



# Several States Offer High School Diploma Options to Address Students' Needs and Future Goals

## *at a glance*

While many states have taken steps to strengthen academic standards, eight states with high school graduation requirements similar to those recently adopted in Florida also allow students the option of earning a diploma with less rigorous requirements. In general, these less rigorous options give students who cannot meet the state's higher graduation standards the opportunity to earn a high school diploma rather than drop out of school. However, some states raised concerns that such a policy has the potential to undermine their efforts to raise student achievement.

In addition, 10 states offer diploma options designed to prepare high school students for the workforce. These diplomas enable students to choose among various academic pathways depending on their post-high school goals—entry into the workforce or postsecondary education. However, the workforce-ready diplomas currently used by these states can limit students' postsecondary education choices and might not fully prepare students for the current job market.

## Scope

As directed by the Florida Legislature, OPPAGA examined differentiated diploma options offered by other states, which are intended to prepare students for entry into the workforce or college after high school.<sup>1, 2</sup> This report answers two primary questions.

1. What states with graduation requirements similar to Florida's also offer students a less rigorous diploma option?
2. What states offer diploma options to prepare students for the workforce and how are these programs structured?

## Background

In 2010, the Florida Legislature increased high school graduation requirements to better prepare students for college and the workplace. Under the new requirements, students must earn four credits in mathematics, one of which must be Algebra I or a higher level course. In addition, beginning with students entering the 9th grade in the 2010-11 school year, one of the four credits in mathematics must be Geometry or a series of equivalent courses as approved by the State Board of Education. Beginning with students entering the 9th grade in the 2012-13 school year, one of the four credits must be Algebra II or an equivalent series of board-approved courses.

Students also must earn three credits in science. Beginning with students entering the 9th grade in the 2011-12 school year, one of the three credits in science must be Biology I or a series of board-approved equivalent courses. Beginning in the 2013-14 school year, students must earn one credit in Biology I, one credit in Chemistry or Physics or a series of board-approved equivalent courses, and one credit in an equally rigorous course.<sup>3</sup>

<sup>1</sup> Section 14, Chapter 2010-022, *Laws of Florida*.

<sup>2</sup> Many states offer alternative diplomas for students, such as those with severe disabilities, who are unable to meet basic academic requirements. These diploma options are not included in the scope of this report.

<sup>3</sup> Eighteen of Florida's 67 school districts have established additional graduation requirements beyond the state requirements for a standard high school diploma.

The law also requires students to pass statewide, standardized end-of-course assessments in three courses to earn course credit. This requirement is applicable to students entering the 9th grade in specified school years: Algebra I in 2011-12, and Biology I and Geometry in 2012-13.<sup>4</sup>

Other states are also increasing graduation requirements. Florida’s move to more rigorous graduation requirements is consistent with a national trend to increase academic standards and graduation requirements, improve assessments, and strengthen accountability to better prepare students for college and the workforce. Florida is one of approximately 35 states that comprise the American Diploma Project, a network dedicated to making sure that every high school graduate is prepared for college or a career.<sup>5</sup> As part of this effort, in June 2010, these states and other key education stakeholders approved Common Core State Standards to provide clear, common expectations in English and mathematics to provide K-12 students with the knowledge and skills they need to succeed in education and training after high school. The standards define what students should know and be able to do at each grade level. As of November 2010, 40 states have adopted the Common Core Standards.

One of the key concepts underlying these efforts is the belief that all students need essentially the same preparation regardless of whether they plan to attend college or enter the workforce after high school. This perspective is based on feedback from business community representatives and postsecondary institutions, as well as recent national studies that conclude that employers and colleges require high school graduates to have similar skills and abilities in areas including communication, mathematics, and critical thinking.<sup>6</sup> The move towards common high

school standards is further supported by national workforce data that shows jobs in all sectors of the economy increasingly require at least some postsecondary education. It is estimated that by 2018, 59% of jobs in Florida will require postsecondary education.<sup>7</sup>

States are using different approaches and timelines to implement the Common Core State Standards. A key issue is whether to enable students to earn a diploma by meeting different course requirements, particularly those students who cannot meet the more rigorous standards or who plan to go directly into the workforce rather than college after high school.

