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## Luther S. Olsen

State Senator

14th District

***2013 Senate Bill 51  
Testimony of Senator Luther Olsen  
Senate Committee on Education  
November 7, 2013***

2013 Senate Bill 51 was introduced by the Joint Legislative Council and recommended by the Special Committee on Improving Educational Opportunities in High School. I served as chair of the Special Committee, and Senator Farrow served as vice-chair.

Throughout the course of the committee's deliberations, witnesses shared information regarding the skills gap in Wisconsin and the strengths and weaknesses regarding college and career readiness in Wisconsin high schools. The committee determined that a high school diploma in Wisconsin should be more meaningful to students and that students need to be better prepared for the transition to college and careers. Instruction in math and science, including applied math and science, is important in preparing students for that transition.

To that end, the Special Committee recommended an increase in the number of math and science credits required for a high school diploma. Under current law, 2 math credits and 2 science credits are required to earn a high school diploma. Senate Bill 51 increases the number of math credits to 3 and increases the number of science credits to 3.

It is also worth noting that DPI's ESEA waiver included this increase in required credits in math and science.

I have also introduced a couple of amendments to Senate Bill 51. Senate Substitute Amendment 1 requires a school board to award a student up to one math credit for completing a course in computer sciences that DPI has determined qualifies as computer sciences.

Senate Amendment 2 to Senate Substitute Amendment 1 further increases the flexibility of these additional credits by requiring school boards to grant up to one credit of math and one credit of science for a career and technical education (CTE) course that the school board determines fulfills the respective requirement.

The Simple to the Sub also sets an effectiveness date that gives both districts and students time to adjust to the increase in required credits. The first class that the increase will apply to will be those who are now Sophomores and who will graduate in the 2016-17 school year.

I am happy to answer any questions you may have. Jessica Karls-Ruplinger and Rachel Letzing of the Legislative Council, who staffed the Special Committee, are also available to answer questions. Thank you for hearing my comments today.

**Senate Committee on Education  
November 7, 2013**

**Department of Public Instruction Testimony on  
2013 Senate Bill 51**

I want to thank Chairperson Olsen and members of the committee for the opportunity to testify before you today. My name is Jennifer Kammerud and I am the legislative liaison at the Department of Public Instruction (DPI). I am here today on behalf of State Superintendent Tony Evers in support of Senate Bill 51 (SB 51) as amended by Senate Substitute Amendment 1 (SSA 1) and Senate Amendment 2 to the substitute.

As amended this bill will increase the math and science credits required for graduation by the state while providing additional flexibility for school districts to meet the needs of students who are considering a variety of post-secondary options.

The state currently only requires two credits of math and science to graduate. While many districts exceed this number, around 45 percent in math and 37 percent for science, we need to do more if we are to ensure students are ready for college and careers. Based on college remediation rates and what we hear from employers, too many of our students are not graduating high school with an expected mastery of math and science concepts. This is why requiring three years of math and science was part of the state's No Child Left Behind waiver request to increase college and career readiness.

The Senate Amendment to SSA 1 will also provide additional flexibility for school districts and students who are concentrating in career and technical education (CTE) coursework. School boards will now be able to give CTE concentrators a science or math credit for their career and technical education work if the board determines the class or classes meet the requirements for a science or math credit. Additionally, SSA 1 gives school boards the opportunity to count computer science as a math credit. Out of all students taking advanced math and science courses at the K-12 level, only two percent are studying computer science, despite the fact that over half of all STEM jobs are in computing.

In summary, the department believes the bill will lead to greater math and science mastery and improve the college and career readiness of all of Wisconsin's high school graduates. Further, the flexibility contained in SSA 1 and the amendment to the substitute will encourage more CTE and computer science offerings and will lead more students to think about pursuing a concentration in this area. We urge your support.

At this time, I would be happy to answer any questions you may have.

name	english	foreign_lang	comp_sci	math	science	soc_studies	fine_arts	phys_ed	health	voc_tech	electives	total
tsford	4	0	1	3	2	3	0	1.5	0	0.5	9	24
is-Friendship Area	4	0	0.5	2	2	3	0	1.5	0.5	0	14.5	28
iy	4	0	1	3	3	3	0	1.5	0.5	0	8	24
na	4	0	0.5	3	3	3.5	0.5	1.5	1	0	7	24
Center	4	0	0	2	2	3	0	1.5	0.5	0	12	25
	4	0	0	2	2	3	0	1.5	0.5	0	9	22
nd-Bancroft	4	0	0.5	2	2	3	0	1.5	0.5	0.5	10	24
na	4	0	0.5	2	2	3	0	1.5	0.5	0.5	10	24
y	4	0	0.5	2	2	4	0	1.5	0.5	0	13.5	28
o Unified	4	0	0	2	2	3	0	1.5	0.5	0	8.5	21.5
ton Area	4	0	0	2	2	3	1	1.5	0.5	0.5	8.5	23
lia	4	0	0	2	2	3.5	0	1.5	0.5	0	10.5	24
e	4	0	0	3	2	3	1	1.5	0.5	1	8	24
vhead UHS	4	0	0	2	3	3	1	1.5	0.5	1	9	25
nd	4	0	0	2	2	3	0	1.5	0.5	0	8.5	21.5
aubenon	4	0	0	2	2	3	0	1.5	0.5	0	15	28
rs	4	0	0.5	3	3	3.5	1	1.5	0.5	0	9	26
rndale	4	0	0.5	3	3	3	0.5	1.5	0.5	0.5	8.5	25
sta	4	0	1	2	3	3	0	1.5	0.5	0	10	25
vin-Woodville Area	4	0	0	2	2	3.5	0	1.5	0.5	0	13.5	27
or	4	0	0.5	2	3	3	0	2	0.5	0	9	24
oo	4	0	0.5	2	2	3	0	1.5	0.5	0	8	21.5
eveld	4	1	1.5	3	3	4	0.5	1.5	0.5	0.5	6.5	26
n Area	4	0	0.5	3	3	3.5	0	1.5	0.5	0	9.5	25.5
eld	4	0	0	2	2	3	0	1.5	0.5	0	12	25
er Dam Unified	4	0	0	2	2	3	0	1.5	0.5	0	11	24
er-Dunbar-Pembine	4	0	1.5	2	2	3	1	1.5	0.5	1.5	7	24
ville	4	0	0	2	2	3	0	1.5	0.5	0	15	28
ont Community	4	0	0	2	2	3	0	1.5	1	0	11.5	25
t	4	0	0	2	2	3	0	1.5	0.5	0.5	10.5	24

