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# **PreK-12 Policy Committee**

**Wednesday, January 20, 2010**

**10:00 a.m.**

**Morris Hall**

## **Meeting Packet**

**Larry Cretul  
Speaker**

**John Legg  
Chair**



# **The Florida House of Representatives**

**Education Policy Council**

**PreK-12 Policy Committee**

**Larry Cretul**  
**Speaker**

**John Legg**  
**Chair**

## **Meeting Agenda**

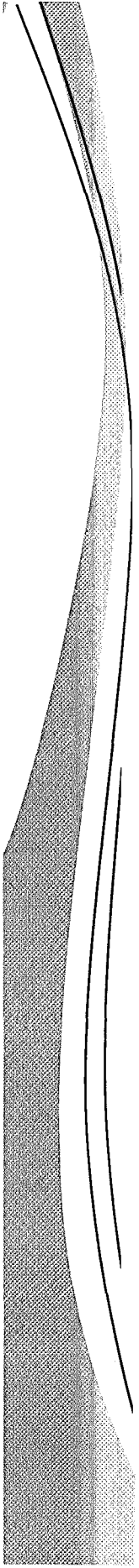
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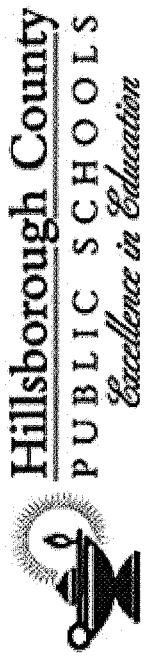
**Morris Hall**

- I. Call to Order/Roll Call**
- II. Presentation by Hillsborough County Public Schools**
- III. Workshop on Standards and Assessments**
- IV. Closing Comments/Adjournment**





# End of Course Exams





# End of Course Exam History

- Since the mid-1970's, Hillsborough County Public Schools (HCPS) has developed and administered End of Course (EOC) exams.
- These instruments serve as valuable tools in measuring student mastery of content and ensuring consistent adherence to curriculum standards and course instructional timelines.



# How we develop EOC exams

- Teams of teachers with content expertise, under the supervision of subject area curriculum specialists, meet to review course objectives.
- Curricula, instructional timelines, teaching strategies, and exams are developed.
- All exams and resources are correlated to the Sunshine State Standards.



# How we use EOC exam data

- Once exams are administered, they are scanned into Achievement Series (SCANTRON).
- Analysis is conducted to determine the validity and reliability of exams and individual test items.
- School and district administrators and teachers can use the data to measure whether benchmarks are met and whether learning has taken place.



# How we use EOC exam data (con't)

- Using the Achievement Series data dashboard, comparisons can be made between classrooms *and* schools across the district.
- The exam counts for 25% of the student's semester grade and helps communicate student achievement to parents.
- Test reliability estimates are an important factor in developing and administering teacher performance pay programs.





# EOC exams meet instructional needs

- Disaggregated data can provide teachers and schools with the data to address student needs and guide instruction.
- Student academic achievement can improve.
- The Sunshine State Standards are addressed with confidence.
- Helps teachers focus on improving instruction.
- Aid in planning staff development, selecting instructional materials, and teaching resources.



# Value added by EOC exams

- EOC exams serve as a reliable measure of student achievement in non-FCAT courses.
- Utilizing EOC exams have helped HCPS develop a Merit Award Program (MAP). HCPS is a leader in creating performance pay programs.
- HCPS has served as a clearinghouse to provide other districts with EOC exams and test items.
- HCPS was awarded a \$100 million “Empowering Effective Teachers” grant from the Gates Foundation partly based on our experience with EOC exams.



