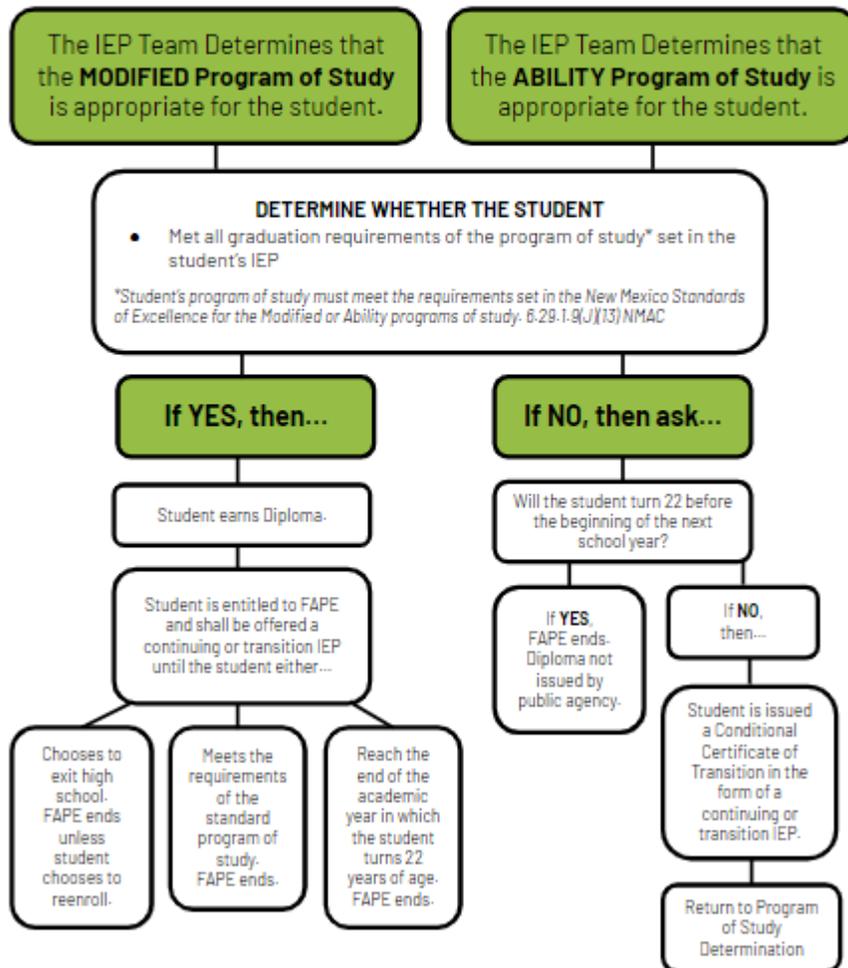
The ability program of study is a program for students who have a significant cognitive disability or a severe mental health issue. IEP goals and functional curriculum course work are based on New Mexico standards with benchmarks and performance standards or the alternate achievement standards, the Essential Elements. It also includes employability and career development standards with benchmarks and performance standards. Students must earn the minimum number of credits or have equivalent educational opportunities required by the public agency. Students accessing the Ability program of study may take the current state graduation exam or the alternate assessment (Dynamic Learning Maps). IEP teams will set individualized cut scores for demonstrating competency through either assessment.

In order to assess a student on the Ability Program of Study using the alternate assessment, an IEP team must determine whether a student is a student with a most significant cognitive disability. A student determined to be a student with a most significant cognitive disability shall be instructed using the alternate achievement standards, the Essential Elements.

A student who obtains a diploma through the ability program of study may choose to exit high school after receiving the diploma, but continues to have an entitlement to receive a FAPE from their charter school or school district. A student may elect to resume their high school education until the student either meets the requirements to obtain a diploma through the standard program of study or until the end of the academic year in which the student becomes 22 years of age.