t Turner	4	0	0.5	3	2	3	0	1.5	0.5	0	9.5	24
on	4	0	0.5	2	2	3	0	1.5	0.5	0	10	23.5
Area	4	0	0	2	2	3.5	0	1.5	0.5	0	11	24.5
ot UHS	4	0	0.5	2	2	3	0	1.5	0.5	0	12	25.5
wood	4	0	0	3	3	4	0	1.5	0.5	0	12	28
Hawk	4	0	0	4	4	3.5	0	2	0.5	0	6	24
River Falls	4	0	0	2	2	3	0	1.5	0.5	0	15	28
Taylor	4	0	0	2.5	2	3.5	0	1.5	0.5	0.5	11	25.5
ner	4	0	0.5	2	2	3	0	1.5	0.5	0	12.5	26
uel	4	0	0	2	2	3	0	1.5	0.5	0	11	24
obel Area	4	0	0	3	3	3.5	0	1.5	0.5	0	12.5	28
er	4	0	0	2	2	4	0	1.5	0.5	0	10	24
aville Community	4	0	0	3	3	3	0	1.5	0.5	0	9	24
on	4	0	0	3	2.5	3.5	0	1.5	0.5	0	10	25
head	4	0	0	2	2	3	0	1.5	0.5	0.5	10.5	24
n Deer	4	1	0	3	3	3.5	1	1.5	0.5	0.5	6	24
e	4	0	0	2	2	3	0	1.5	0.5	0	12	25
ngton Area	4	0	0.5	3	2	3.5	0	2	0.5	0	8	23.5
rnut	4	0	0	2.5	2.5	3	0	2	0.5	0	9.5	24
eadership Academy	4	2	0	3	3	3	0	0	0	0	6	21
tt Community	4	0	0.5	3	3	3	0	1.5	0.5	0	10	25.5
ria-Friesland	4	0	1	3	3	3	0	1.5	0.5	0	10	26
ridge	4	0	0	2	2	3	0	1.5	0.5	0	12	25
eron	4	0	0	3	3	3.5	0	1.5	0.5	0	10.5	26
obellsport	4	0	0	3	3	3	0	1.5	0.5	0	13	28
on	4	0	0	3	3	4	0	2	0.5	0.5	8	25
ille	4	0	0.5	4	3	3	0	2	0.5	0	8.5	25.5
r Grove-Belgium Area	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
rburg	4	0	0	2	2	3	0	1.5	0.5	0	9	22
al/Westosha UHS	4	0	0.5	3	3	3	0	1.5	0.5	0	8.5	24
uamegon	4	0	0	3	3	3	0	1.5	0.5	0	12	27

ak-Weyerhaeuser Area	4	0	0.5	2	2	3.5	0	1.5	0.5	0	13	27
on	4	0	0.5	2	2	4	0	1.5	0.5	0	13.5	28
ewa Falls Area Unified	4	0	0	2	2	3	0	1.5	0.5	0	9	22
on	4	0	0	3	3	3	0	1.5	0.5	1	10	26
Lake	4	0	0	2	2	3	0	1.5	0.5	0	13	26
on Community	4	0	0	3	3	3	0	1.5	0.5	0	11	26
onville	4	0	0	2	2	3	0	1.5	0.5	0	11	24
rane-Fountain City	4	0	0	3	2	4	0	1.5	0.5	0	9	24
r	4	0	0	3	3	3.5	0	1.5	0.5	0	8.5	24
nan	4	0	0	3	3	3	0	1.5	0.5	0	9	24
x	4	0	0	2	2	3	0	1.5	0.5	0	11	24
nbus	4	0	1	2	2	3	0.5	1.5	0.5	1	13	28.5
ell	4	0	0.5	2	2	3	0	1.5	0.5	0	14.5	28
lon	4	0	0	2	3	4	0	1.5	0.5	0	7.5	22.5
z	4	0	0	2	2	3	0	1.5	0.5	0	10	23
City	4.5	0	0.5	2	2	3	0	1.5	0.5	0.5	9.5	24
hy	4	0	0	2	2	3	0	1.5	0.5	0	8.5	21.5
erland	4	0	0.5	2	2	3	1	1.5	0.5	0.5	11	26
erest Area	4	0	0	2	2	3	0	2	0.5	0	8	21.5
ngton Community	4	0	0	2	2	3	0	1.5	0.5	0	11	24
rest Area	4	0	0	2	2	3	0.5	1.5	0.5	0	8.5	22
ere	4	0	0	2	2	3	0	1.5	0.5	0	9	22
oto Area	4	0	1	3	3	3	1	1.5	0.5	1.5	9.5	28
ield Community	4	0	0.5	3	2	3	4	1.5	0.5	0	9.5	28
ran-Darien	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ark	4	0	0	3	3	3	0	1.5	0.5	0.5	12.5	28
eland	4	0	0.5	2	2	3	0	2	0.5	0	12	26
eville	4	0	0	2	2	3	0	2	0.5	0	14.5	28
iamond Area	4	0	0.5	3	3	3	0	1.5	0.5	0	8.5	24
rd	4	0	0.5	2	2	3.5	0	1.5	0.5	0	12	26
Froy Community	4	0	0	2	2	3	0	1.5	0.5	0	9.5	22.5