## Questions and Answers —

### *What states with graduation requirements similar to Florida’s also offer students a less rigorous diploma option?*

Eight of the 12 states with high school graduation requirements similar to Florida’s enable students to earn a diploma with less rigorous requirements. In general, these states’ intent is to give students who cannot meet the higher graduation standards an opportunity to earn a high school diploma rather than drop out of school. Although each state’s less rigorous requirements work differently, all eight states require parents and/or school officials to approve this option before students can pursue the less rigorous diploma.

Twelve states have high school graduation requirements similar to those Florida enacted in 2010. These states have added at least three of Florida’s four new courses to their graduation requirements. However, as shown in Exhibit 1, the 12 states vary in their similarity to Florida’s course requirements and implementation timetable. Texas and Louisiana are most similar to Florida in terms of course requirements. The time period for implementing these new graduation requirements varies among the states. For example, Indiana’s requirements were in full effect for the 2010 graduation class, while Florida’s new requirements will not become fully effective until 2017.

<sup>4</sup> Performance on end-of-course assessments must constitute 30 percent of the student’s final course grade for students entering the 9th grade in specified school years: Algebra I in 2010-11, and Biology I and Geometry in 2011-12.

<sup>5</sup> The American Diploma Project was launched in 2005 by Achieve, an independent, bipartisan, non-profit education reform organization. Achieve was created in 1996 by the nation’s governors and corporate leaders to make college and career readiness a national priority.

<sup>6</sup> *The Condition of College & Career Readiness 2010*, ACT [www.act.org/research/policymakers/cccr10/about.html](http://www.act.org/research/policymakers/cccr10/about.html).

<sup>7</sup> Anthony P. Carnevale, June 2010. Help Wanted: Projections of Jobs and Education Requirements Through 2018 (Florida Profile), The Georgetown University Center on Education and the Workforce.

**Exhibit 1**  
**Twelve States' Most Rigorous Graduation Requirements Are Similar to Those Recently Adopted in Florida**

State	Math		Science			Fully Effective for Students Graduating
	Geometry	Algebra II	Biology	Chemistry	Physics	
Florida (new)	✓	✓	✓	○	○	2017
Indiana <sup>1</sup>	✓	✓	✓	○	○	2010
Michigan	✓	✓	✓	○	○	2011
Texas <sup>2</sup>	✓	✓	✓	✓	✓	2011
Louisiana	✓	✓	✓	✓	●	2012
Alabama	✓	✓	✓	●	●	2013
Hawaii <sup>3</sup>	✓	✓	○	○	○	2013
North Carolina <sup>1</sup>	✓	✓	✓	●	●	2013
Tennessee	✓	✓	✓	○	○	2013
Arkansas	✓	✓	✓	○	○	2014
South Dakota	✓	✓	✓	○	○	2014
Virginia <sup>3</sup>	-- <sup>4</sup>	-- <sup>4</sup>	○	○	○	2014
Minnesota	●	✓	✓	○	○	2015

Legend: ✓ - Required ● - Not Required ○ - Choose among these options

<sup>1</sup> Indiana and North Carolina students may fulfill the math requirements by completing Integrated Math I, II, and III; education officials in both states indicated that this math sequence is equivalent to Algebra I, Algebra II, and Geometry.

<sup>2</sup> Texas graduation requirements are effective for students entering the 9<sup>th</sup> grade in 2007 and thereafter.

<sup>3</sup> For Hawaii and Virginia, which have multiple diplomas, we compared the most rigorous diploma requirements to the new requirements Florida enacted in 2010. However, these two states have not established the state's most rigorous requirements as their default or preferred diploma.

<sup>4</sup> Virginia's most rigorous diploma option requires that students take at least three courses among Algebra I, Geometry, Algebra II, or other math courses above the level of Algebra II.

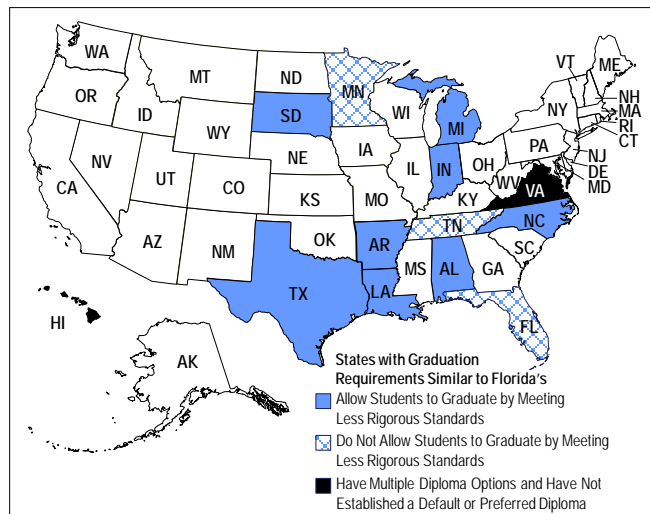
Source: Review of available published reports, other states' statutes and rules, and interviews and correspondence with state education officials.