PATHWAY FOR **MODIFIED** OR **ABILITY** PROGRAM OF STUDY



More Information

This document is housed on the [Graduation Requirements web page](#) along with:

- **-Graduation Course Requirements and Checklists**
- List of Industry Recognized Credentials
- List of Programs of Study by Content Area
- Required Coursework for Programs of Study

For more information, please email:

Grad.Questions@ped.nm.gov for high school graduation coursework questions.

PED.Assessment@ped.nm.gov for high school graduation demonstration of competency questions.

SED.Support@ped.nm.gov for modified and ability pathway questions.

Appendix A

Demonstration of Competency Programs of Study Required Coursework Option

For each program of study below, students must complete **THREE courses in sequence with a GPA of at least 3.0 (in the 3 course sequence, no D's or F's)** in order for a program of study to be used as a demonstration of competency. Courses are listed below in their appropriate sequence. **Revised GPA 12/19/2023**

Content Area	Program of Study	Course Code	Course Name
Mathematics	Finance/Accounting	0207	Accounting
		0210	Advanced Accounting
		0212	Cost Accounting
		0299 or 2060	Dual Credit in Finance/Accounting or AP Statistics
Science	Animal Systems	0133	Intro to the Science of Agriculture
		0161	Science of Large Agriculture Animals
Reading		0162	Science of Small Animals
		0199	Dual Credit in Animal Systems
Writing	Multimedia Production	1905	Introduction to Multimedia Writing & Technology
		1906	Multimedia Productions I
Reading		1907	Multimedia Productions II
		1904 or 1999	Multimedia Productions III or Dual Credit in Multimedia Communications
Mathematics	Clean Energy Technology – Advanced Career SREB	1678	Advanced Career - Clean Energy Systems
		1679	Advanced Career - Clean Energy Applications
Science		1680	Advanced Career - Clean Energy Strategies
		1681	Advanced Career - Clean Energy Innovations
Mathematics	Programming & Cybersecurity - PLTW	0344	PLTW Computer Science Essentials
		0345	AP PLTW Computer Science Principles
Science		0346	AP PLTW Computer Science A
		0347	PLTW Cybersecurity
Social Studies	Emergency & Fire Management Services	2503	Community Protection
		2523	Fire Fighting
		1517	Emergency Medical Technician
		2599	Dual Credit in Emergency & Fire Management Services

Science	Plant & Biotechnology Systems	0133	Intro to the Science of Agriculture
		0141 or 0143	Horticulture/Botany or Greenhouse/Nursery Operations
Reading		0144 or 145	Landscape or Floriculture
		0199	Dual Credit in Plant & Biotechnology Systems
Science	Transportation/Auto	0912	Auto Technologies
		0920	Auto Tech 2
		0921	Auto Tech 3
		0999	Dual Credit in Transportation/Auto
Social Studies	Foreign Services	2752	Contemporary World Issues
		2504	Public Administration
		0294 or 0295	AP Microeconomics or AP Macroeconomics
		0299	Dual Credit in Foreign Services
Social Studies	Business Management	0221	Introductory Business
		0223	Business Management
		0294 or 0295	AP Microeconomics or AP Macroeconomics
		0299	Dual Credit in Business Management
Mathematics	Computer Technology Assistant - GenYES	0320	Computer Technology Assistant I - GenYES
		0321	Computer Technology Assistant II - GenYES
Science		0322	Computer Technology Assistant III - GenYES
		0336	AP Computer Science Principles
Writing	Law	2761	Law Studies
		2762	Consumer Law
		2763	Business Law
		2765 or 2773	Mock Trial or AP Psychology
Reading	Global Logistics & Supply Chain Management – Advanced Career SREB	0925	Advanced Career- Introduction to Logistics
		0926	Advanced Career- Functional Areas in Logistics
		0927	Advanced Career- Global Logistics Management
		0928	Advanced Career- Logistics & Supply Chain Management

