I. Summary:

The bill provides each student the option of graduating as soon as the student has earned 24 credits that meet high school graduation requirements. Students who graduate early will still be able to participate in high school graduation activities.

The bill allows school districts to receive funding for more than 24 credits if the student completed unpaid high school credit delivered by the district in prior year enrollment. The additional funding is up to one full-time equivalent (FTE) for students graduating one year early and up to one-half FTE for students who graduate one semester early. A student who graduates at the end of the first semester is eligible for a Bright Futures Scholarship to enter college in the spring term.

For purposes of calculating high school grades, the bill allows a school to earn bonus points for students who graduate early or who take additional science, technology, engineering, and mathematics (STEM) courses.

The bill provides for performance based funding. Credit is funded based on passing the statewide end-of-course (EOC) assessment without taking the course. High school credits for courses that require an EOC assessment, after the third year of administering the assessment, will be funded only upon passing the assessment.

The bill requires the Algebra I EOC assessment to be administered four times annually.
This bill substantially amends sections 1008.22, 1008.34, 1009.53, 1009.531, 1011.62 and creates section 1003.4281 of the Florida Statutes.

II. Present Situation:

Science, Technology, Engineering and Mathematics (STEM)
Research by the Center on Education and the Workforce at Georgetown University found that a student’s choice of major substantially affects employment prospects and earnings. The study found that “majors with high technical, business, and healthcare content tend to earn the most among both recent and experienced college graduates.”

According to the TechAmerica Foundation, in a ranking of states on high technology measures based on 2010 data, Florida ranked fifth in high tech employment, third in number of high tech establishments, and second in defense systems manufacturing. According to a Georgetown University report analyzing STEM jobs by state, Florida will require a total of 385,010 STEM jobs by 2018, and 89 percent of those jobs will require postsecondary education and training in high technology employment. Forty-nine percent of Florida’s STEM jobs will be in computer occupations by 2018. The report also projects that nine percent of all Florida jobs for holders of Master’s degrees and ten percent of all jobs for holders of a PhD degree will be in STEM fields by 2018. However, since 2001, there has been a 46 percent decline in bachelor’s degrees earned at state universities in computer, computer services, information technology, software engineering, management information systems and related high tech fields.

Prioritizing STEM in education is one of seven key steps in the Governor’s 2012 Job Creation and Economic Growth Agenda. The agenda calls for prioritizing STEM to focus Florida’s K-12 and higher education systems on producing graduates that can support a growing high-tech workforce. The agenda cites Enterprise Florida’s estimate that 15 of the 20 fastest growing job fields will require a STEM education.

High School Graduation
Florida students entering their first year of high school may choose from one of the following five options to earn a standard diploma:
- A four-year, 24-credit program;

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1 Carnevale, A.P.; Cheah, B.; and Strohl, J.; “Hard Times: College Majors, Unemployment and Earnings: Not All College Degrees are Created Equal,” Georgetown University Center for Education and the Workforce, January 4, 2012.
2 Id., p. 6.
4 This number represents an increase of 62,450 jobs over the 2008 total of 322,560 jobs.
5 Florida State University Learning Systems Institute using state university system data, compiled October 2011.
7 Id., p. 6.
8 Id., p. 6.
9 A student may also graduate from high school with a GED, certificate of completion, or a special diploma.
10 s. 1003.428, F.S. The 24 credits may be earned through applied, integrated, and combined courses approved by the DOE. Sixteen of the 24 credits are core curriculum credits: four credits in English; four credits in mathematics, one of which must be Algebra I, a series of courses equivalent to Algebra I, or a higher-level mathematics course; three credits in science, two of which must have a laboratory component; three credits in social studies; one credit in fine or performing arts, speech and debate, or a practical arts course that incorporates artistic content and techniques of creativity, interpretation, and
● An International Baccalaureate (IB) curriculum;\textsuperscript{11}
● An Advanced International Certificate of Education (AICE) curriculum;\textsuperscript{12}
● A three-year, 18-credit college preparatory program;\textsuperscript{13} or
● A three-year, 18-credit career preparatory program.\textsuperscript{14}

**End-of Course Assessments**

Beginning with students entering grade 9 in the 2011-2012 school year, a student who is enrolled in Algebra I or an equivalent course must earn a passing score on the assessment in Algebra I or attain an equivalent score to earn course credit.\textsuperscript{15} For the 2011-2012 school year, the Algebra I assessment will be administered during two testing windows (December/January and April/May). The Geometry and Biology I assessments will be administered in April/May.\textsuperscript{16}

Beginning in the 2012-2013 school year, the Algebra I EOC Assessment will be administered three times, in July, December, and April/May. In addition, the Geometry and Biology I EOC assessments will be administered twice, in December and April/May.

