

High School Schedule

A stylized graphic featuring a clock face with a black arrow pointing to the upper right, and a network diagram with a central green circle connected to several smaller green circles by thin lines. The clock face is positioned behind the word 'School' and the network diagram is positioned behind the word 'Schedule'.

Parent Information Meeting
Hybrid 4 X 4

What Started the Discussion?

- Strategic Plan
 - Increasing the number of scores of three or higher on AP Exams
 - Increasing the number of students earning an Advanced Studies Diploma
 - Maximizing “On time” Graduation Rates for **all** subgroups
- Increased Graduation Requirements
 - Economics & Personal Finance

What is the Hybrid 4x4?

- The school day is divided into four, 90 minute blocks.
- Most classes meet every day for a semester; at the end of the semester, students earn a full credit.
- Some classes meet all year on an alternating-day (A/B) schedule, for example: AP, IB, performing arts, marketing, yearbook, and ROTC.
- Allows students to take 8 classes each year; 32 credits over 4 years.

Current 7AB Block Schedule Sample

Class	1st Semester	2nd Semester
Block 1	(A Day) English 9	
	(B Day) World History I	
Daily Period	Earth Science	
Block 3	(A Day) Band	
	(B Day) Algebra I	
Block 4	(A Day) French II	
	(B Day) Health & Physical Education 9	

Why Change?

- Support, Acceleration, and Enrichment Opportunities
- Credit Recovery
- Course Load Management

Research

Zepeda and Mayers (2006) conducted an analysis of 58 empirical studies of high school block scheduling. The results of this analysis revealed that, although the results were mixed with respect to student achievement and attendance, block scheduling appears to have a positive effect on student grades, student discipline, and school climate. Both students and teachers reported that the block schedule provided greater opportunity for increased student-teacher interaction.

Research

Student Grades/GPA:

- **Improved grades/GPA on 4x4 block** (Hurley, 1997; Khazzaka, 1998; Pisapia & Westfall, 1997; Snyder, 1997)
- **Student failure rates declined on the 4x4 block** (Canady & Rettig, 2000; Eineder & Bishop, 1997; Evans, Tokarczyk, Rice, & McCray, 2002; Mutter, Chase, & Nichols, 1997)

Student Discipline:

- **Decrease in discipline referrals on 4x4 block** (Evans et al., 2002; Khazzaka 1998)

Research

Climate:

Student Perception of the 4x4 block

- **More time for in-depth learning and increased attention from teachers** (Hurley, 1997; Wilson & Stokes, 2000)
- **Improved academic and social outcomes as compared to a traditional schedule** (Eineder & Bishop, 1997; Thomas & O'Connell, 1997)
- **More satisfied with the number of courses available than with a traditional or AB block schedule** (Pisapia & Westfall, 1997)
- **No significant perception of student efficacy comparing the AB Block to the traditional schedule** (Payne & Jordan, 1996)

Research

Climate:

*Teacher Perception of the 4x4 block
(compared to the traditional schedule)-*

- **Student-teacher interaction more positive/more time for concentrated instruction** (Eineder & Bishop, 1997; Thomas & O'Connell, 1997; Skrobarcek et al., 1997)
- **More time for in-depth study** (Queen, Algozzine, & Eddy, (1997))

Sample Schedule 1

Standard Diploma following one student through grades 9-12



Grade 9	1 st Semester	2 nd Semester
1	Algebra I Double Block	
2	English 9	World History I
3	Life Skills (A Day)	
	Health and PE 9 (B Day)	
4	Earth Science	Ceramics

Grade 10	1 st Semester	2 nd Semester
1	Biology	Information Technology Fundamentals
2	Health and PE 10 (A Day)	
	Life Skills (B Day)	
3	English 10	Algebra Functions & Data Analysis
4	Geometry	World History II

Grade 11	1 st Semester	2 nd Semester
1	English 11	US History
2	Computer Information Systems I	Atmospheric Science
3	Life Skills	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Educational Center: Culinary Arts I	

Grade 12	1 st Semester	2 nd Semester
1	CIS II	Economics & Personal Finance
2	Government	English 12
3	Life Skills	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Educational Center: Culinary Arts I	

Grade 9 – Standard Diploma Sample

Grade 9	1 st Semester	2 nd Semester
1	Algebra I Double Block	
2	English 9	World History I
3	Life Skills (A Day)	
	Health and PE 9 (B Day)	
4	Earth Science	Ceramics

Grade 10 – Standard Diploma Sample

Grade 10	1 st Semester	2 nd Semester
1	Biology	Information Technology Fundamentals
2	Health and PE 10 (A Day)	
	Life Skills (B Day)	
3	English 10	Algebra Functions & Data Analysis
4	Geometry	World History II

Grade 10 – Standard Diploma Sample

Grade 10	1 st Semester	2 nd Semester
1	Biology	Information Technology Fundamentals
2	Health and PE 10 (A Day)	
	Life Skills (B Day)	
3	English 10	Geometry
4	Geometry	World History II