laire Area	4	0	0	2	2.5	3	0	1.5	0.5	0	8.5	22
	4	0	0.25	2	2	3	0	1.5	0.5	0	14	27.25
ton	4	0	0	2	2	3	0	1.5	1	0	11.5	25
	4	0	0	3	3	3	0	1.5	0.5	0	6.5	21.5
-Strum	4	0	0	2	2	4	0	1.5	0.5	0	12	26
ound Area	4	0	1	3	3	3.5	0	1.5	1	0	11.5	28.5
rt Lake-Glenbeulah	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
rn Area	4	0	0	2	2	3	0	1.5	0.5	0	11	24
orth Community	4	0	0.5	2	2.5	3.5	0	1.5	0.5	0	12.5	27
rook	4	0	0	2	2	3	1	1.5	0.5	0	8	22
ood	4	0	0	2	2	3	0	1.5	0.5	0	13	26
sville Community	4	0	0	3	2	3	0	1.5	0.5	0	14	28
reek	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
iver	4	0	1	3	3	3	0	1.5	0.5	0	9	25
imore Community	4	0	0	2	2	3	0	1.5	0.5	0	10.5	23.5
eau	4	0	0.5	2	2	3	0	1.5	0.5	0	11	24.5
nce County	4	0	0	3	3	3	0	1.5	0.5	0	10	25
du Lac	4	0	0	2	2	3	0	1.5	0.5	0	10	23
Atkinson	4	0	0	2	2	3	0	1.5	0.5	0	10	23
ilin Public	4	0	0	3	3	3	0	1.5	0.5	0	13	28
eric	4	0	1	2	2	4	0	1.5	0.5	0	9	24
lom Area	4	0	0	2.5	2	3	0	1.5	0.5	0	9.5	23
ville-Ettrick-Trempealeau	4	0	0	3	3	3	0	1.5	0.5	0	10.5	25.5
iantown	4	0	0	3	3	3	0	1.5	0.5	0	8	23
ltar Area	4	0	0	3	3	4	1	2	0.5	1	7.5	26
t	4	0	0	3	2	4	0	1.5	0.5	0	10.6	25.6
n	4	0	0.5	3	3	4	0	1.5	0.5	0	7.5	24
nton	4	0	0	2	3	3	0.5	1.5	0.5	0.5	11	26
wood City	4	0	0	3	3	3	0	1.5	0.5	0	9	24
man-Armstrong Creek	4	0	0	2	2	3	0	1.5	0.5	0	12	25
on	4	0	0	2	2	3	0	1.5	0.5	0	9	22

ton Area	4	0	0	2	2	3	0	1.5	0.5	0	12	25
tsburg	4	0	1	2	2	3	0	1.5	0.5	0	13	27
n Bay Area Public	4	0	0	3	2	3	0	1.5	0.5	0	8	22
n Lake	4	0	0	2	2	4	0	1.5	0.5	0	12	26
ndale	4	0	0	2	2	3	0	1.5	0.5	0	10	23
nfield	4	0	0	2	2	3.5	0.5	2	0.5	0.5	7	22
nwood	4	0	0	3	3	3	0	1.5	0.5	1.5	9	25.5
nam	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
lton	4	0	0	2	2	3	0	1.5	0.5	0	15	28
ord UHS	4	0	0	3	3	3	0	1.5	0.5	0	9	24
ard Community	4	0	0	3	3	3	0	1.5	0.5	0	13	28
and	4	0	1	3	3	3	0	2	0.5	0	9.5	26
rt	4	0	0	2	2	4	0	2	0.5	0	8	22.5
oro	4	0	0	3	2	3	0	1.5	0.5	0	12	26
en	4.5	0	0.5	2	2	3.5	0	2.5	0.5	0.5	10.5	26.5
on	4	0	0	2	2	3.5	0	1.5	0.5	0.5	10	24
onville Area	4	0	0.5	3	3	4	1	1.5	0.5	0	6.5	24
ard-Suamico	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ards Grove	4	0	0.5	2	2	3	1	1.5	1	1	12	28
on	4	0	0	2	2	3.5	0	1.5	0.5	0	9.75	23.25
y	4	0	0.5	2	2	4	0	1.5	0.5	0	7.5	22
sford	4	0	0	3	2	3	1	2	0.5	1	9.5	26
endence	4	0	0.5	2	3	3	0	2	0.5	0	12	27
icandinavia	4	0	0	2	2	3	0	1.5	0.5	0	11	24
-Grant	4	0	0.5	3	3	3	0	1.5	0.5	0	8.5	24
a	4	0	0	2	2	3	1	2	0.5	0.5	9	24
ville	4	0	0	2	2	3	0	1.5	0.5	0	8.5	21.5
'son	4	0	0	2	2	3.5	1	1.5	0.5	1	10.5	26
ion Creek	4	0	0	3	2.5	3.5	0	1.5	0.5	0	12	27
	4	0	0	2	2	3	0	1.5	0.5	1	9.5	23.5
una Area	4	0	0	2	2	3	0	1.5	0.5	0	10	23



sha	4	0	0	4	4	4	0	1.5	0.5	0.5	7.5	26
é Moraine	4	0	0	2	3	3	0	1.5	0.5	0	9	23
skum	4	0	0	3	3	3	0	1.5	0.5	0	13	28
unee	4	0	0.5	2	2	3.5	0	1.5	0.5	0.5	11.5	26
po Area	4	0	0	2	2	3	0	1.5	0.5	0.25	10.75	24
area	4	0	0	3	3	3	0	1.5	0.5	0	14	29
erly Area	5	0	0	3	3	3	0	2	0.5	0	11.5	28
er	4	0	0.5	2	2	3	0.5	1.5	0.5	0	12	26
osse	4	0	0.5	2	2.5	3	0	1.5	0.5	0	8.5	22.5
rge	4	0	0	2	2	3	0	1.5	0.5	0	11	24
mith	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Geneva-Genoa City UHS	4	0	0.5	2	2	3.5	0	1.5	0.5	0	10	24
Holcombe	4	0	0	2	2	3	0	1.5	0.5	0	13.5	26.5
Mills Area	4	0	0	3	2	3	0	1.5	0.5	0	12	26
and UHS	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ister Community	4	0	0	2	2	3	0	1.5	0.5	0	12	25
a	4	1	0	3	3	3	0.5	1.5	0.5	0.5	7	24
	4	0	0	3	2	3	0	1.5	0.5	0	11	25
Chute Area	4.5	0	0	2	2.5	3.5	0	1.5	0.5	0	14.5	29
	4	0	0	3	3	4	0.5	1.5	0.5	0.5	7	24
ra	4	0	0	2	2	3	0	1.5	0.5	0	11	24
	4	0	0.5	2	2	3	0	1.5	0.5	0	11.5	25
	4	0	0.5	3	2.5	4	1	2	0.5	2	6.5	26
nburg-Casco	4	0	0.5	2	2	3	0	3	0.5	0	8	23
son Metropolitan	4	0	0	2	2	3	0	1.5	0.5	0	9	22
iwa	4	0	0	3	2	3	0	1.5	0.5	0	12	26
towoc	4	0	0	3	2	3	0	1.5	0.5	0	10	24
e	4	0	0.5	3	3	4	0	1.5	0.5	0	11.5	28
thon City	4	0	0	2	2	3	0	1.5	0.5	0	9	22
nette	4	0	0	2	2	3.5	0	1.5	0.5	0	8.5	22
on	4	0	0	2	2	3	0	1.5	0.5	0	11	24