**High School Grades\textsuperscript{17}**

For Florida's high school grading system, the state assessment-based components are weighted at 50 percent of the high school grade,\textsuperscript{18} while the other 50 percent of the available school grade points are weighted toward component areas that directly measure, or are otherwise essential to, career and college readiness (i.e., graduation rate, participation and performance in advanced curricula, including national industry certifications), and postsecondary readiness in reading and mathematics.\textsuperscript{19} These additional components for measuring high school performance were implemented beginning in 2009-2010 to provide a more comprehensive measure of high schools' effectiveness in preparing students for success after graduation.

Currently, Florida calculates high school graduation rates for schools using a cohort method of tracking individual students in and out of the system from their entrance into ninth grade through completion four years later.\textsuperscript{20} High schools are not currently awarded additional bonus point for students who graduate early from high school. Instead, high schools are awarded points based on the annual growth of their cohort graduation rate and the growth of their cohort graduation rate
for at-risk students. At-risk students are those students who scored at Level 2 or below on both the FCAT reading and FCAT math tests in grade eight.\textsuperscript{21}

The high school grading formula does include points for accelerated course work participation for students in grades 9-12, which is based on Advanced Placement (AP), IB, AICE, dual enrollment, and industry certification\textsuperscript{22} exams and courses.\textsuperscript{23} High schools earn points for this component regardless of what course the student is enrolled in.\textsuperscript{24} In addition, high schools can earn points for their students’ performance in accelerated course work.\textsuperscript{25}

**Florida Bright Futures Scholarship Program**

The law establishes three lottery-funded scholarships to reward Florida high school graduates for high academic achievement.\textsuperscript{26} The Florida Bright Futures Scholarship Program is comprised of the following awards:

- Florida Academic Scholars award, including Academic Top Scholars (ATS) award;
- Florida Medallion Scholars award; and
- Florida Gold Seal Vocational Scholars award.

Current law authorizes the DOE to evaluate students annually for a Bright Futures Scholarship.\textsuperscript{27} The evaluation is based upon transcripts reflecting completed and in-progress coursework at the end of the 7th or 8th semesters, community service hours, and SAT/ACT test scores taken up to January 30th or June 30th of the student’s high school graduation year.\textsuperscript{28}

Each funded academic year begins in fall and ends with the spring term. The DOE transmits payment for each initial and renewal award to eligible postsecondary institutions before the registration period each term of each academic year.\textsuperscript{29} The law provides for a renewal evaluation of a Bright Futures Scholar recipient after the passage of a full academic year, fall through spring.\textsuperscript{30}

Students must apply for a scholarship by high school graduation.\textsuperscript{31} Students file a Florida Financial Aid Application (FFAA) to be evaluated for academic eligibility for the subsequent academic year.\textsuperscript{32} A student who graduates in the 2012-2013 academic year would file a 2013-2014 FFFA for funding during any term in the 2013-2014 academic year, which begins fall 2013.\textsuperscript{33}

\textsuperscript{21} s. 1008.34(3)(b)3.d., F.S.
\textsuperscript{22} Industry courses and exams are those leading to national industry certification identified in the Industry Certification Funding List, pursuant to SBE rules.
\textsuperscript{23} s. 1008.34(3)(b)3.b., F.S.
\textsuperscript{24} DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.
\textsuperscript{25} Id.
\textsuperscript{26} s. 1009.53, F.S.
\textsuperscript{27} Id. See http://www.floridastudentfinancialaid.org/SSFAD/bf/awardamt.htm and http://www.floridastudentfinancialaid.org/SSFAD/factsheets/BF.htm.
\textsuperscript{28} DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.
\textsuperscript{29} Id.
\textsuperscript{30} s. 1009.532, F.S.
\textsuperscript{31} s. 1009.531(1)(f), F.S.
\textsuperscript{32} s. 1009.531, F.S. See https://www.floridastudentfinancialaidsg.org/UA/SAWSTUA uaform.asp.
\textsuperscript{33} DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.
III. **Effect of Proposed Changes:**

**High School Graduation**

The bill allows a student to graduate early, providing the minimum graduation requirements in s. 1003.428, F.S., have been satisfied. School districts would be required to notify the parent of a student who is eligible to graduate early.