Most states with graduation requirements similar to Florida's also allow students to earn a diploma by meeting less rigorous requirements. Florida's new high school graduation requirements apply to all students. However, as shown in Exhibit 2, of the states with rigorous requirements, eight allow students who cannot meet the states' graduation standards to earn a diploma by meeting less rigorous standards.<sup>8,9</sup> Like Florida, an additional two states—Minnesota and Tennessee—do not have such provisions. Although Hawaii and Virginia have a less rigorous diploma option, they have not established the state's more rigorous option as their default or preferred diploma, so we did not include them in our analysis.

<sup>8</sup> We identified the eight states using available published reports, other states' statutes and rules, and follow-up interviews and correspondence with other states' education official to confirm our conclusions.

<sup>9</sup> These eight states meet one of two criteria: the state has one standard diploma with similar requirements as Florida's but permits a different, less rigorous curriculum for a limited number of students who cannot meet its higher graduation requirements or the state has more than one diploma option, but officially has chosen the diploma with standards similar to Florida's as the default diploma intended for the vast majority of students.

**Exhibit 2**  
**We Identified Eight States with Graduation Requirements Similar to Florida's that Also Allow Students to Graduate By Meeting Less Rigorous Standards**



Source: Review of available published reports, other states' statutes and rules, and interviews and correspondence with education officials in selected states.

All eight states permit students to choose a less rigorous curriculum only with the involvement of their parents and/or school. In Louisiana, for example, parents must sign a document stating that they explicitly acknowledge that choosing the alternative curriculum may make the student ineligible for admission to a four-year public college or university. This shifts responsibility to students' parents for making a decision that could put students at a disadvantage, particularly if they decide later in high school that they want to go on to college. Other states that require parental sign-off include Alabama, Indiana, and Texas. Some states such as Arkansas, Michigan, and North Carolina require parents and/or school officials to be involved in determining the specific requirements that students must meet to graduate.

In addition, states vary widely in the course requirements associated with their less rigorous options. For instance, the primary difference between Michigan's standard diploma and its less rigorous option relates to the state's Algebra II requirement. Michigan students who are unsuccessful in passing the course requirement for Algebra II may elect to take the course over two semesters, complete a course the state's Department of Education deems to be equivalent to Algebra II, or enroll in a career education program and complete the same content as one semester of Algebra II. In other states there are greater differences between their standard diploma and less rigorous option. In Arkansas, both options require the same number of total credits, but students pursuing the less rigorous option are not required to meet the Algebra II or Physics/Chemistry requirements associated with the state's standard diploma. Appendix A provides information on all eight states' less rigorous graduation requirements.

States that offer less rigorous graduation options report that their intent is to enable students to earn high school diplomas rather than dropping out. Our interviews with education officials in other states identified several arguments for and against allowing students to graduate by meeting less rigorous requirements. States mainly enacted such provisions to give students who cannot meet

requirements for a standard diploma the opportunity to earn a high school credential rather than drop out of school. In contrast, officials in some states without less rigorous graduation options raised concerns that such policies would undermine their efforts to raise student achievement, particularly for minority students and students from poor families. In addition, officials expressed concern that less rigorous graduation options might be considered by the general public and businesses as 'second class' or substandard to the state's more rigorous standard diploma(s).

Research and state enrollment trends do not appear to support concerns that increasing academic standards affect dropout rates. Research studies have shown that higher graduation standards do not necessarily lead to increased dropout rates. A widely-cited study of the San Jose Unified School District, a community with broad ethnic and socioeconomic diversity, provides information on this issue.<sup>10</sup> In the 1990s, the district adopted the University of California's entrance requirements as its graduation requirements, giving it the most rigorous requirements of all California school districts. The district reports that its graduation rates have remained steady since adopting these requirements, while both student achievement and SAT scores have risen.