Grade 11 – Standard Diploma Sample

Grade 11	1 st Semester	2 nd Semester
1	English 11	US History
2	Algebra Functions & Data Analysis	Atmospheric Science
3	Life Skills	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Educational Center: Culinary Arts I	

Grade 12 – Standard Diploma Sample

Grade 12	1st Semester	2nd Semester
1	Computer Information Systems I	Economics & Personal Finance
2	Government	English 12
3	Life Skills	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Educational Center: Culinary Arts I	

Sample Schedule 2

Advanced Studies Diploma following one student through grades 9-12



Grade	1 st Semester	2 nd Semester
9		
1	Algebra I	Geometry
2	Earth Science	Spanish I
3	English 9	World History I
4	ROTC Health & PE 9	

Grade	1 st Semester	2 nd Semester
10		
1	World History II	English 10
2	Health & PE 10	Technical Theatre
3	Algebra Functions and Data Analysis	Algebra II
4	Spanish II	Spanish III

Grade	1 st Semester	2 nd Semester
11		
1	Algebra III/Trigonometry	US History
2	English 11	Chemistry
3	Economics & Personal Finance - <i>Virtual</i> Travel to NHREC	
4	New Horizons Regional Education Center Auto Tech I	

Grade	1 st Semester	2 nd Semester
12		
1	Digital Photography I	Probability & Statistics/Discrete Math
2	English 12	Government
3	Teacher Assistant Travel to NHREC	
4	New Horizons Regional Education Center Auto Tech II	

Grade 9 – Advanced Studies Diploma Sample 2

Grade 9	1st Semester	2nd Semester
1	Algebra I	Geometry
2	Earth Science	Spanish I
3	English 9	World History I
4	ROTC (A Day)	
	Health & PE 9 (B Day)	

Grade 10 – Advanced Studies Diploma Sample 2

Grade 10	1st Semester	2nd Semester
1	World History II	English 10
2	Biology	Health & PE 10
3	Algebra Functions and Data Analysis	Algebra II
4	Spanish II	Spanish III

Grade 11 – Advanced Studies Diploma Sample 2

Grade 11	1 st Semester	2 nd Semester
1	Algebra III/Trigonometry	US History
2	English 11	Chemistry
3	Economics & Personal Finance - <i>Virtual</i>	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Education Center Auto Tech I	

Grade 12 – Advanced Studies Diploma Sample 2

Grade 12	1st Semester	2nd Semester
1	Chemistry	Atmospheric Science
2	English 12	Government
3	Teacher Assistant	
	<i>Travel to NHREC</i>	
4	New Horizons Regional Education Center Auto Tech II	

Sample Schedule 3

Advanced Studies Diploma following one student through grades 9-12



Grade	1 st Semester	2 nd Semester
9		
1	Advanced English 9	Geometry
2	Biology	World History II
3	Health & PE 9 (A Day)	
	Chorus I (B Day)	
4	Public Speaking	Spanish II

Grade	1 st Semester	2 nd Semester
10		
1	Algebra II	Trigonometry
2	Small Vocal I (A Day)	
	Health & PE 10 (B Day)	
3	Advanced English 10	World History II
4	Spanish III	Chemistry

Grade	1 st Semester	2 nd Semester
11		
1	English 11	US History
2	Math Analysis	Calculus
3	Yearbook (A Day)	
	Small Vocal II (B Day)	
4	Double Block Physics & AP Physics	

Grade	1 st Semester	2 nd Semester
12		
1	Double Block AB-BC AP Calculus	
2	English 12	Government
3	Yearbook (A Day)	
	Small Vocal II (B Day)	
4	AP Psychology (A Day)	
	Career Mentorship (B Day)	

Grade 9 – Advanced Studies Diploma Sample 3

Grade 9	1 st Semester	2 nd Semester
1	Advanced English 9	Geometry
2	Biology	World History I
3	Health & PE 9 (A Day)	
	Chorus I (B Day)	
4	Public Speaking	Spanish II

Grade 10 – Advanced Studies Diploma Sample 3

Grade 10	1 st Semester	2 nd Semester
1	Algebra II	Trigonometry
2	Small Vocal I (A Day)	
	Health & PE 10 (B Day)	
3	Advanced English 10	World History II
4	Spanish III	Chemistry

Grade 11 – Advanced Studies Diploma Sample 3

Grade 11	1 st Semester	2 nd Semester
1	English 11	US History
2	Math Analysis	Calculus
3	Yearbook (A Day)	
	Small Vocal II (B Day)	
4	Double Block Physics & AP Physics	

Grade 12 – Advanced Studies Diploma Sample 3

Grade 12	1st Semester	2nd Semester
1	Double Block AB-BC AP Calculus	
2	English 12	Government
3	Yearbook (A Day)	
	Small Vocal II (B Day)	
4	AP Psychology (A Day)	
	Career Mentorship (B Day)	

Sample Schedule 4

Advanced Studies Diploma following one student through grades 9-12



Grade 9	1 st Semester	2 nd Semester
1	Spanish III	Advanced English 9
2	Band (A Day)	
	AP Human Geography (B Day)	
3	Biology	Spanish IV
4	Algebra II Trigonometry	Health & PE 9