# Workshop

- High School Course Requirements in Mathematics and Science
- End-Of-Course (EOC) Assessments
  - High-Stakes Assessments
  - Other EOC Assessments
  - Options for Students Who Fail EOC Assessments
  - Effect on School Grades
- DOE's Transition to Next Generation and Computer-Based Tests in Florida
  - Computer-Based Tests
  - Replace Certain FCAT Assessments with EOC Assessments
  - Race to the Top Funding

## High School Graduation Requirements

<b>Subject</b>	<b>Credits</b>	<b>2007-2008 &amp; Subsequent School Years 24 Credits s. 1003.428, F.S.</b>
<b>English</b>	<b>4</b>	<b>major concentration in composition, reading for information, and literature</b>
<b>Mathematics</b>	<b>4</b>	<b>including 1 credit of Algebra I, equivalent or higher level; School districts encouraged to increase enrollment in Geometry and Algebra II</b>
<b>Science</b>	<b>3</b>	<b>2 credits must have a laboratory component</b>
<b>Social Sciences</b>	<b>3</b>	<b>including 1 credit in American History, 1 credit in World History, 0.5 credits in Economics, and 0.5 credits in American Government</b>
<b>Fine or Performing Arts</b>	<b>1</b>	<b>may include Speech and Debate</b>
<b>Physical Education</b>	<b>1</b>	<b>including integration of health</b>
<b>Electives</b>	<b>8</b>	<b>credits in Majors, Minors, or Electives (4 credits in Major Area of Interest and 4 credits in Elective Courses – second major Area of Interest, Minor Area of Interest, Elective Courses, or Intensive Reading or Mathematics Intervention courses)</b>

Transition to Next Generation and Computer-based Tests in Florida:  
Plans Currently Included in the FCAT II Contract

**Computer-based Tests:** Grades and subjects which are optional by school in CBT or PBT are shown in ***bold, italic***; full CBT administration except for accommodations are shown in ***bold, italic, underlined***.

	2009-10	2010-11	2011-12	2012-13	2013-14
FCAT	Reading (3-10), Mathematics (3-10), Science (No SRs/ERs; 5, 8, 11), Writing (4, 8, 10) Reading & Math Retakes (fall, <b><i>spring</i></b> )	Science (No SRs/ERs; 5, 8, 11), Writing (4, 8, 10) Reading & Math Retakes ( <b><i>fall, spring</i></b> )	Writing (4, 8, 10) Reading & Math Retakes ( <b><i>fall, spring</i></b> )	Reading & Math Retakes ( <b><i>fall, spring</i></b> )	Reading & Math Retakes ( <b><i>fall, spring</i></b> )
FCAT II	Reading (3-10) (FT) Mathematics (3-8) (FT)	Reading (3-10) (B) Mathematics (3-8) (B) Science (5, 8) (FT)	Reading (3-6, <b><u>Z</u></b> , 8-10) (SS) Reading Retake ( <b><i>fall</i></b> ) Mathematics (3-8) (SS) Science (5, 8) (B)	Reading (3-6, <b><u>Z</u></b> , 8-9, <b><u>10</u></b> ) Reading Retake ( <b><i>fall</i></b> ) Mathematics (3-6, <b><u>Z</u></b> , 8) Science (5, 8) (SS) Writing (4, <b><u>Z</u></b> , <b><u>11</u></b> ) (B)	Reading (3-4, <b><u>5</u></b> , 6, <b><u>Z</u></b> , 8-9, <b><u>10</u></b> ) Reading Retake ( <b><i>fall</i></b> ) Mathematics (3-5, <b><u>6-Z</u></b> , 8) Science (5, 8) Writing (4, <b><u>Z</u></b> , <b><u>11</u></b> ) (SS)
End-of-Course	<b><u>Algebra 1</u></b> (FT) <b><u>Geometry</u></b> (FT)	<b><u>Algebra 1</u></b> (B) <b><u>Geometry</u></b> (B) <b><u>Biology</u></b> (FT)	<b><u>Algebra 1</u></b> (SS) <b><u>Geometry</u></b> (SS) <b><u>Biology</u></b> (B) <b><u>US History</u></b> (FT)	<b><u>Algebra 1</u></b> <b><u>Geometry</u></b> <b><u>Biology</u></b> (SS) <b><u>US History</u></b> (B)	<b><u>Algebra 1</u></b> <b><u>Geometry</u></b> <b><u>Biology</u></b> <b><u>US History</u></b> (SS)

Notes: Provision of end-of-course (EOC) tests requires legislative action to allow use of EOCs instead of comprehensive tests in high school. The Geometry EOC field test is being added to the FCAT II contract through a pending contract amendment.  
 FT – Field test administration only; EOCs will be field-tested in a sample of high schools only.  
 B – Baseline administration; a scale score will be reported; no developmental score or achievement levels will be available.  
 SS – Standards set; developmental scores, achievement levels, and passing scores will be reported for the first time.



# STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

Clear and compelling evidence shows that the level of the courses students take in high school is one of the best predictors of their success in college and the workplace. This is particularly true in mathematics: Data show a strong correlation between taking higher-level mathematics courses in high school and achieving success in college and employment in high-growth, high-performance jobs. Rigorous course-taking matters for all students, but it is particularly important for students from disadvantaged backgrounds.

Taking a challenging high school curriculum — including but not limited to content typically taught in Algebra II — cuts in half the gap in college completion rates between white students and black and Latino students. The *number* of courses students are required to take has been on the rise for the past quarter century, but until recently, few states specified *which* courses students are required to take and set their graduation expectations at the appropriate level to ensure that graduates are prepared for success in college and the workplace.

Achieve’s research suggests that for high school graduates to be prepared for success in postsecondary settings, they need to take four years of challenging mathematics — including content at least through Algebra II or its equivalent — and four years of rigorous English aligned with college- and career-ready standards.

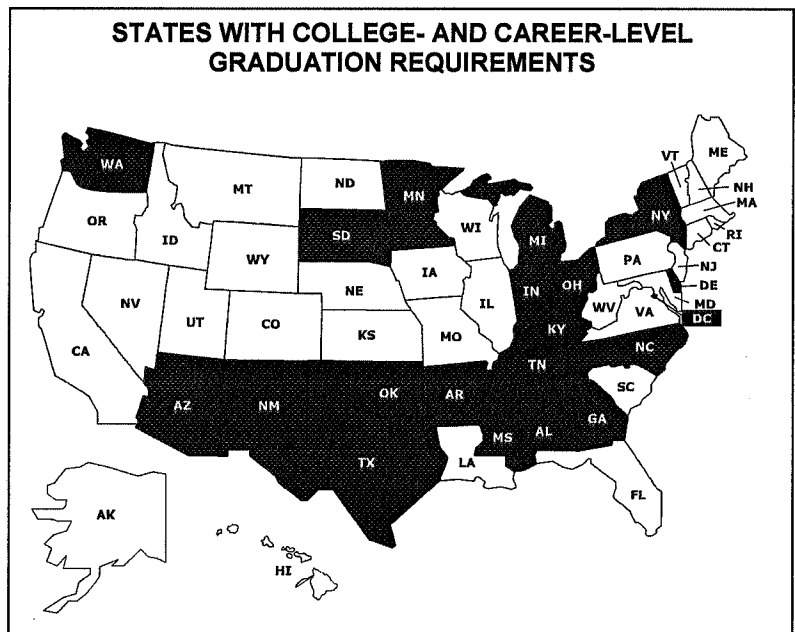
## Nineteen States Require All Students to Complete a College- and Career-Ready Curriculum

At the time of the Summit three years ago, only two states — *Texas and Arkansas* — had set their requirements at a level that would ensure that all graduates were prepared for success in college and the workplace. Today, 19 states — *Alabama, Arizona, Arkansas, Delaware, Georgia, Indiana, Kentucky, Michigan, Minnesota, Mississippi, New Mexico, New York, North Carolina, Ohio, Oklahoma, South Dakota, Tennessee, Texas and Washington* — and the *District of Columbia*, accounting for almost half of students in the U.S., have elevated their high school diploma requirements to the college- and career-ready level. Another ten states report plans to move in this direction in coming years.

States raising their course requirements to the level recommended by ADP have taken one of two approaches:

- Six states and the District of Columbia have set *mandatory* course requirements without opt-out provisions.
- Thirteen states require students to automatically enroll in the “*default*” college- and career-ready curriculum but allow them to opt out of the requirements — typically mathematics requirements — if their parents sign a waiver.

Both approaches are designed to do away with the type of tracking that has long existed in American high schools and continues to leave many students unprepared for the world they enter after high school.





## STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

STATE DIPLOMA	YEAR NEW REQUIREMENTS PASSED	1 <sup>ST</sup> IMPACTED EXPECTED GRADUATING CLASS	REQUIREMENT	# OF REQUIRED CREDITS	CHANGE IN TOTAL REQUIRED CREDITS
ALABAMA FIRST CHOICE DIPLOMA	2008	2013	Default	24	0
ARIZONA HIGH SCHOOL DIPLOMA	2007	2013	Default	22	+2
ARKANSAS SMART CORE	2004	2010	Default	22	0
DELAWARE HIGH SCHOOL DIPLOMA	2006	2011 (2013: For Lang Added)	Mandatory	24	+2
DISTRICT OF COLUMBIA	2007	2011	Mandatory	24	+0.5
GEORGIA HIGH SCHOOL DIPLOMA	2007	2012	Mandatory	23	+1
INDIANA CORE 40	2005	2011	Default	20	0
KENTUCKY DIPLOMA	2006	2012	Mandatory	22	0
MICHIGAN MERIT CURRICULUM	2006	2011 (2016: For Lang Added)	Default	18	+18
MINNESOTA HIGH SCHOOL DIPLOMA	2006	2015	Mandatory	21.5	0
MISSISSIPPI HIGH SCHOOL DIPLOMA	2006	2012	Default	24	+4
NEW MEXICO DIPLOMA OF EXCELLENCE	2007	2013	Default	24	+1
NEW YORK REGENTS DIPLOMA	2005	2010	Mandatory	22	0
NORTH CAROLINA FUTURE-READY CORE	2007	2013	Default	21	+1
OHIO CORE	2007	2014	Default	20	0
OKLAHOMA COLLEGE-PREP & WORK-READY CURRICULUM	2005	2010	Default	23	0
SOUTH DAKOTA ADVANCED HIGH SCHOOL DIPLOMA	2005	2010	Default	22	0
TENNESSEE READY CORE	2008	2013	Mandatory	22	+2
TEXAS RECOMMENDED HIGH SCHOOL PROGRAM	2003/2006*	2008/2011	Default	26	+4
WASHINGTON CORE 24	2008	2013/2016**	Default	24	+5

\*The Texas RHSP was first established as the default diploma requirement for all students in 2003 – impacting the class of 2008 – and included three math credits through Algebra II. In 2006 – impacting the class of 2011 – a fourth year of math was added to RHSP.

\*\* The full Washington Core 24 requirements will be in place in 2016, but the Algebra II requirement will be phased in for the class of 2013.





## STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

	ALABAMA	ARIZONA	ARKANSAS	DELAWARE	DISTRICT OF COLUMBIA
<b>English</b>	4 • English 9-12	4 • Including 0.5 incorporating the principles of speech and debate	4.5 • English 9-12 • 0.5 Oral Communication	4	4
<b>Mathematics</b>	4 • Algebra I • Geometry • Algebra II with Trigonometry • 1 beyond Algebra II	4 • Algebra I • Geometry • Algebra II or its equivalent • fourth course covering significant math content	4 • Algebra I • Geometry • Algebra II or their equivalents • 1 beyond Algebra II	4 • Algebra I • Geometry • Algebra II	4 • Algebra I (by ninth grade) • Geometry • Algebra II
<b>Science</b>	4 • 1 Biology • 1 Physical Science • 2 approved science electives	3 • Aligned with Arizona Instrument to Measure Standards	3 • 3 lab-based physical sciences from Biology, Chemistry, Physics, Applied Biology / Chemistry, Principles of Technology	3 • 3 lab sciences from Biology, Chemistry, Physics, Earth Science or another integrated science	4 • 3 lab sciences
<b>Social Studies</b>	4 • 1 World History to 1500 • 1 U.S. History to 1877 • 1 U.S. History from 1877-Present • 1 American Government/Economics	3 • 1 American History, including AZ History • 1 World History/Geography • 0.5 American Government including AZ Government • 0.5 Economics	3 • 1 American History • 1 World History • 1 Civics / US Government	3 • Including History, Geography, Civics and Economics	4 • World History 1 • World History 2 • US History • US Government & DC History
<b>Electives</b>	6.5 • 2 Foreign Language • 0.5 Arts Education • 0.5 Computer Applications • 3.5 from Foreign Languages, Arts, PE, Wellness Ed, CTE and Driver Ed	8 • 1 Fine Arts <u>OR</u> Career/Tech • 7 electives	6.5 • 0.5 Fine Arts • 6 "Career Focus"	8.5 • 2 Foreign Language • 3 "Career-Academic Pathway" courses • 3.5 electives	6.5 • 2 World Language • 0.5 Art • 0.5 Music • 2 CTE or College-level courses • 1.5 electives
<b>Other</b>	1.5 PE/Health		1 PE/Health & Safety	1.5 PE/Health	1.5 PE/Health • 100 hours of community service • Theses in 11 <sup>th</sup> and 12 <sup>th</sup> grades
<b>Total Required</b>	24	22	22	24	24



## STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

	GEORGIA	INDIANA	KENTUCKY	MICHIGAN	MINNESOTA
<b>English</b>	4 <ul style="list-style-type: none"> <li>1 American Literature &amp; Composition</li> <li>1 9th grade Literature &amp; Composition</li> </ul>	4 <ul style="list-style-type: none"> <li>Including literature, speech &amp; composition</li> </ul>	4 <ul style="list-style-type: none"> <li>Including reading, writing, speaking, listening, observing, inquiry, conventions, analysis, and using technology as a communication tool</li> </ul>	4 <ul style="list-style-type: none"> <li>English 9-12</li> </ul>	4
<b>Mathematics</b>	4 <ul style="list-style-type: none"> <li>Mathematics 1</li> <li>Mathematics 2</li> <li>Mathematics 3 or their equivalents</li> </ul>	3 <ul style="list-style-type: none"> <li>Algebra I</li> <li>Geometry</li> <li>Algebra II</li> <li>Students may also take Integrated Math I-III</li> <li>Math or Physics required in junior or senior year</li> </ul>	3 <ul style="list-style-type: none"> <li>Algebra I</li> <li>Geometry</li> <li>Algebra II</li> <li>Students must be engaged in math all four years of high school</li> </ul>	4 <ul style="list-style-type: none"> <li>Algebra I</li> <li>Geometry</li> <li>Algebra II</li> </ul>	3 <ul style="list-style-type: none"> <li>Geometry</li> <li>Algebra II</li> <li>Probability / Statistics</li> <li>Algebra I in 8<sup>th</sup> grade</li> </ul>
<b>Science</b>	4 <ul style="list-style-type: none"> <li>1 Biology</li> <li>1 Physical Science or Physics</li> <li>1 Chemistry, Earth Systems, Environmental Science or an AP/IB]</li> </ul>	3 <ul style="list-style-type: none"> <li>1 Biology</li> <li>1 Chemistry, Physics, or Integrated Chemistry-Physics</li> <li>Math or Physics required in junior or senior year</li> </ul>	3 <ul style="list-style-type: none"> <li>3 lab-based courses</li> </ul>	3 <ul style="list-style-type: none"> <li>1 Biology</li> <li>1 Chemistry or Physics</li> </ul>	3 <ul style="list-style-type: none"> <li>1 Biology</li> <li>1 Chemistry or Physics</li> </ul>
<b>Social Studies</b>	3 <ul style="list-style-type: none"> <li>1 U.S. History</li> <li>1 World History</li> <li>0.5 American Government / Civics</li> <li>0.5 Economics</li> </ul>	3 <ul style="list-style-type: none"> <li>1 U.S. History</li> <li>1 World History / Civilization or Geography</li> <li>0.5 U.S. Government</li> <li>0.5 Economics</li> </ul>	3 <ul style="list-style-type: none"> <li>Including U.S. History, Geography, Economics Government / Civics, and Culture/Societies</li> </ul>	3 <ul style="list-style-type: none"> <li>1 U.S. History and Geography</li> <li>1 World History and Geography</li> <li>0.5 Civics</li> <li>0.5 Economics</li> </ul>	3.5 <ul style="list-style-type: none"> <li>3 encompassing U.S. History, Geography, World History and Government / Citizenship</li> <li>0.5 Economics</li> </ul>
<b>Electives</b>	7 <ul style="list-style-type: none"> <li>3 from Career/Tech, Fine Arts, Modern Languages/Latin</li> <li>4 electives</li> </ul>	5.5 <ul style="list-style-type: none"> <li>2.5 from Fine Arts, Career/Tech and World Languages</li> <li>3 "Career-Academic Sequence" recommended</li> </ul>	8 <ul style="list-style-type: none"> <li>1 Visual or Performing Arts</li> <li>7 electives, four within students' academic or career interests, based on students' Individualized Learning Plans</li> </ul>	3 <ul style="list-style-type: none"> <li>2 Foreign Language</li> <li>1 Visual Arts</li> </ul>	8 <ul style="list-style-type: none"> <li>1 Arts</li> <li>7 electives</li> </ul>
<b>Other</b>	1 PE/Health	1.5 PE/Health	1 PE/Health	1 PE/Health <ul style="list-style-type: none"> <li>Online learning experience</li> </ul>	
<b>Total Required</b>	23	20	22	18	21.5



## STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

	MISSISSIPPI	NEW MEXICO	NEW YORK	NORTH CAROLINA	OHIO
<b>English</b>	4	4	4	4	4
		<ul style="list-style-type: none"> <li>Major emphasis on grammar, nonfiction writing and literature</li> </ul>		<ul style="list-style-type: none"> <li>English I-IV</li> </ul>	
<b>Mathematics</b>	4	4	3	4	4
	<ul style="list-style-type: none"> <li>Algebra I</li> <li>Two courses above Algebra I</li> </ul>	<ul style="list-style-type: none"> <li>Including one course equal to or higher than Algebra II</li> </ul>	<ul style="list-style-type: none"> <li>All students must pass course and end-of-course test in "Integrated Algebra" that combines Algebra I and II</li> </ul>	<ul style="list-style-type: none"> <li>Algebra I</li> <li>Geometry</li> <li>Algebra II</li> <li>Students may also take Integrated Math I-III</li> <li>A fourth year of math aligned with student's post high school plans</li> </ul>	<ul style="list-style-type: none"> <li>Including Algebra II or its equivalent</li> </ul>
<b>Science</b>	4	3	3	3	3
	<ul style="list-style-type: none"> <li>At least one lab-based course</li> </ul>	<ul style="list-style-type: none"> <li>At least two lab-based courses</li> </ul>	<ul style="list-style-type: none"> <li>1 Physical Science</li> <li>1 Life Science</li> </ul>	<ul style="list-style-type: none"> <li>1 Biology</li> <li>1 Physical Science</li> <li>1 Earth/Environmental Science</li> </ul>	<ul style="list-style-type: none"> <li>1 Physical Science</li> <li>1 Biology</li> <li>An additional advanced lab-based course</li> </ul>
<b>Social Studies</b>	4	3.5	4	3	3
	<ul style="list-style-type: none"> <li>1 World History</li> <li>1 U.S. History</li> <li>0.5 Geography</li> <li>0.5 U.S. Government</li> <li>0.5 Economics</li> <li>0.5 Mississippi Studies</li> </ul>	<ul style="list-style-type: none"> <li>3 including U.S. History and Geography, World History and Geography, Government and Economics</li> <li>0.5 New Mexico History</li> </ul>	<ul style="list-style-type: none"> <li>1 U.S. History</li> <li>0.5 Government Participation</li> <li>0.5 Economics</li> </ul>	<ul style="list-style-type: none"> <li>1 World History</li> <li>1 US History</li> <li>1 Civics and Economics</li> </ul>	<ul style="list-style-type: none"> <li>0.5 American History</li> <li>0.5 American Government</li> </ul>
<b>Electives</b>	7.5	8.5	5.5	6	5
	<ul style="list-style-type: none"> <li>1 Fine Arts</li> <li>1 Computer Discovery OR 0.5 Keyboarding and 0.5 Computer Applications</li> <li>5.5 electives</li> </ul>	<ul style="list-style-type: none"> <li>1 Foreign Language OR Career Cluster or Work Readiness</li> <li>7.5 electives</li> </ul>	<ul style="list-style-type: none"> <li>1 Foreign Language (or demonstrated proficiency)</li> <li>1. Fine Arts</li> <li>3.5 electives</li> </ul>	<ul style="list-style-type: none"> <li>6 electives (at least two of which must be any combination of Career and Technical Education, Arts or Second Language)</li> </ul>	<ul style="list-style-type: none"> <li>5 from Foreign Language, Fine Art, Business, Career-Tech Education, Family and Consumer Sciences, Technology, Agricultural Education, or other academic courses</li> </ul>
<b>Other</b>	0.5 PE/Health	<ul style="list-style-type: none"> <li>1 PE</li> <li>At least 1 credit in AP, honors, dual credit or distance learning</li> </ul>	2.5 PE/Health	1 PE/Health	1 PE/Health
<b>Total Required</b>	24	24	22	21	20