Similarly, enrollment trends in Indiana and Michigan suggest that more rigorous standards do not reduce the percentage of students remaining enrolled in high school from year-to-year.<sup>11</sup> In Indiana, students graduating in 2010 were the first class to complete high school under standards similar to those recently adopted in Florida. Data for the 2010 class show that 94% of the students who were enrolled in the 8th grade in fall 2005 were enrolled in the 11th grade in 2008-09. While this represents a slight drop over the previous

<sup>10</sup> Murray, L. (2004). *The San Jose Unified School District Story: Implementing a College-Ready Curriculum for All*, May 28, 2010, [www.all4ed.org/files/Murray\\_PIL.pdf](http://www.all4ed.org/files/Murray_PIL.pdf).

<sup>11</sup> Although enrollment trends provide an indicator of student intent, they do not necessarily measure final graduation and dropout rates. The actual rates may increase, decrease, or remain the same after a full cohort of students has been through high school under the higher graduation requirements.

year, it still is the second highest retention figure recorded in Indiana during the last 20 years.

In Michigan, initial concerns that the state's more rigorous math requirement would increase dropout rates appear to be unfounded. The first students fully affected by the new requirement were in 8th grade in the fall of 2006. At the beginning of 2009, 95.5% of these students were still in high school. This is the highest percentage in 7 years and the second highest percentage the state has reported in the 20 years for which data is available.

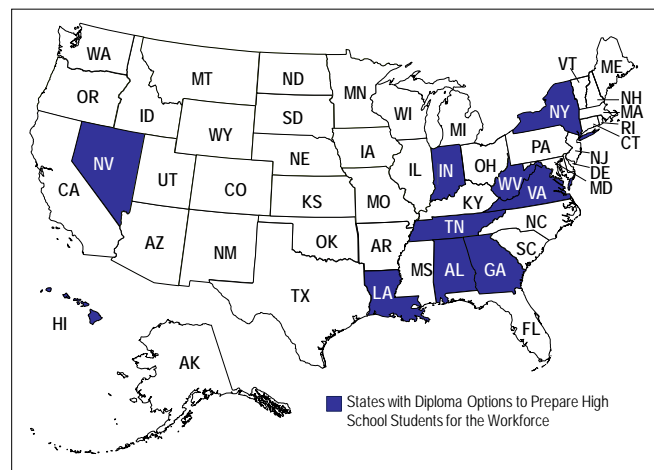
There is limited data regarding whether allowing students to graduate by meeting less rigorous standards undermines states' efforts to raise student achievement overall or among certain of students. Early data from one state (Texas) appears not to support this concern.<sup>12</sup> Based on the most recent enrollment data available, the percentage of African-American and Hispanic students opting out of Texas' recommended high school program and enrolling in the minimum program decreased only slightly between 2007-08 and 2008-09. However, more information is necessary to make a conclusion about the effect of such policies on states' efforts to raise student achievement.

### ***What states offer diploma options to prepare students for the workforce and how are these programs structured?***

Ten states offer diploma options to prepare high school students for the workforce. These states generally require students to meet similar academic course requirements for graduation regardless of the diploma option they choose. Although Florida does not offer different diploma options for its standard diploma, students have several opportunities to prepare for the workforce.

Ten states offer students diploma options designed to prepare them for the workforce. Most states provide a standard diploma to all high school students regardless of their plans after graduation. However, as shown in Exhibit 3, some states (10) have developed diploma options that recognize students who meet specific requirements designed to ensure their readiness to enter the workforce after graduation.<sup>13, 14</sup> Most of these states (8) recognize such students through an endorsement or certification on their standard diploma. Two states—Indiana and Virginia—offer students a separate career technical diploma, distinct from a standard high school diploma.

### **Exhibit 3 We Identified 10 States that Offer Their Students Diploma Options to Signify Workforce Readiness**



Source: Review of available published reports, other states' statutes and rules, and interviews and correspondence with education officials in selected states.

While these states vary in the specific requirements that students must meet to earn a workforce-ready diploma, in most cases there is considerable overlap in course requirements among their diploma options. In general, students pursuing a workforce-ready diploma must successfully complete three to four vocational-technical courses in place of other

<sup>12</sup> In Texas, all high school graduates are awarded the same type of diploma, but students pursue one of three program options: the Minimum High School Program, the (default) Recommended High School Program, or the Distinguished Achievement High School Program.

<sup>13</sup> In addition, five states (Alabama, Georgia, Kentucky, Nevada, and Virginia) provide distinct diplomas or special recognition for students who take coursework above that required for the standard diploma to prepare for college.