A student who graduates early may continue to participate in school activities and events as if he or she was still enrolled, until the time at which the student would have been scheduled to satisfy the minimum graduation requirements. However, a student who fails to comply with district school board rules and policy may be denied access to the school facilities and grounds during normal operating hours.

**End-of Course Assessments**

The proposed change will require the DOE and school districts to administer the Algebra I EOC assessment four times annually. According to the DOE, this would require amending the current assessment contract to include the additional test administration. The DOE notes that the earliest this could be accomplished would be the 2013-2014 school year when the necessary funding is approved and the contract is modified.

The changes for Algebra I and Geometry EOC assessments would be in place for one year since the state transitions to the Partnership for Assessment of Readiness for College and Careers (PARCC) assessments in 2014-2015. The PARCC assessments are based on the Common Core Standards and are scheduled to be fully implemented in the 2014-2015 school year.

**High School Grades**

Beginning in the 2012-2013 school year, the DOE must award bonus points for regular high school course completion data for the percentage of students who took additional courses in science and mathematics that exceeds the current high school graduation requirements.

34 Currently, there are six statewide assessment administrations: Writing in February/March; Reading, Math, Science in April; FCAT/FCAT 2.0 Retakes in October; and the EOC assessments in December, July/August, and April/May). DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.

35 Id.

36 Id.

37 Beginning with students entering grade 9 in the 2011-2012 school year, one of the three credits in science must be Biology I or a series of courses equivalent to Biology I as approved by the State Board of Education (SBE). Beginning with students entering grade 9 in the 2011-2012 school year, the EOC assessment requirements must be met in order for a student to earn the required credit in Biology I. Beginning with students entering grade 9 in the 2013-2014 school year, one of the three credits must be Biology I or a series of courses equivalent to Biology I as approved by the SBE, one credit must be chemistry or physics or a series of courses equivalent to chemistry or physics as approved by the SBE, and one credit must be an equally rigorous course, as determined by the SBE.

38 Beginning with students entering grade 9 in the 2010-2011 school year, in addition to the Algebra I credit requirement, one of the four credits in mathematics must be geometry or a series of courses equivalent to geometry as approved by the SBE. Beginning with students entering grade 9 in the 2010-2011 school year, the EOC assessment requirements must be met in order for a student to earn the required credit in Algebra I. Beginning with students entering grade 9 in the 2011-2012 school year, the EOC assessment requirements must be met in order for a student to earn the required credit in geometry. Beginning with students entering grade 9 in the 2012-2013 school year, in addition to the Algebra I and geometry credit requirements, one of the four credits in mathematics must be Algebra II or a series of courses equivalent to Algebra II, as approved by the SBE.
According to the DOE, this may result in students enrolling in additional courses that are not required for students to graduate to inflate the points they receive for the non-FCAT components of high school grades. However, the bill requires the courses to be at a level of rigor that exceeds the general course requirements for high school graduation in s. 1003.428, F.S.

High schools are awarded points for participation and performance in accelerated coursework. The proposed change would allow for the award of additional points to high schools if students take an AP or dual enrollment course in mathematics or science. Also, the DOE would award bonus points to high schools based on the percentage of students who graduate in fewer than eight semesters.

The DOE currently tracks the number of students who graduate from high school early based upon the 18-credit hour diploma option; however, the proposed change will require the bonus points to be awarded retroactively to schools if the cohort count of the 18-credit-hour diploma is used. The DOE notes that an annual count of the early graduates could be used for this bonus point calculation, instead of the cohort count because students who graduate early are not counted in the graduation rate until their four-year cohort graduation rate is calculated.

**Florida Bright Futures Scholarship Program**

The DOE would evaluate students who graduate at midpoint of an academic year based upon official transcripts reflecting completed and in progress coursework, community service hours, and SAT/ACT test scores for academic eligibility for the spring term of that same academic year. The DOE would transmit payment for each initial award to eligible postsecondary institutions before the registration period for spring term.

Eligible Bright Futures students who graduate midpoint of an academic year and are funded in the spring term of that same academic year would be evaluated for renewal of an award at the end of the following spring term of the next academic year in which they are funded.

According to the DOE, students currently file the FFAA between December 1st and high school graduation up through August 31st of an academic year for evaluation for academic eligibility for the subsequent academic year. Students who graduate at the midpoint of an academic year will be required to file the FFAA by November 30th for academic eligibility and funding during the remainder of that academic year. The student who graduates midpoint of the 2012-13 academic year would file a 2012-13 FFAA for funding in the 2012-13 academic year.