Mathematics	Carpentry - NCCER	0480	NCCER Core Curriculum-Intro
		0481	NCCER Carpentry Level 1
		0482	NCCER Carpentry Level 2
		0483	NCCER Carpentry Level 3
Mathematics	Database Design & Programming – Oracle Academy	0314	Database Foundations – Oracle Academy
		0330	Database Design & Programming – Oracle Academy
Science		0331	Database Programming with SQL – Oracle Academy
0399		Dual Credit in Computer & Information Technology	

Content Area	Program of Study	Course Code	Course Name
Mathematics	Database Design & Programming – Oracle Academy	0314	Database Foundations – Oracle Academy
		0330	Database Design & Programming – Oracle Academy
Science		0331	Database Programming with SQL – Oracle Academy
0399		Dual Credit in Computer & Information Technology	
Science	Manufacturing - Welding	2414	Welding
		2416	Welding 2
		2417	Welding 3
		2499	Dual Credit in Manufacturing - Welding
Science	Engineering - PLTW	1615	PLTW Intro to Engineering Design
		1617	PLTW Principles of Engineering
		1616 or 1739	PLTW Digital Electronics or AP Physics 1
		1620 or 1740	PLTW Capstone-Engineering Design/Development or AP Physics 2
Science	Biomedical Sciences - PLTW	1660	PLTW Principles of Biomedical Sciences
		1661	PLTW Human Body Systems
		1662	PLTW Medical Intervention
		1664	PLTW Biomedical Innovation
Social Studies	Restaurants & Food/Beverage Services	0504	Nutrition
		0532	ProStart I
		0533	ProStart II
		0539 or 0599	ProStart Internship or Dual Credit in Restaurants & Food/Beverage Services

Mathematics	Java Programming - Oracle	0323	Computer Science/Programming
		0324	Programming
Science		0325 or 0326	Advanced Programming or Computer Programming-Other Lang
		0327 or 0336	AP Computer Science A or AP Computer Science Principles
Science	Health Informatics-Advanced Careers SREB	1560	Advanced Career-Health Informatics Data & Use
		1561	Advanced Career-Health Informatics Transforming Data into Information
		1562	Advanced Career-Health Informatics Transforming Info into Knowledge
		1563	Advanced Career-Health Informatics Problems & Solutions

Content Area	Program of Study	Course Code	Course Name
Science	Innovations in Science & Technology – Advanced Careers SREB	1670	Advanced Career-Nature of Science & Technology
		1671	Advanced Career-Core Applications of Science/Technology
		1672	Advanced Career-Impacts of Science & Technology
		1673	Advanced Career-Creativity & Innovations
Mathematics	Aerospace Engineering – Advanced Careers SREB	1674	Advanced Career-Fundamentals Aerospace Tech
		1675	Advanced Career-Advanced Aerospace Technology
Science		1676	Advanced Career-Aeronautics Engineering Apps
		1677	Advanced Career-Astronautics Engineering Apps
Social Studies	Teacher Education	0550	Child Development
		0562	Teacher Academy 1
Reading		0563	Teacher Academy 2
		0597 or 0599	Teaching & Practicum or Dual Credit Teacher Education