## STATE COLLEGE- AND CAREER-READY HIGH SCHOOL GRADUATION REQUIREMENTS

	OKLAHOMA	SOUTH DAKOTA	TENNESSEE	TEXAS	WASHINGTON
<b>English</b>	4	4	4	4.5	4
		<ul style="list-style-type: none"> <li>• 1.5 Writing and Communications</li> <li>• 1.5 Literature</li> <li>• 0.5 American Literature</li> <li>• 0.5 Speech</li> </ul>		<ul style="list-style-type: none"> <li>• 0.5 Speech</li> </ul>	
<b>Mathematics</b>	3	3	4	4	3
	<ul style="list-style-type: none"> <li>• 1 Algebra</li> <li>• 1 Geometry</li> <li>• 1 Algebra II</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Algebra</li> <li>• 1 Geometry</li> <li>• 1 Algebra II</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Algebra</li> <li>• 1 Geometry</li> <li>• 1 Algebra II</li> </ul>	<ul style="list-style-type: none"> <li>• Algebra I</li> <li>• Geometry</li> <li>• Algebra II</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Algebra</li> <li>• 1 Geometry</li> <li>• 1 Algebra II</li> <li>• 1 math course must be taken in senior year</li> </ul>
<b>Science</b>	3	3	3	4	3
	<ul style="list-style-type: none"> <li>• 1 Biology</li> <li>• 1 Chemistry or Physics</li> <li>• An additional lab-based course</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Biology</li> <li>• 1 Chemistry or Physics</li> <li>• An additional lab-based course</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Biology</li> <li>• 1 Chemistry or Physics</li> <li>• An additional lab-based course</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Biology</li> <li>• 2 in integrated Physics &amp; Chemistry, Chemistry, Physics or Principles of Technology I</li> </ul>	<ul style="list-style-type: none"> <li>• 2 lab-based courses</li> <li>• 1 Biology, Chemistry or Physics</li> </ul>
<b>Social Studies</b>	3	3.5	3	4	3
	<ul style="list-style-type: none"> <li>• 0.5 U.S. History</li> <li>• 0.5 Oklahoma History</li> <li>• 0.5 U.S Government</li> </ul>	<ul style="list-style-type: none"> <li>• 1 U.S. History</li> <li>• 1 0.5 U.S. Government</li> <li>• 0.5 Geography</li> <li>• 0.5 World History</li> <li>• 0.5 Economics</li> </ul>	<ul style="list-style-type: none"> <li>• Including U.S. History, World History / World Geography, Economics and Government</li> </ul>	<ul style="list-style-type: none"> <li>• 1 World History</li> <li>• World Geography</li> <li>• 1 U.S. History: Post-Reconstruction</li> <li>• 0.5 U.S. Government</li> <li>• 0.5 Economics</li> </ul>	<ul style="list-style-type: none"> <li>• 1 U.S. History</li> <li>• 1 World history</li> </ul>
<b>Electives</b>	10	8	6	5.5	9
	<ul style="list-style-type: none"> <li>• 2 Foreign Language <u>OR</u> Computer Technology</li> <li>• 1 Fine Arts <u>OR</u> Speech</li> <li>• 1 Career Tech <u>OR</u> academic course</li> <li>• 6 electives</li> </ul>	<ul style="list-style-type: none"> <li>• 2 from Foreign Languages, Career Tech, Computer Studies or additional math or science courses</li> <li>• 1 Fine Arts</li> <li>• 5 electives</li> </ul>	<ul style="list-style-type: none"> <li>• 3 CTE in same program area <u>OR</u> 2 Foreign Language and 1 Fine Arts</li> <li>• 3 electives</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Foreign Language</li> <li>• 1 Fine Arts</li> <li>• 1 Technology Applications</li> <li>• 3.5 electives</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Arts</li> <li>• 7 chosen from Career and Technical Education, World Language and other electives</li> </ul>
<b>Other</b>		<ul style="list-style-type: none"> <li>• 0.5 PE/Health</li> </ul>	<ul style="list-style-type: none"> <li>• 1.5 PE/Health</li> <li>• 0.5 Personal Finance</li> </ul>	<ul style="list-style-type: none"> <li>• 2 PE/Health</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Fitness/Health</li> </ul>
<b>Total Required</b>	23	22	22	26	24