esan	4	0	0.5	2	2	3	0	1.5	0.5	0	12.5	26
hall	4	0	0	3	3	3	0	1.5	0.5	0	12	27
hfield Unified	4	0	0.5	2	2	3.5	0	1.5	0.5	0.5	10.5	25
iton	4	0	0.5	2	3	3	0	1.5	0.5	0	13.5	28
ille	4	0	0	2	2	3	0	1.5	0	0	10.5	23
rland	4	0	0.5	2	2	3	1	2	0.5	1	10	26
ord Area Public	4	0	0.5	3	2	3	0.5	2	0.5	0.5	7.75	23.75
en	4	0	2	3	3	3	0	1.5	0.5	0	8	25
ose-Mindoro	4	0	0	2	2	3.5	0	1.5	0.5	0	11.5	25
asha Joint	4	0	0	3	3	3	0	1.5	0.5	0	7.5	22.5
ominee Indian	4	0	0	3	3	4	0.5	1.5	0.5	0.5	7	24
omonee Falls	4	0	0	3	2	3	1	1.5	0.5	0	8	23
omonie Area	4	0	0	3	3	3.5	1	2	0.5	0	10	27
on-Thiensville	4	0	0.5	2	2	3	1	1.5	0.5	0	7.5	22
er	4	0	0.5	2.5	3	3	0	2	0.5	0	10	25.5
ill Area	4	0	0	2	2	3	0	1.5	0.5	0	8.5	21.5
leton-Cross Plains Area	4	3	0	3	3	3	0.5	1.5	0.5	0.5	4	23
n	4	0	0	2	2	3	0	1.5	0.5	0	11	24
aukee Academy of Science	4	2	0	4	5	3	0	1.5	0.5	0	2	22
aukee	4	0	0	2	2	3	1	1.5	0.5	0	8	22
ral Point Unified	4	0	0	3	3	4	0	1.5	0.5	0.5	7.5	24
icot	4.5	0	0	2	2	3.5	0	1.5	0.5	1	11.5	26.5
lovi	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ona Grove	4	0	0	2	2	3.5	0	1.5	0.5	0	10.5	24
oe	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ello	4	0	0	3	2	3	0	1.5	0.5	0	11	25
icello	4	0	0.5	2	2	3	0	1.5	0.5	0	11.5	25
nee	4	0	0	2	2	3.5	0	1.5	0.5	0	8.5	22
nt Horeb Area	4	0	0	2	2	3	0	1.5	0.5	0	11	24
vonago	4	0	0	2	2	3	0	1.5	0.5	0	10	23
ego-Norway	4	0	0	2	2	3	1	1.5	1	0	7.5	22

dah Area	4	0	0	3	3	3	0	1.5	0.5	0	11.5	26.5
ah Joint	4	0	0	3	3	3.5	0.5	1.5	0.5	0.5	6.5	23
ville	4	0	0	2	2	3	0	1.5	0.5	0	11	24
osa	4	0	0	3	2.5	3.5	0	1.5	0.5	0	8.5	23.5
Auburn	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Berlin	4	0	0	3	3	3	0	1.5	0.5	0	9	24
Glarus	4	0	0	3	3	3.5	0	1.5	0.5	0.5	9	25
Holstein	4	0	0	3	3	3	0	1.5	0.5	0	9	24
Lisbon	4	0	0	2	3	3	1	1.5	0.5	1	10.5	26.5
London	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Richmond	4	0	0	2	2	3	0	1.5	0.5	0	10	23
ira	4	0	1	3	2	3	0	1.5	0.5	0	10	25
et UHS	4	0	0.5	2	2	3	1	1.5	0.5	1	6.5	22
s	4	0	0	2	2	3	0	1.5	0.5	0	9	22
1 Crawford	4	0	0	2	2	3	1	1.5	0.5	0	11	25
1 Fond du Lac	4	0	0	3	3	3	0	1.5	0.5	0	9	24
ern Ozaukee	4	0	0	3	3	3	0.5	1.5	0.5	0.5	11	27
land Pines	4	0	0	3	3	3.5	0	1.5	0.5	0	12.75	28.25
wood	4	0	0	3	3	3	0	1.5	0.5	1	10	26
alk-Ontario-Wilton	4	0	0	2	2	3	0	1.5	0.5	0	11	24
reek-Franklin Joint	4	0	0	3	2	3	0	1.5	0.5	0	9	23
eld	4	0	0.5	3	2	3	0	1.5	0	0	9.5	23.5
omowoc Area	4	0	0.5	3	3	3	0.5	1.5	0.5	0	10	26
to Falls Public	4	0	0.5	3	2	3	0	1.5	0.5	0	11.5	26
to Unified	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
)	4	0.5	0.5	3	2	3.5	0.5	1.5	0.5	2	8.5	26.5
aska	4	0	0	3	3	4	0	1.75	1	0	7.25	24
urg	4	0	0	2	2	4	0	1.5	0.5	0	13	27
on	4	0	0	2	2	3	0	1.5	0.5	0	10	23
ola	4	0	0.5	3	2	4	0	1.5	0.5	0	10	25.5
osh Area	4	0	0	2	2	3	0	1.5	0.5	0	9	22