Appendix B

Fourth Math Credit Options

Course ID	Course Name	Course Description	Min Grd	Max Grd
2074	Abstract Algebra-Pre Calculus	Abstract Algebra - Pre Calculus level - Grades 11 - 12 - This course is higher than the level of Algebra II. Course intended for students who have attained pre-calculus objectives. Abstract algebra is the set of advanced topics in algebra that deal with abstract algebraic structures rather than the usual number systems. Abstract Algebra-Pre Calculus level courses include a study of the properties of the number system from an abstract perspective, including such topics as number fields (i.e., rational, real, and complex numbers), integral domains, rings, groups, polynomials, and the fundamental theorem of algebra.	11	12
2044	Algebra II/Trigonometry	Algebra II/Trigonometry - Grades 10 - 12 - This course is above the level of Algebra 1 and is designed for students who have attained Algebra I and Geometry objectives. This course covers Algebra II concepts and looks more deeply at specifically trigonometric functions and relationships. The four critical areas for Algebra II are: (1) polynomial, rational, and radical relationships; (2) trigonometric functions; (3) modeling with functions and (4) inferences and conclusions from data. Topics for Trigonometry in this course include study of right and oblique triangles, trigonometric functions (including graphs, transformations, and modeling), solving trigonometric equations, trigonometric identities, circular functions, and applications of trigonometric and circular functions. If time allows, study of vectors, the complex plane, polar coordinates, and conic sections may be possible.	10	12
2050	Analytic Geometry/ Math Analysis	Analytic Geometry/Math Analysis - Grades 9 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives. This is a precalculus course covering topics in both Analytic Geometry and Math Analysis in preparation for a calculus course. Topics for Analytic Geometry include: vectors, lines in two dimensions, circles, conics, transformation of coordinates, polar coordinates, parametric equations, and the solid analytic geometry of vectors, lines, planes, cylinders, spherical and cylindrical coordinates. Topics for Math Analysis include: patterns in behavior of graphs, study of domains and ranges, roots of functions that are Real or Complex, turns in graphs and the first derivative, graphing using transformations (with and without a graphing calculator), study of limits, introduction to integration, study of matrices, algebraic proofs and conceptual explanations, and application problem solving.	09	12
2058	AP Calculus AB	AP Calculus AB - Grades 11 - 12 - This course is higher than the level of Algebra II and aligns to College Board's AP Calculus AB content. This course is intended for students who have attained the objectives of pre-calculus. Topics for AP Calculus AB include limits and continuity; differentiation; integration and accumulation of change; differential equations; application of integration. This course is intended to prepare students for the optional Advanced Placement Exam in this subject and should follow the published College Board guidelines.	11	12
2059	AP Calculus BC	AP Calculus BC - Grades 11 - 12 - This course is higher than the level of Algebra II and aligns to College Board's AP Calculus BC content. This course is intended for students who have attained the objectives of pre-calculus. AP Calculus BC covers the same topics as AP Calculus AB (Refer to course code 2058 for topics) plus parametric equations, polar coordinates, vector-valued functions, and infinite sequences and series. This course is intended to prepare students for the optional Advanced Placement Exam in this subject and should follow the published College Board guidelines.	11	12
2060	AP Statistics	AP Statistics - Grades 11 - 12 - This course is higher than the level of Algebra II and aligns to College Board's AP Statistics content. This course is intended for students who have attained the objectives of pre-calculus. AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation, distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions. This course is intended to prepare students for the optional Advanced Placement Exam in this subject and should follow the published College Board guidelines.	11	12
2024	Applied Math	Applied Math - Grades 9 - 12 - This course aligns to the high school standards for Mathematics I or Algebra I and Geometry with an emphasis on application in a contextual environment. The fundamental purpose of this course is to extend the mathematics that students learned in Mathematics I or Algebra I and Geometry through applications. This course should allow the students to apply the concepts learned in Mathematics I or Algebra I and Geometry and should not be the first time students learn these concepts. The critical areas deepen and extend understanding of linear and exponential relationships through analyzing, solving, and using quadratic functions. The course expands and explores more complex geometric situations and geometric relationships. The Standards for Mathematical Practice are interwoven with the content standards throughout the course, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.	09	12
2055	Calculus	Calculus - Grades 11 - 12 - This course is higher than the level of Algebra II and is intended for students who have attained pre-calculus objectives, including trigonometry. Calculus deepens student understanding of functions and introduces the process of differentiation and integration. Concepts explored include limits and continuity; derivatives; definite integrals; exponential and logarithmic functions, trigonometric functions, the fundamental theorem of calculus; and techniques of integration. anti-derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus.	11	12
2079	Data Science	Data Science - Grades 10 - 12 - Prerequisite: either the course series of Algebra I and Geometry or the course series of Integrated Pathway: Mathematics I and II. This course is higher than the level of Algebra II. This course develops computational thinking and builds on mathematics conceptual understanding to support skills and abilities necessary to extract actionable knowledge from data. The course is focused on rigorous learning that fuses mathematics with computer science, understanding of data analysis, sampling, correlation/causation, bias and uncertainty, probability, modeling with data, making and evaluating data-based arguments, the power of data in society, and other practical applications of data analysis to give students concrete and applicable skills, engaging in statistical inference using randomization and simulation techniques, to enable students to learn about their world.	10	12
2057	Differential Calculus	Differential Equations - Grades 11 - 12 - This course is higher than the level of Algebra II and is intended for students who have attained objectives in Calculus. Course includes the study of elementary differential equations including first and higher order differential equations, partial differential equations, linear equations, systems of linear equations, transformations, series solutions, numerical methods, boundary value problems, and existence theorems.	11	12
2054	Discrete Mathematics	Discrete Mathematics - Grades 9 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives, Discrete Mathematics courses focus on conceptual categories Number and Quantity; Statistics and Probability; and Modeling, as well as briefly covering some concepts in Algebra and Functions. Discrete Mathematics is a problem-based learning course that is heavily based in modeling with mathematics, especially with topics like elections and weight voting, graph theory, game theory, and apportionment. This course expands on the topics of matrices; combinatorial reasoning; counting techniques; algorithms; sequences and series; and applications of each.	09	12