## Grade Level Florida Students Typically Take Algebra I, Geometry, and Biology

Grade	Total Students Enrolled <sup>1</sup>	Students Taking Algebra I <sup>2</sup>	Percent of Enrollees Taking Algebra I	Students Taking Geometry <sup>3</sup>	Percent of Enrollees Taking Geometry	Students Taking Biology <sup>4</sup>	Percent of Enrollees Taking Biology
07	225,834	13,648	6%	87	0%	17	0%
08	233,424	63,178	27%	8,834	4%	1,678	1%
09	250,618	148,799	59%	52,690	21%	82,815	33%
10	244,761	23,280	10%	115,377	47%	112,311	46%
11	223,683	8,490	4%	45,030	20%	27,118	12%
12	210,522	4,825	2%	16,927	8%	11,050	5%

### In Florida:

- Students typically take Algebra I 9<sup>th</sup> Grade; though many 8<sup>th</sup> graders take Algebra I, as well.
  - In 2008-09, 59% of 9<sup>th</sup> graders were enrolled in Algebra I
  - In 2008-09, 27% of 8<sup>th</sup> graders were enrolled in Algebra I
  
- Students typically take Geometry in 10<sup>th</sup> Grade; though many 9<sup>th</sup> and 11<sup>th</sup> graders take Geometry, as well.
  - In 2008-09, 47% of 10<sup>th</sup> graders were enrolled in Geometry
  - In 2008-09, 21% of 9<sup>th</sup> graders and 20% off 11<sup>th</sup> graders were enrolled in Geometry.
  
- Students typically take Biology in 10<sup>th</sup> Grade; though many 9<sup>th</sup> graders take Biology, as well.
  - In 2008-09, 46% of 10<sup>th</sup> graders were enrolled in Geometry
  - In 2008-09, 33% of 9<sup>th</sup> graders were enrolled in Geometry

### Notes

<sup>1</sup>Total enrollment includes all surveys for 2008-09 (preliminary 2008-09 Survey 5 enrollments).

#### <sup>2</sup>Algebra I Courses and their equivalents

1200310 - Algebra I  
 1200370 - Algebra IA and 1200380 - Algebra IB  
 1205400 - Applied Mathematics I and 1205410 - Applied Mathematics II  
 1207310 - Integrated Mathematics I and 1207320 - Integrated Mathematics II  
 1200500 - Pacesetter Mathematics I  
 1209810 - pre-AICE Math 1

#### <sup>3</sup>Geometry Courses and their equivalents

1206310 – Geometry  
 1206320 – Geometry Honors  
 1206300 – Informal Geometry  
 1206330 – Analytical Geometry  
 1206800 – Analytical Geometry IB

#### <sup>4</sup>Biology Courses and their equivalents

2000310 – Biology I  
 2000320 – Biology I Honors  
 2000321 – AICE Biology I  
 2000340 – AP Biology  
 2000800 – Biology I-Pre IB  
 2002440 – Integrated Science 3  
 2002450 – Integrated Science 3 Honors