<sup>14</sup> While students in most states can take career and technical courses, these ten states have established pathways or sequences of courses specifically designed to ensure students' workforce readiness.

course requirements. Most often, these vocational-technical courses replace foreign language requirements associated with the states' standard or college-ready diplomas. The examples of states' workforce-ready diploma programs below illustrate these course requirements. (See Appendix B for details on the 10 states' programs.)

- Alabama offers two types of career/technical endorsements on diplomas, both of which require 24 credits for graduation. Students who earn three career and technical education credits can receive a high school diploma with a career/technical endorsement. If these students also successfully complete Algebra II, they are eligible for an advanced career/technical endorsement. Students who pursue either type of career/technical endorsement are not required to take a foreign language.
- In Hawaii, students who earn two career and technical education credits can have a career technical notation on their high school diplomas.<sup>15</sup> High school students not pursuing a career and technical pathway are required to take two credits either in world languages or in fine arts.
- In Louisiana, to obtain the College and Career diploma, students can choose between the 24-credit 'Core 4' curriculum and the 24-credit 'Basic Core' curriculum. The core requirements in English are the same for the two curricular pathways. However, students following the Core 4 pathway must take four primary credits in a career and technical education area of concentration and two related elective credits, one of which must be in a computer/technology course. Students who pursue this diploma option are not required to take a foreign language.
- Indiana students who complete 47 semester credits (equivalent to 23.5 academic credits in

most other states) that include 8 to 10 career/technical semester credits receive a 'Core 40' diploma with technical honors.<sup>16</sup> The technical honors diploma requires the same core courses as the state's academic honors diploma but requires no foreign language credits and two fewer math credits.

- Virginia will begin offering a 22-credit standard technical diploma as well as a 26 credit advanced technical diploma in 2011-12.<sup>17</sup> Students who pursue the standard technical diploma option will be required to earn four credits in career and technical education. Students who select the advanced technical diploma will be required to take three career and technical education credits as well as a foreign language.

One of the 10 states with a workforce-ready diploma (Nevada) allows students to meet its graduation requirements by completing career education courses that integrate math and/or science course content. However, several states that do not offer workforce-ready diplomas permit students to substitute career and technical education for some math and/or science courses under certain circumstances.<sup>18</sup> For example, Michigan permits a student to satisfy Algebra II course requirements by completing an entire career and technical education program the state Department of Education approves as having appropriate embedded mathematics content.

Workforce-ready diplomas offer several advantages but have some drawbacks. Education officials in other states indicated that the primary advantage of workforce-ready diplomas is that they provide students the opportunity to choose among various academic pathways depending on whether their post-high school goals are entry into the workforce or postsecondary education. In addition, because the course requirements of workforce-ready

<sup>15</sup> Beginning with the 2012-13 school year (graduating class of 2013), the two credits must be within a single career pathway. Hawaii students can choose between a 25 credit Board of Education recognition diploma and a 24 credit diploma. The 24-credit diploma requires 3 credits in math and does not require students to complete Algebra II.

<sup>16</sup> In Indiana, 'credit' means satisfactory completion of a course that meets a minimum of 250 minutes of instruction per week for one semester for a school operating on a traditional schedule.

<sup>17</sup> Virginia students can also choose a 22-credit standard diploma or a 26-credit advanced studies diploma.

<sup>18</sup> These states are Arizona, Illinois, Kentucky, Michigan, New Mexico, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Utah, Washington, and Wisconsin.

diplomas substantially overlap the requirements for the states' standard and college-ready diplomas, students are able to switch between types of diplomas and still graduate within four years. Further, the overlapping course requirements avoid unduly limiting students' postsecondary education choices.

However, students who pursue workforce-ready diplomas may not meet the entrance requirements of many universities. This could occur because the workforce-ready option often does not require students to take a foreign language in high school. Public universities, including those in Florida, generally require at least two years of a foreign language.<sup>19</sup>

In addition, the differentiated diploma model used in most states may not fully prepare students for many occupations. Students who obtain workforce diplomas may still require additional education/training before they can enter some occupations, as an increasing number of jobs require at least some postsecondary training.

Although Florida does not offer a workforce-ready option for its standard diploma, students have opportunities to prepare for the workforce. Florida students who wish to move more quickly toward workforce readiness may graduate under the state's three-year accelerated diploma program.<sup>20</sup> The state's three-year, 18-credit career preparatory diploma is designed to prepare students for entry into a technical center, Florida college for career preparation, or the workforce.