2045	Elementary Functions	Elementary Functions - Grades 10 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained precalculus objectives. This course is intended to support preparation for a calculus course and offers a deeper study of elementary functions -polynomial, rational, algebraic, exponential, logarithmic, circular, and trigonometric functions - their graphs, and their applications. Topics include examination of functions verbally, graphically, numerically, and symbolically, as well as properties of functions, such as domain and range, rates of change, concavity, asymptotes, and piece-wise functions.	10	12
2097	Financial Literacy-Math	Financial Literacy - Math - Grades 9 -12 - This course provides an understanding of the topics of finance while reinforcing concepts and skills in the high school mathematics standards. This course aligns to at least the Algebra I standards. The finance topics may include: income and careers; money management; credit and debt; and savings and investing. Topic sections cover: personal income, business ownership; budget; taxes; insurance; credit cards; buying verses leasing, mortgages; rent; credit ratings; bankruptcy, bank and brokerage accounts; interest rates; stocks and bonds; retirement; pensions; inheritance; and government financing. The Standards for Mathematical Practice apply throughout this course and, together with the content standards, prescribe mathematics as a coherent, useful, and logical subject that makes sense of problem situations.	09	12
2039	Fractal Mathematics	Fractal Mathematics - Grades 9 - 12 - This course is higher than the level of Algebra II and is intended for students who have attained Algebra II objectives. This course develops computational thinking skills, builds on mathematics conceptual understanding of algebra, and utilizes mathematical tools to model fractal geometry in the environment. This course includes projects where students use computational thinking skills such as pattern matching, algorithms, abstraction, and decomposition and further develops knowledge and skills around algebra, geometry, functions, and writing and solving algebraic expressions and equations. Extensive use of technology tools and applications should be included in student learning opportunities.	09	12
2083	Integrated Math 4 12th	Integrated Pathway: Mathematics IV - Grade 12 - This course is higher than the level of Algebra II and may include topics in pre-calculus, trigonometry, math analysis and/or calculus. This course is for students who have successfully attained the standards for Integrated Pathway: Mathematics III course and seek an integrated approach to further study mathematics.	12	12
2075	Linear Algebra-Pre Calculus	Linear Algebra - Pre Calculus level - Grades 11 - 12 - This course is higher than the level of Algebra II. Course intended for students who have attained pre-calculus objectives. Linear Algebra-Pre Calculus level courses include maxtrix algebra, determinants, elementary vector spaces, characteristics equations and eigenvalues.	11	12
2076	Linear Programming-PreCalculus	Linear Programming - Pre Calculus level - Grades 11 - 12 - This course is higher than the level of Algebra II. Course intended for students who have attained pre-calculus objectives. Linear programming is the fundamental modelling technique in optimal decision-making. Linear Algebra-Pre Calculus level courses include a study of the concepts of LP modelling, exploration of the mathematical properties of LP problems, and a study of the theory of the simplex algorithm as a solution technique.	11	12
2047	Math Analysis	Math Analysis - Grades 10 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives. This is a precalculus course that offers an in-depth, conceptual analysis of algebraic, polynomial, rational, logarithmic, exponential, and trigonometric functions, including solving and graphing all types of functions. Topics include patterns in behavior of graphs, study of domains and ranges, roots of functions that are Real or Complex, turns in graphs and the first derivative, graphing using transformations (with and without a graphing calculator), study of limits, introduction to integration, study of matrices, algebraic proofs and conceptual explanations, and application. problem solving.	10	12