Grade 10	1 st Semester	2 nd Semester
1	Digital Photography I	Chemistry
2	Health & PE 10 (A Day)	
	Band (B Day)	
3	AP Spanish (A Day)	
	AP European History (B Day)	
4	Math Analysis	Advanced English 10

Grade 11	1 st Semester	2 nd Semester
1	AP English Language (A Day)	
	AP US History (B Day)	
2	AP Psychology (A Day)	
	Band (B Day)	
3	Governor's School for Science and Technology	
4	Scientific Programming Strand – Science, Math & Research	

Grade 12	1 st Semester	2 nd Semester
1	AP Government (A Day)	
	AP English Literature (B Day)	
2	AP Micro & Macro Economics (A Day) <i>Virtual</i>	
	Band (B Day)	
3	Governor's School for Science and Technology Scientific Programming Strand – Science, Math & Research	

Grade 9 – Advanced Studies Diploma Sample 4

Grade 9	1 st Semester	2 nd Semester
1	Spanish III	Advanced English 9
2	Band (A Day)	
	AP Human Geography (B Day)	
3	Biology	Spanish IV
4	Algebra II Trigonometry	Health & PE 9

Grade 10 – Advanced Studies Diploma Sample 4

Grade 10	1 st Semester	2 nd Semester
1	Digital Photography I	Chemistry
2	Health & PE 10 (A Day)	
	Band (B Day)	
3	AP Spanish (A Day)	
	AP European History (B Day)	
4	Math Analysis	Advanced English 10

Grade 10 – Advanced Studies Diploma Sample 4

Grade 10	1 st Semester	2 nd Semester
1	Advanced English 10	Chemistry
2	Health & PE 10 (A Day)	
	Band (B Day)	
3	AP Spanish (A Day)	
	AP European History (B Day)	
4	Math Analysis	Calculus

Grade 10 – Advanced Studies Diploma Sample 4

Grade 10	1 st Semester	2 nd Semester
1	Digital Photography I	Chemistry
2	Health & PE 10 (A Day)	
	Band (B Day)	
3	AP Spanish (A Day)	
	AP European History (B Day)	
4	Math Analysis	Advanced English 10

Grade 11 – Advanced Studies Diploma Sample 4

Grade 11	1 st Semester	2 nd Semester
1	AP English Language (A Day)	
	AP US History (B Day)	
2	AP Psychology (A Day)	
	Band (B Day)	
3	Governor's School for Science and Technology Scientific Programming Strand – Science, Math & Research	
4		

Grade 12 – Advanced Studies Diploma Sample 4

Grade 12	1st Semester	2nd Semester
1	AP Government (A Day)	
	AP English Literature (B Day)	
2	AP Micro & Macro Economics (A Day) <i>Virtual</i>	
	Band (B Day)	
3	Governor's School for Science and Technology Scientific Programming Strand – Science, Math & Research	

High School Schedule

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Questions?

Virginia Public High Schools Schedule Formats Trend Data 1995-2010

Schedule Format	1994-1995		1999-2000		2004-2005		2009-2010	
	# of VA High Schools	% of VA High Schools	# of VA High Schools	% of VA High Schools	# of VA High Schools	% of VA High Schools	# of VA High Schools	% of VA High Schools
4x4	28	9.7%	97	32.6%	93	30.4%	114	37.0%
6AB	16	5.6%	5	1.7%	0	0.0%	0	0.0%
6 Period	55	19.1%	12	4.0%	8	2.6%	2	0.6%
7AB	39	13.5%	82	27.5%	94	30.7%	67	21.8%
7 Period	133	46.2%	74	24.8%	66	21.6%	52	16.9%
8AB	10	3.5%	22	7.4%	42	13.7%	48	15.6%
8 Period	3	1.0%	0	0.0%	0	0.0%	1	0.3%
Not Provided / Other	4	1.4%	6	2.0%	3	1.0%	24	7.8%
TOTAL	288		298		306		308	

High School Schedule Committee Members

- Chief Academic Officer
- Director of Secondary Instruction
- Director of Accountability & Instructional Services
- Director of School Administration
- Coordinator of Online Learning
- Instructional Specialist
- All high school principals
- Guidance Director
- IB Program Coordinator
- SOA Program Coordinator
- Athletic Director
- English teacher
- Math teacher
- Science teacher
- Social studies teacher
- CTE teacher
- Health/PE teacher
- Foreign language teacher
- Special education teacher
- Student participating in three varsity sports
- Student participating in band/music program
- Student in IB program
- Student enrolled in Governor's School
- Student enrolled in NHREC
- Student participating in ROTC
- Student enrolled in SOA
- Two additional students
- One parent representing each high school

Research

Canadian Study – Bateson, 1990

Study compared the performance of 10th grade students on a 4x4 schedule to students on a traditional schedule on a 40-item, multiple choice science test administered in May

Schedule Type	Raw Score	Notes:
Traditional Schedule	22.1 / 40	Class meets daily for full year.
4x4 Fall	20.6 / 40	Students tested 3-4 months after completing course.
4x4 Spring	21.1 / 40	Students miss two days of instruction for every one day missed on traditional schedule.