o-Fairchild	4	0	0	2	2	3	0	1.5	0.5	0.5	11.5	25
n-Withee	4	0	0	3	3	3.5	0	2	0.5	1	9	26
ra-Eagle Area	4	0	0.5	3	3	3	0	1.5	0.5	0	9.5	25
eville Area	4	0	0	2	2	3.5	0	1.5	0.5	0.5	10	24
view	4	0	0	3	2	3	0	1.5	0.5	0	10.5	24.5
onica Area	4	0	0	3	3	3	0	1.5	0.5	0	10.5	25.5
Area	4	0	0.5	2	2	3	0	1.5	0.5	0	12.5	26
igo	4	0	0	3	3	3	0	1.5	0.5	0	7	22
ukee	4	0	0	3	3	3.5	3	1.5	0.5	0	9.5	28
is	4	0	0	3	3	3	0	1.5	1	0	8.5	24
os	4	0	0.5	2.5	3	3.5	0	1.5	0.5	0.5	10.5	26.5
ville	4	0	0	3	2	3	0	1.5	0.5	0	10.5	24.5
eville	4	0	0	2	2	3	0	1.5	0.5	0	11	24
City	4	0	1	3	3	3	0	1.5	0.5	0	8	24
outh Joint	4	0	0	2	2	3	0	1.5	0.5	0	12	25
Edwards	4	0	0	3	3	4	0	1.5	0.5	0	6	22
Washington-Saukville	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ge Community	4	0	0	2	2	3	0	1.5	0.5	0	11	24
si	4	0	0.5	3	2	3	0	1.5	0.5	0	8.5	23
ette	4	0	0	3	2.5	4	0	2	0.5	0	10.5	26.5
e Farm Public	4	0	0	2	2	3.5	0	1.5	0.5	0	12.5	26
e du Chien Area	4	0	0.5	2	3	3	0	2	0.5	1	10.5	26.5
ice	4	0	0.5	2	2	3	0	1.5	0.5	0	10.5	24
ott	4	0	0	2	2	3	0	1.5	0.5	0	11	24
eton	4	0	0	3	3	3	0	1.5	0.5	0	11	26
ki Community	4	0	0	2	2	3	0	1.5	0	0	9.5	22
e Unified	4	0	0	2	2	3.5	1	1.5	0.5	0	7.5	22
olph	4	0	0.5	3	3	3	0	1.5	0.5	0	10.5	26
om Lake	4	0	0	3	2	4	0	1.5	0.5	0	15	30
sburg	4	0	0	2	2	3	0	1.5	0.5	0	9.5	22.5
sவில்	4	0	0.5	2	2	3	0	1.5	0.5	0	13.5	27

Islander	4	0	0	2	2.5	3.5	0	1.5	0.5	0	8	22
Lake	4	0	0.5	2	2	3	1	2	0.5	1	8	24
Lake Area	4	0	0	2	2	3	0	1.5	0.5	0	13	26
Land	4	0	0	2	2	3	0	1.5	0.5	0	10	23
Community	4	0	0.5	3	3	3	0	1.5	0.5	0	8.5	24
North Area	4	0	0	3	2	3	0	1.5	0.5	0.5	11.5	26
Falls	4	0	0	2	2	3.5	0	1.5	0.5	0	16.5	30
Ridge	4	0	0	2	2	3.5	0	1.5	0.5	0	10.5	24
Valley	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Waldale	4	0	0	3	2.5	3	0	1.5	0.5	1	10.5	26
Waldale-Brandon	4	0	0	3	2	4	0	1.5	0	0	9.5	24
Walt	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Will	4	0	0	3	3	3.5	0	2	0.5	0.5	10	26.5
Croix Central	4	0	0	2	2	3	0	1.5	0.5	0	11	24
Croix Falls	4	0	0.5	3	3	3	1	1.5	0.5	0	11.5	28
Francis	4	0	0	2	2	3	0	2	0.5	0	10.5	24
Prairie	4	0	0	2	2	3.5	0	1.75	0.5	0	8.25	22
Rosa	4	0	0.5	2	2	3	0	1.5	0.5	2.5	8	24
St. Joseph	4	0	0	2	2	3.5	0	1.5	0.5	0	11.5	25
St. Louis Community	4	0	0	2	2	3	0	1.5	0.5	0	9.5	22.5
St. Paul	4	0	0	2	2	3	0	1.5	0.5	0	11	24
St. Peter Area	4	0	0	2	2	3.5	0	1.5	1	0	9	23
St. Peter Falls	4	0	0	2	3	3	0	1.5	0	0	9.5	23
St. Peter Lake	4	0	0	3	3	4	0	1.5	0.5	2	10	28
St. Peter Station	4	0	0.5	3	2	3	0	1.5	0.5	0	10.5	25
St. Peter Wood	4	0	0	3	3	3	1	1.5	0.5	0	7	23
St. Peterburg	4	0	0	3	3	3	0	1.5	0.5	0	10	25
St. Peter West	4	0	0.5	2	2	3	0	1.5	0.5	0	12.5	26
St. Peter East	4	0	0	2	2	3.5	0	1.5	0.5	0	12	25.5
St. Peter Springs	4	0	0.5	2	2	4	0	1.5	0.5	0	11.5	26
St. Peter West	4	0	0	2	2	3.5	0	1.5	0.5	0	14.5	28