2078	Mathematical Modeling Grades	Mathematical Modeling - Grades 10 - 12 - This course is higher than the level of Algebra II. This is a project based course using emergent technologies to give students hands on experience exploring mathematical modeling and processes. Students will create an independent research project to address real world situations including using robotics, supercomputing, 3D modeling or other techniques. Students may present their projects and/or compete in robotics, supercomputing or other competitions. Licensure Requirements are the same as course code 2053.	10	12
2096	Mathematics-Independent Study	Mathematics - Independent Study - Grades 9 - 12 - This course is higher than the level of Algebra II, often conducted with instructors as mentors, enables students to explore mathematics topics of interest. This course may be offered in conjunction with other rigorous math courses, or may serve as an opportunity to explore a topic of special interest. They may also serve as an opportunity to study for AP exams if the school does not offer specific courses for that endeavor.	09	12
2099	Mathematics-Other	Mathematics - Recommended for Students Grades 5 - 12 - This course code is to be used for college level courses which are not listed above. It may also be used for middle school students if an appropriate MATH course code is unavailable. Typically used with advanced dual credit topics.		
2056	Multivariate Calculus	Multivariate Calculus - Grades 11 - 12 - This course is higher than the level of Algebra II and is intended for students who have attained objectives in Calculus. Topics include vectors in Euclidean space; vector analysis; analytic geometry of three dimensions; curves in space; partial derivatives; optimization techniques; multiple integrals; vector fields, Green's theorem, divergence theorem; Stokes's theorem; differential forms.	5 11	12 12
2073	Number Theory-Algebra II Level	Number Theory - Grades 11 - 12 - This course is higher than the level of Algebra II. Course intended for students who have attained the objectives of Algebra II. Number Theory courses are devoted primarily to the study of the integers, their additive and multiplicative structures, the Fundamental Theorem of Arithmetic, congruence, and divisibility.	11	12
2087	Pathway2Careers Algebra 2A	Pathway2Careers Algebra D502A - Grades 9-11 - This course uses Pathway2Careers (P2C) curriculum and is aligned to half of the Algebra 2 Common Core State Standards, as well as concepts from higher math courses. It includes Linear, Polynomial, Quadratic, and Piecewise Functions and Graphs, Vectors, and Matrices as well as Data, Discrete Math, and Logic. Pathway2Careers connects mathematical concepts to their applications in various careers. Students who pass both P2C Algebra IIA and P2C Algebra IIB fulfill graduation requirements for Algebra 2.	09	11
2088	Pathway2Careers Algebra 2B	Pathway2Careers Algebra 2B - Grades 10-12 - Pre-requisite: Pathway2Careers Algebra 2A. This course uses Pathway2Careers curriculum and is aligned to half of the Algebra 2 Common Core State Standards, as well as concepts from higher math courses. It includes Radical, Rational, Exponential, and Logarithmic Functions, Conic Sections, Complex Numbers, Trigonometry, and Series and Sequences as well as Binary Numbers, Computer Science Math, and Topology. Pathway2Careers connects mathematical concepts to their applications in various careers. Students who pass both P2C Algebra IIA and P2C Algebra IIB fulfill graduation requirements for Algebra 2.	10	12
2053	Pre-Calculus	Precalculus - Grades 10 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives, in preparation for a calculus course. Precalculus incorporates algebraic, graphical, numerical, and verbal analyses through the study of complex numbers; expanded understanding of polynomial and rational, logarithmic and exponential, and trigonometric functions; trigonometric identities and equations; vectors; the polar coordinate system; conic sections; and an introduction to limits; Application-based problem solving using appropriate technology tools is an integral part of the course.	10	12