Compared to the state's four-year high school diploma, the three-year accelerated career preparatory diploma requires fewer credits, focuses more on academic courses, and requires students to earn specific credits in a single vocational, career, or technical education program. Students pursuing this option must complete three credits in a single vocational/career education program and one elective credit, three

credits in a single career/technical certificate dual enrollment program and one elective credit, or four credits in vocational/career education (including three credits in one sequential career and technical education program). While Florida's new graduation requirements continue the three-year accelerated diploma program, it has no option for the standard four-year diploma to signify a student's workforce readiness.

Students wishing to quickly enter the workforce can also participate in Florida's career and professional academies, which are designed to link student learning with potential career outcomes. Career and professional academies differ from traditional academic and vocational programs in that they simultaneously prepare students for college and the workforce. These programs provide students with qualifications that can be used to either pursue a college education or enter directly into the workforce upon graduation, whichever is most appropriate for the individual student.<sup>21</sup> When students receive an industry certification based on the program at a career and professional academy and graduate with a standard high school diploma, the school district receives incentive funding designed to encourage districts to provide more programs that result in industry-certified credentials. As of January 2011, all of Florida's school districts had at least one career and professional academy. Many districts offered multiple career and professional academies; statewide, there were 1,298 career and professional academies.

In addition, Florida students may prepare for the workforce by meeting requirements defined in statute for the Florida Ready to Work Certification Program.<sup>22</sup> Florida law provides that students who receive certain workforce certifications or credentials receive a designation on their standard high school diplomas.<sup>23</sup>

<sup>19</sup> While foreign language is required for Florida public university entrance, it is only recommended for entrance to the state's public colleges.

<sup>20</sup> Students may also pursue the 3-year, 18-credit college preparatory program which is designed to prepare them for entry into a postsecondary education institution.

<sup>21</sup> Section 1003.493, *Florida Statutes*.

<sup>22</sup> This program may be conducted in public middle and high schools, community colleges, technical centers, one-stop career centers, vocational rehabilitation centers, and Department of Juvenile Justice educational facilities. Section 1004.99, *F.S.*

<sup>23</sup> Section 1003.4285, *F.S.*

## Appendix A

# Eight States with Graduation Requirements Similar to Florida’s Also Allow Students to Graduate by Meeting Less Rigorous Standards

Table A-1 shows the eight states that offer high school students the option to complete a less rigorous curriculum than what is currently or will be required for the highest standards or default diploma. These eight states meet one of two criteria: (1) the state has one standard diploma with requirements as rigorous as Florida’s, or (2) the state has more than one diploma option, but officially has chosen the diploma with standards similar to Florida’s as the default diploma intended for the vast majority of students. In addition, all eight states allow a limited number of students who cannot meet their higher graduation requirements to graduate high school by meeting less rigorous standards.

Most of these states require four credits (referred to in some states as ‘units’ or ‘units of credit’) in English and either three or four units in mathematics, science, and social studies. Some states require the same total number of credits for graduation under the less rigorous curriculum as required for the highest standards diploma (typically 21 to 24), but students are allowed to substitute less demanding courses.<sup>24</sup> Other states require fewer total credits in the less rigorous curriculum. In all eight states, parents must confer with a school administrator and sign a waiver before their child is permitted to pursue a less rigorous curriculum.

**Table A-1**  
**Eight States with Graduation Requirements Similar to Florida’s Also Allow Students to Graduate by Meeting Less Rigorous Standards**

State	Core Requirements for Default Diploma <sup>1</sup>	Permissible Less Rigorous Requirements	Additional Comments
Alabama	Four credits each of English/language arts, mathematics (to include Geometry and Algebra II), science (to include Biology), and social studies	The total number of required credits (24) is the same. However, the less rigorous curriculum does not require Algebra II.	Parents must sign a form and consult with school administrators for their child to take the less rigorous curriculum.
Arkansas	Four and a half units of language arts, four units of mathematics (to include Algebra I, Geometry, Algebra II, and a fourth unit beyond Algebra II), three units in science (to include Biology and two additional physical sciences chosen from Physical Science, Chemistry, and Physics), and social studies	The total number of required credits (22.5) is the same. However, the less rigorous curriculum does not require Algebra II and a fourth unit of math beyond Algebra II nor Physics/Chemistry.	Parents can sign a waiver for their child to take the less rigorous curriculum.

<sup>24</sup> In Indiana, ‘credit’ means satisfactory completion of a course that meets a minimum of 250 minutes of instruction per week for one semester for a school operating on a traditional schedule.