1 Milwaukee	4	0	0	2	2	3	0	1.5	0.5	0	13	26
1 Shore	4	0	1	2	3	3	0	1.5	0.5	0	13	28
ern Door County	4	0	0.5	2	2	3	0	2	0.5	0	8	22
western Wisconsin	4	0	0	2	2	3	0	1.5	0.5	0	12	25
a Area	4	0	0	2	2	3.5	0	1.5	0.5	0	10.5	24
cer	4	0	0	2	2	3	0	1.5	0.5	0	11	24
ner Area	4	0	0.5	2	2	3	0	1.5	0.5	1.5	11	26
g Valley	4	0	0	3	3	3	0	1.5	0.5	0	11	26
ey-Boyd Area	4	0	0	3	2	3	0	1.5	0.5	0.5	11.5	26
ns Point Area Public	4	0	0	2	2	3	0.5	1.5	0.5	0	10	23.5
bridge	4	0	0	2	2	3	0	1.5	0.5	0	17	30
ghton Area	4	0	0	2	2	3.5	0.5	1.5	0.5	0.5	7.5	22
ord	4	0	0	2	2	3	0	1.5	0.5	0	13	26
eon Bay	4	0	0	2	2	3	0	1.5	0.5	0	13	26
rairie Area	4	0	0	2	2	3	0	1.5	0.5	0	10	23
rior	4	0	0	2	2	4	0	1.5	0.5	0	8	22
g Public	4	0	0	2	2	4	0	1.5	1	0	8.5	23
r High School	4	0	0	3	3	3	0	0	0	0	5	18
)	4	0	0	2	2	3	0	1.5	0.5	0	11	24
e Lakes	4	0	0	3	2	3	0	1.5	0.5	0	7.5	21.5
ton	4	0	0	3	3	4	0	1.5	0.5	0	9	25
h Area	4	0	0.5	2.5	2	3	0	1.5	0.5	0	10.5	24.5
hawk	4	0	0	3	3	3	0	1.5	0.5	0.5	8.5	24
orrow River	4	0	0	2	3	3.5	1	2	0.5	2	9	27
ounty Area	4	0	0.5	2	2	3	0	1.5	0.5	0	9	22.5
e Lake	4	0	1	3	3	4	0	1.5	0.5	0.5	8.5	26
Rivers Public	4	0	0	3	3	3.5	0	1.5	0.5	0	8.5	24
1 Grove UHS	4	0	0	3	3	3	1	1.5	0.5	1	11	28
	4	0	0	3	2	4	0	1.8	0.5	1.5	7.7	24.5
rs Area	4	0	0.5	2	2	3	0	1.5	0.5	0	11	24.5
as High	4	0	0	2	2	3	1.5	0	0	0	10.5	23

ra Area	4	0	0	2	2	3	0	1.5	0.5	0	9.5	22.5
ua Area	4	0	0	2	2	3	0	1.5	0.5	0	13	26
eno Area	4	0	0.5	3	3	3	0	1.5	0.5	0	8.5	24
burn	4	0	0	3	2	3	0	1.5	0.5	1	11	26
ington	4	0	0	2	2	3	0	1.5	1	1	8.5	23
rford UHS	4	0	0	2	2	3	0	1.5	0.5	0.25	10.75	24
rloo	4	0	0	3	3	3.5	1	1.5	0.5	0	9.5	26
rtown Unified	4	0	0	2	2	3	0.5	1.5	0.5	0.5	9	23
esha	4	0	0	3	3	3.5	0	1.5	0.5	0	9.5	25
akee Community	4	0	0	2	2	3	0	1.5	0.5	0.25	11	24.25
aca	4	0	0.5	2	2	3	0	1.5	0.5	0	9	22.5
un	4	0	0	2	2	3	0	1.5	0.5	0	13	26
au	4	0	0	2	2	3.5	0	1.5	0.5	0	8.5	22
aukee	4	0	0	3	3	3	0	1.5	0.5	0	11	26
oma Area	4	0	0	2	2	3	0	1.5	0.5	0	10	23
atos	4.5	0	0	2	2	3	0	1.5	0.5	0	9.5	23
eka-Steuben	4	0	0	2	2	3	0	1.5	0.5	0.5	12.5	26
ster	4	0	0.75	3	2	3	0	1.5	0.5	0	11.25	26
Allis-West Milwaukee	4	0	0	2	2	3	0	1.5	0.5	0	10.5	23.5
Bend	4	0	0	2	2	3	0.5	1.5	0.5	0	8.5	22
De Pere	4	0	0	2	2	3	0	1.5	0.5	0	13	26
Salem	4	0	0.5	2	2	4	0	1.5	0.5	0.5	8	23
by Area	4	0	0	2.5	2	3.5	0	1.5	0.5	0	10	24
field	4	0	0	3	3	3	0	1.5	0.5	0	11	26
on	4	0	0	2	2	3	1	2	0.5	3	7	24.5
uwega-Fremont	4	0	0	3	2	3.5	0	1.5	0.5	0.5	10	25
e Lake	4	0	1	2	2	3	0	1.5	0.5	0	10	24
efish Bay	4	0	0.5	2	2	3	0	1.5	0.5	0	6.5	20
ehall	4	0	0	3	3	3	0	1.5	0.5	0	9.5	24.5
ewater Unified	4	0	0	2	2	3	0	1.5	0.5	0	10.5	23.5
hall	4	0	0.5	3	2	3	0	1.5	0.5	0	9	23.5

Rose	4	0	0.5	2	2	3	0	1.5	0.5	1	8.5	23
ims Bay	4	0	0	2.5	2.5	3	0	1.5	0.5	0	12	26
ot UHS	4	0	0	3	3	4	0	1.5	0.5	0	7.5	23.5
econne Community	4	0	0	2	2	3	0	1.5	0.5	0	9	22
er	4	0	1	3	3	3	1	1.5	0.5	1	8	26
onsin Dells	4	0	0.5	2	2	3.5	1	1.5	0.5	0	13	28
onsin Heights	4	0	0	2	2	3	0	1.5	0.5	0	11	24
onsin Rapids	4	0	0.5	2	2	3	0	1.5	0.5	0	9	22.5
enberg-Birnamwood	4	0	0	2	2	3.5	0	1.5	0.5	0	11	24.5
ewoc-Union Center	4	0	0.5	3	3	3	0	1.5	0.5	0	12.5	28
atstown Community	4	0	0	2	2	3	0	1.5	0.5	0	12.5	25.5