The DOE noted that amending the filing date for the FFAA from November 30th to August 31st would allow appropriate time to efficiently use current staff and programs to collect necessary data (e.g., transcripts, test scores, and community service) and perform evaluations in time for mid-year graduates to receive scholarship funding from their respective postsecondary institutions.

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39 DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.
40 s. 1008.34, F.S.
41 DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.
42 Id.
43 Id.
44 Id.
The Bright Futures Scholarship applicants would be required to file the FFAA for evaluation of scholarship academic eligibility. Applicants would also need to file the Free Application for Federal Student Aid (FAFSA) to receive funding.

IV. **Constitutional Issues:**

   A. Municipality/County Mandates Restrictions:

      None.

   B. Public Records/Open Meetings Issues:

      None.

   C. Trust Funds Restrictions:

      None.

V. **Fiscal Impact Statement:**

   A. Tax/Fee Issues:

      None.

   B. Private Sector Impact:

      The proposed change may increase the opportunities a student has to pass the Algebra I EOC Assessment, if the student initially failed the assessment. The early graduation option would permit a student to obtain a Bright Futures Scholarship in the spring.

   C. Government Sector Impact:

      The estimated cost of an additional EOC assessment administration is $750,000 for one subject per year and funds would need to be allocated for a full-time staff member to assist with the additional administration, scoring, and reporting responsibilities.\(^{45}\) The proposed change would increase the testing load in school districts.\(^{46}\)

      Currently, a high school student earns Florida Education Finance Program (FEFP) funding at the rate of one-sixth of a full-time equivalent student for each course in which the student is enrolled. The maximum funding limit is six courses or 1.0 FTE. Enrollment in more than six courses does not result in funding for more than 1.0 FTE. The bill specifies that one high school credit is equivalent to one-sixth of an FTE. Under the bill, high school credits earned in excess of six per school year in courses provided by the district are defined as unpaid credits.

\(^{45}\) DOE Bill Analysis for SB 1368, February 1, 2012. On file with the Senate Committee on Education Pre-K – 12.

\(^{46}\) Id.
Under the bill, a student who graduates at least one semester in advance of the scheduled graduation of the student’s cohort earns one-sixth of an FTE for each unpaid high school credit. For a student who graduates one year or more in advance of the student’s cohort, the school district may report up to 1.0 FTE for unpaid high school credits. For a student who graduates one semester in advance of the student’s cohort, the school district may report up to one-half FTE for unpaid high school credits. The number of courses in excess of six courses per day in which students enrolled during prior years is not known.

The number of students who would graduate early under the bill is not known. To the extent that a student graduates early, the district may earn funding for courses enrolled in during prior years that were in excess of the 1.0 FTE limit. The unpaid credits funding earned for early graduation would be approximately equal to the funding foregone as a result of early graduation.\footnote{Id.}

Districts that authorize the accelerated graduation of a student may report additional FTE of unpaid credits for courses taken in prior years of enrollment. The number of students who will graduate early with 24 credits because of the financial incentives in the bill is unknown.

Typically, students remain enrolled in high school for four years, even if they meet graduation requirements early. Consequently, the state normally funds a high school student for four FTE. The bill may encourage districts to graduate a student who meets requirements early, as the student would no longer need to be enrolled for eight semesters in order for a district to earn four FTE for funding.

Districts that authorize the accelerated graduation of a student may report additional FTE of unpaid credits for courses taken in prior years of enrollments.

Currently, FTE for funding purposes is based only on seat time. The bill changes this to provide courses with EOC assessments to be funded only upon the award of the course credit, whether the student enrolled in the course or only took and passed the EOC assessment. If the student passes the EOC assessment, the district may report one-sixth of an FTE, subject to the 1.0 FTE per student limit. The number of students who would take EOC assessments without taking the course is not known.

The costs associated with revising FTE reporting requirements would be mitigated through modifications to the existing data systems.\footnote{Meeting with DOE staff, January 27, 2012.}

\section*{VI. Technical Deficiencies:}

The requirements for school grade bonus points are unclear as written. An amendment to lines 466-476 and 568-578 would clarify these requirements.
VII. Related Issues:

None.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
   (Summarizing differences between the Committee Substitute and the prior version of the bill.)
   None.

   B. Amendments:

   None.

This Senate Bill Analysis does not reflect the intent or official position of the bill’s introducer or the Florida Senate.