State	Core Requirements for Default Diploma <sup>1</sup>	Permissible Less Rigorous Requirements	Additional Comments
Indiana	Eight credits of English/language arts, six credits each in mathematics (to include Geometry and Algebra II or Integrated Math I, II, and III), science (to include two credits in Biology; and two credits in Chemistry, Physics, or Integrated Chemistry-Physics), and social studies	Two fewer credits each in the areas of social studies, math, and science.	The student, the student's parent or guardian, and the student's counselor (or another staff member who assists students in course selection) must meet to discuss the student's progress. After reviewing the student's career and course plan, the student's parent or guardian can decide if the student will achieve greater educational benefits by completing the less rigorous curriculum or the standard curriculum. The school determines the career-academic course sequence for students pursuing the less rigorous curriculum.
Louisiana	Four units each of English, mathematics (to include Geometry and Algebra II), science (to include Biology and Chemistry), and social studies	The total number of required credits (24) is the same. The less rigorous curriculum requires one less credit each in science and social studies, and does not require Algebra II.	Students can choose the less rigorous option after two years with parental permission. Parents must acknowledge that choosing the alternative curriculum may make their child ineligible for admission to a four-year public college or university. Students may also choose the 23-credit Career Diploma which requires 16 academic credits and a sequence of 7 credits in career and technical education. This option does not require Algebra II, Geometry, or Chemistry.
Michigan	Four credits each of English/language arts and mathematics (to include Algebra II and Geometry), and three each in science (to include Biology and Chemistry or Physics) and social science	A student must attempt Algebra II before opting out. The student is still required to complete the equivalent of one semester of Algebra II, complete Algebra II in two courses, complete a course the state Department of Education deems to be equivalent to Algebra II, or enroll in a career education program and complete a course with the same content as one semester of Algebra II.	The state's less rigorous option allows an alternative curriculum that must be approved by the school counselor. Students must complete Algebra I and attempt Algebra II. Students can request the less rigorous curriculum in 9th grade.
North Carolina	Four credits each in English language arts, and mathematics (to include Geometry and Algebra II or a series of three integrated mathematics courses), and three each in science (to include Biology), and social studies	A principal may exempt a student from the prescribed math sequence and allow specified substitutions.	Alternate math sequence allowed in rare instances. The principal and high school guidance counselor have some leeway and may give flexibility to students who may not be able to complete all the math requirements.
South Dakota	Four units of English/language arts and three each in science (to include Biology, and Chemistry or Physics), mathematics (to include Geometry and Algebra II), and social studies	Students can choose not to take Algebra II or Geometry, but not both. Students may also be excused from Chemistry or Physics, but must still have three units of lab science.	A student may be excused if the student's parent or legal guardian and school counselor or administrator agrees and the excuse is documented.
Texas	Four credits of English language arts, mathematics (to include Algebra II and Geometry) and science (to include Biology; Chemistry, and Physics), and three credits in social studies	One less credit in math, two less credits in science, and one less credit in social studies. Students pursuing the less rigorous curriculum are not required to take Algebra II and must take Integrated Physics/Chemistry (IPC). The student may opt to take Physics or Chemistry instead of IPC but must take the second of these two courses as an elective credit.	The student, the student's parent or other persons standing in parental relation to the student, and a school counselor or school administrator must agree that the student should be permitted to take courses under the less rigorous curriculum.

<sup>1</sup> We defined core courses as math, science, English/language arts, and social studies.

Source: Review of published reports, other states' statutes and rules, and interviews and correspondence with education officials.

## Appendix B

# Ten States Offer High School Students Diploma Options to Signify Workforce Readiness

Table B-1 shows the 10 states that offer high school students diploma options that signify workforce readiness. While students in most states can take career and technical courses, these ten states have established pathways or sequences of courses that are specifically designed to ensure students’ workforce readiness. Most of these states require four credits (called ‘units’ in some states) in English and either three or four credits in mathematics, science, and social studies. The total number of required credits ranges from 22 to 26, while the number required in career or technical courses varies from 2 to 6 credits.<sup>25</sup>

**Table B-1**  
**States Vary in the Required Core Courses, the Number of Career Credits, and the Total Credits Required for a Career-Ready Credential**