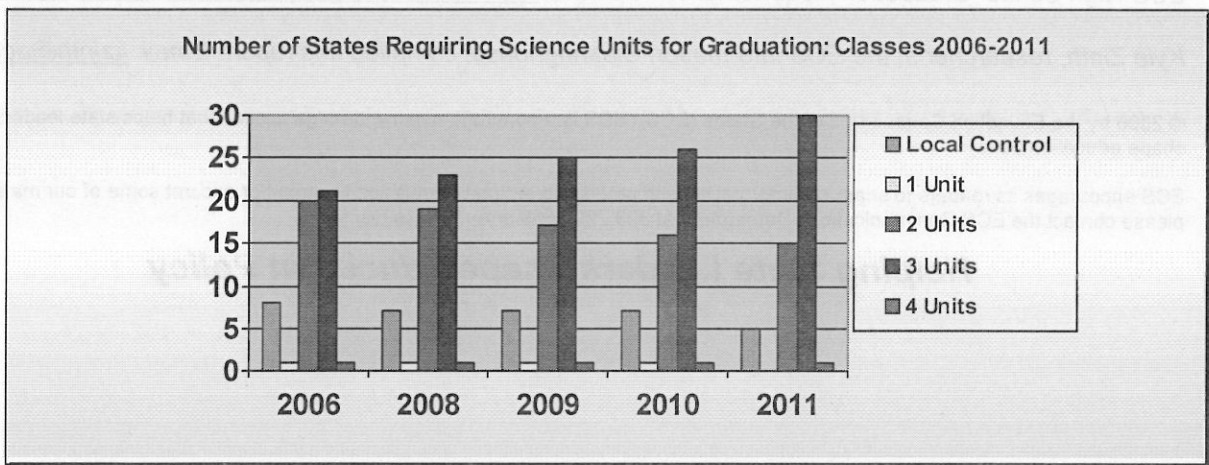


### Science Graduation Requirements: Classes 2006 Through 2011

By Kyle Zinth

Updated August 2006

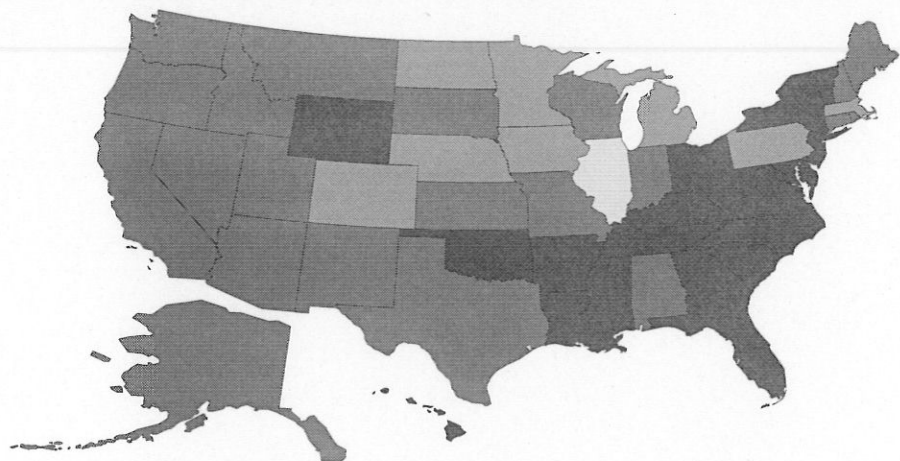
While not a uniform development across all states, many states are increasing the number of science units a student must complete to earn a high school diploma through the class of 2011. This document provides an overview of this trend. Listed requirements do not take into account the differentiated diplomas that exist in some states, and instead focus on the minimum requirements needed to earn a high school diploma. The District of Columbia is treated as a state for the purposes of this document.



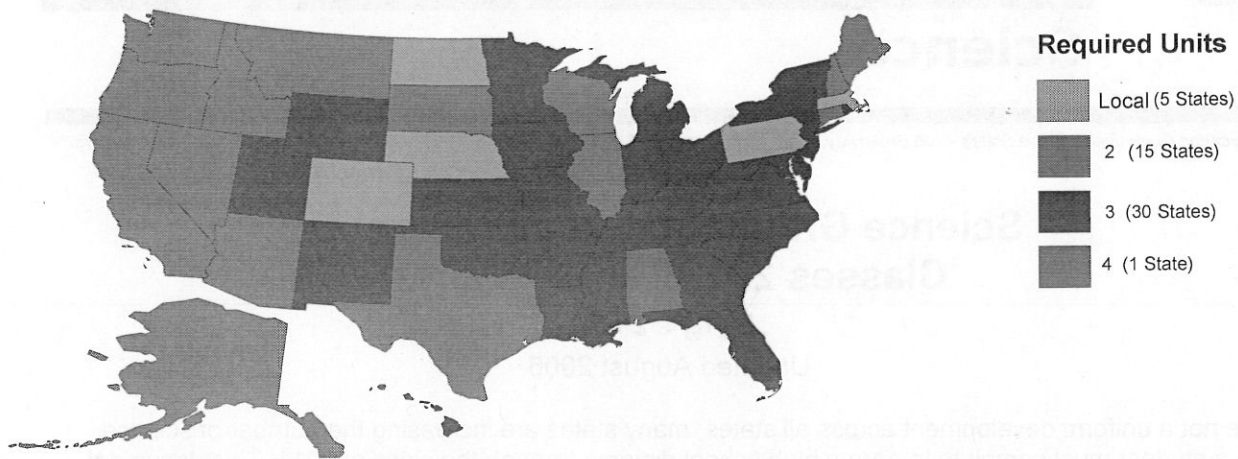
#### Current Requirements for the Class of 2006:

##### Required Units

- Local (8 States)
- 1 (1 State)
- 2 (20 States)
- 3 (21 States)
- 4 (1 State)



**Requirements to Take Effect by the Class of 2011:**



**Source:**

ECS High School Graduation Requirements Database <http://mb2.ecs.org/reports/Report.aspx?id=735>