2029	Probability and Statistics	Probability and Statistics - Grades 9 -12 - This course aligns to the Probability and Statistics standards and is designed for students who have attained Algebra 1 and Geometry objectives. This course aims to support students in applying statistical concepts and methods to solve real-world problems and examine real-life scenarios based on data analysis. Four critical areas addressed in the course include: (1) Interpret categorical and quantitative data; (2) Make inferences and justify conclusions; (3) Apply conditional probability and probability rules and interpret data using rules of probability; (4) Apply probability to make decisions and use probability to evaluate outcomes of decisions. Appropriate use of technology is important in statistical applications.	09	12
2077	SREB Math Ready	SREB Math Ready - Grade 12 - Pre-requisite: either the course series of Algebra I, Geometry and Algebra II or the course series of Integrated Pathway: Mathematics I, II and III. This course is higher than the level of Algebra II. This Southern Regional Educational Board (SREB) course emphasizes an understanding of math concepts. Math Ready students learn the context behind procedures and come to understand the WHYS of using certain formulas or methods to solve a problem. By engaging students in real-world applications, this course develops critical thinking skills that students will use in college and careers. Refer to course code 2076 for standards.	12	12
2043	Trigonometry	Trigonometry - Grades 10 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives. This course is intended to support students in preparation for precalculus and calculus learning through an in-depth study of trigonometric and circular functions, including modeling, graphing, and connecting to polar coordinates, complex numbers, and series. Topics include study of right and oblique triangles, trigonometric functions (including graphs, transformations, and modeling), solving trigonometric equations, trigonometric identities, circular functions, vectors, the complex plane, polar coordinates, conic sections, and applications of trigonometric functions and other listed concepts.	10	12
2048	Trigonometry/ Analytic Geometry	Trigonometry/Analytic Geometry - Grades 9 - 12 - This course is higher than the level of Algebra II and is designed for students who have attained Algebra II objectives. This is a precalculus course covering topics in both Trigonometry and Analytic Geometry in preparation for a calculus course. Topics for Trigonometry include: study of right and oblique triangles, trigonometric functions (including graphs, transformations, and modeling), solving trigonometric equations, trigonometric identities, circular functions, vectors, the complex plane, polar coordinates, conic sections, and applications of trigonometric functions and other listed concepts. Topics for Analytic Geometry include: vectors, lines in two dimensions, circles, conics, transformation of coordinates, polar coordinates, parametric equations, and the solid analytic geometry of vectors, lines, planes, cylinders, spherical and cylindrical coordinates.	09	12
2049	Trigonometry/ Math Analysis	Trigonometry/Math Analysis - Grades 9 - 12 - This course is higher than the level of Algebra II , designed for students who have attained Algebra II objectives, and covering topics in both Trigonometry and Math Analysis in preparation for a calculus course. Topics for Trigonometry include: study of right and oblique triangles, trigonometric functions (including graphs, transformations, and modeling), solving trigonometric equations, trigonometric identities, circular functions, vectors, the complex plane, polar coordinates, conic sections, and applications of trigonometric functions and other listed concepts. Topics for Math Analysis include: patterns in behavior of graphs, study of domains and ranges, roots of functions that are Real or Complex, turns in graphs and the first derivative, graphing using transformations (with and without a graphing calculator), study of limits, introduction to integration, study of matrices, algebraic proofs and conceptual explanations, and application problem solving.	09	12

COMPUTER SCIENCE: Beginning with cohort 2021: *Students who demonstrate proficiency on the ESSA-required mathematics assessment and meet the Algebra II graduation requirement may use a qualifying computer science course for mathematics graduation credit.