State	Required Core Courses for the Career-Ready Credential <sup>1</sup>	Required Number Career Units/Credits	Total Required Units/Credits	Additional Comments
Alabama	Alabama High School Diploma with Career/Technical Endorsement: four credits each of English Language Arts, mathematics (to include Geometry and Algebra I), science (to include Biology), and social studies	3	24	Alabama also offers a diploma with an advanced academic endorsement with the same core requirements as the Advanced Career Technical but with the requirement of two credits in foreign language.
	Alabama High School Diploma with Advanced Career/Technical Endorsement: four credits each of English Language Arts, mathematics (to include Geometry, Algebra I, and Algebra II), science (to include Biology), and social studies	3	24	
Georgia	Four units each of English/Language Arts, mathematics (to include Mathematics I, II, and III), and science (to include Biology, Physical Science or Physics, and Chemistry, Environmental Science or Earth Systems), and three credits in social studies	3	23	Georgia also offers a University System Entry pathway with the same core requirements as the career pathway but with the requirement of two units of the same modern language.
Hawaii	Four credits each of English and social studies, and three in mathematics and science	2	24	
Indiana	Eight credits of English/Language Arts, six credits each in mathematics (to include Geometry and Algebra II or Integrated Math I, II, and III), science (to include Biology and Chemistry or Physics or Integrated Chemistry-Physics), and social studies. (One credit in Indiana is one-half of an academic credit in most other states.)	8-10 (equivalent to 4-5 academic credits in most other states)	47 (equivalent to 23.5 academic credits in most other states)	The Core 40 Technical Honors Diploma requires the same core courses as the state’s academic honors diploma in English, social studies and science, but requires two fewer credits in math and no world language credits. Students can also pursue the Core 40 Diploma which encourages students to complete a career-academic sequence.

<sup>25</sup> In Indiana, 47 semester credits is equivalent to 23.5 academic credits in most other states.

State	Required Core Courses for the Career-Ready Credential <sup>1</sup>	Required Number Career Units/Credits	Total Required Units/Credits	Additional Comments
Louisiana	Four units each of English, mathematics (to include Geometry and Algebra II), science (to include Biology and Chemistry), and social studies	6	24	Students may also choose the 23-credit Career Diploma which requires 16 academic credits and a sequence of 7 credits in career and technical education. This option does not require Algebra II, Geometry, or Chemistry.
Nevada	Four credits each of English, three in mathematics, and two each in science and social studies	2	22.5	
New York	Three units each of English Language Arts and social studies, two units each in mathematics and science, and three and a half or four units (depending on approach) of CTE/Integrated Academic, CTE/Specialized Courses, or CTE/Combined Integrated and Specialized Courses	3.5	22	
Tennessee	Four credits each of English and mathematics (to include Geometry and Algebra II), three in science (to include Biology, and Chemistry or Physics) and social studies	3	22	
Virginia	Standard Technical Diploma: Four credits in English and three credits each in mathematics, science, and history/social science	4	22	
	Advanced Technical Diploma: Four credits each in English, mathematics, science, and history/social science	3	26	
West Virginia	Four credits of reading and English Language Arts, mathematics, and social studies, and three in science (to include Biology, Chemistry, and Physics)	4	24	

<sup>1</sup> We defined core courses as math, science, English/language arts, and social studies.

Source: Review of published reports, other states' statutes and rules, and interviews and correspondence with education officials.

# *The Florida Legislature*

## *Office of Program Policy Analysis and Government Accountability*

---



OPPAGA provides performance and accountability information about Florida government in several ways.

- Reports deliver program evaluation and policy analysis to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government better, faster, and cheaper.
- PolicyCasts, short narrated slide presentations, provide bottom-line briefings of findings and recommendations for select reports.
- Government Program Summaries (GPS), an online encyclopedia, [www.oppaga.state.fl.us/government](http://www.oppaga.state.fl.us/government), provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- The [Florida Monitor Weekly](#), an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.
- Visit OPPAGA's website at [www.oppaga.state.fl.us](http://www.oppaga.state.fl.us)

---

OPPAGA supports the Florida Legislature by providing data, evaluative research, and objective analyses that assist legislative budget and policy deliberations. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475). Cover photo by Mark Foley.

**OPPAGA website:** [www.oppaga.state.fl.us](http://www.oppaga.state.fl.us)

Project supervised by David D. Summers (850/487-9257)  
Project conducted by Kathleen Del Monte, Laurie Scott, and Peter Tanzy  
Tim Elwell (850/487-9228), Staff Director, Education Policy Area  
Kathy McGuire, OPPAGA Interim Director