*Kyle Zinth, researcher in the ECS Information Clearinghouse, compiled this report. Email: [kzinth@ecs.org](mailto:kzinth@ecs.org)*

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***Helping State Leaders Shape Education Policy***



# StateNotes

## Mathematics

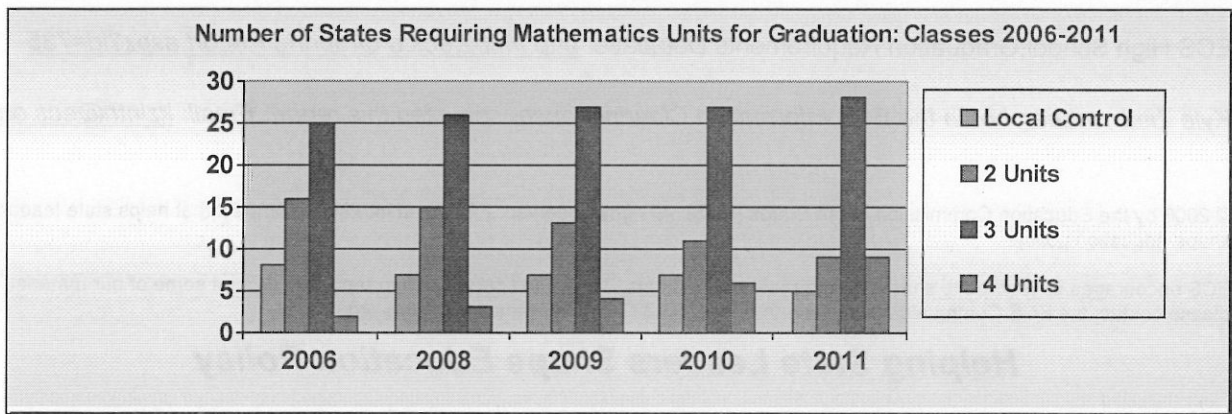
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### Mathematics Graduation Requirements: Classes 2006 Through 2011

By Kyle Zinth

Updated August 2006

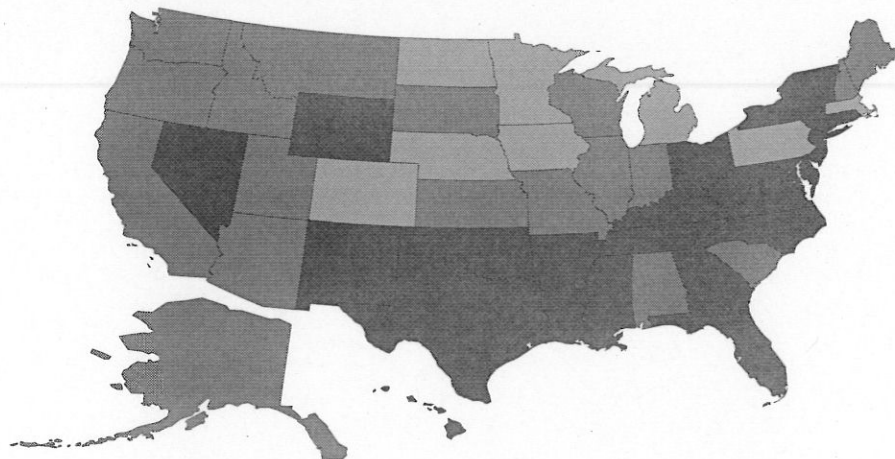
While not a uniform development across all states, many states are increasing the number of mathematics units a student must complete to earn a high school diploma through the class of 2011. This document provides an overview of the trend. Listed requirements do not take into account the differentiated diplomas that exist in some states, and instead focus on the minimum requirements needed to earn a high school diploma. The District of Columbia is treated as a state for the purposes of this document.



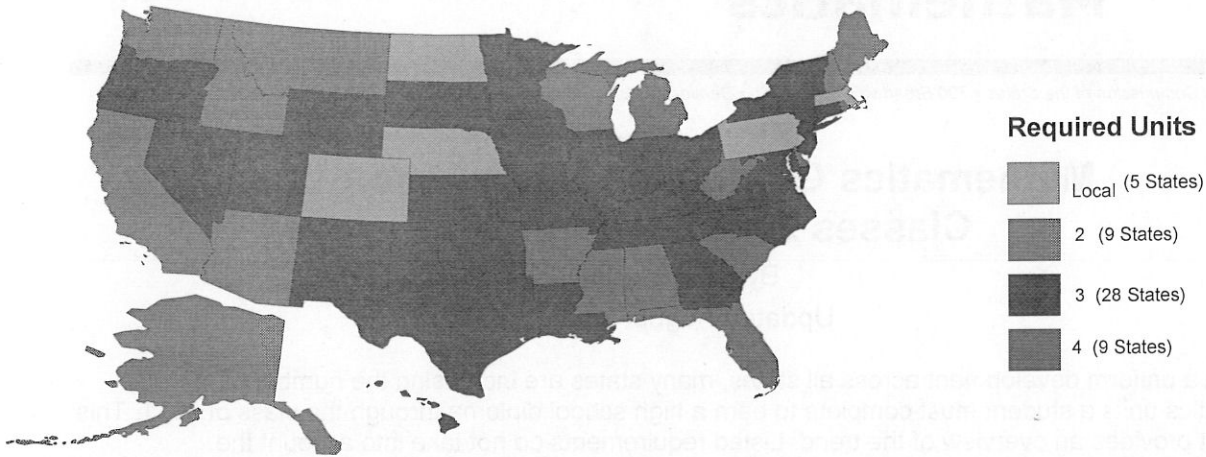
#### Current Requirements in Place for the Class of 2006:

##### Required Units

- Local (8 States)
- 2 (16 States)
- 3 (25 States)
- 4 (2 States)



**Requirements to Take Effect by the Class of 2011:**



**Source:**

ECS High School Graduation Requirements Database: <http://mb2.ecs.org/reports/Report.aspx?id=735>

Kyle Zinth, researcher in the ECS Information Clearinghouse, compiled this report. Email: [kzinth@ecs.org](mailto:kzinth@ecs.org)

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