



# Ridge High School Master Schedule

July 22, 2019



# What: Move To a Different Master Schedule

Current	Rotating Drop*	Alternating A-day/B-day
<ul style="list-style-type: none"><li>● 9 periods of 41-42 minutes each</li><li>● 8 academics plus 1 lunch scheduled</li><li>● Lunch served during 5 of the 9 periods</li></ul>	<ul style="list-style-type: none"><li>● 8 academics plus unit lunch</li><li>● 6 periods daily ~ 57 minutes each (2 periods rotate out)</li><li>● 1 unit lunch between the three morning and three afternoon classes</li></ul> <p>*Preferred by site visitors</p>	<ul style="list-style-type: none"><li>● 8 academics plus unit lunch scheduled</li><li>● 4 periods ~ 80 minutes each</li><li>● 4 periods on A-day, the other 4 on B-day</li><li>● 1 unit lunch between the two morning and two afternoon classes</li></ul>

# The Current Master Schedule at Ridge High School

1	7:35 – 8:18
2	8:22 – 9:07
3	9:11 – 9:53
4 (Lunch)	9:57– 10:39
5 (Lunch)	10:43 – 11:24
6 (Lunch)	11:28 – 12:09
7 (Lunch)	12:13– 12:54
8 (Lunch)	12:58 – 1:39
9	1:43 – 2:25

# Option 1: Plus 6.4 Periods

Time	A (4, 8)	B (3, 7)	C (2, 6)	D (1, 5)
7:35-8:33	1	4	3	2
8:37-9:35	2	1	4	3
9:39-10:37	3	2	1	4
Unit Lunch 10:37-11:23	Lunch	Lunch	Lunch	Lunch
11:23-12:21	5	8	7	6
12:25-1:23	6	5	8	7
1:27-2:25	7	6	5	8

## Option 3: Add 2 minutes & lunch/study hall, net 0

Time	A (4, 8)	B (3, 7)	C (2, 6)	D (1, 5)
7:35-8:31	1	4	3	2
8:35-9:31	2	1	4	3
9:35-10:31	3	2	1	4
Lunch A Study Hall A 10:31-11:01	Lunch A Study Hall A	Lunch A Study Hall A	Lunch A Study Hall A	Lunch A Study Hall A
Lunch B Study Hall B 11:01-11:31	Lunch B Study Hall B	Lunch B Study Hall B	Lunch B Study Hall B	Lunch B Study Hall B
11:31-12:27	5	8	7	6
12:31-1:27	6	5	8	7
1:31-2:27	7	6	5	8

# Sample Full Block Schedule, Alternating A/B Days (with unit lunch)

<b>Regular Bell Schedule</b>			
<b>Start/End</b>	<b>"A" Day</b>	<b>"B" Day</b>	<b>Time</b>
7:20 - 8:49 (HR)	Block A1	Block B1	84+ (5)
8:53 - 10:17	Block A2	Block B2	84
10:21 - 11:11	Unit Lunch	Unit Lunch	50
11:15 - 12:39	Block A3	Block B3	84
12:43 - 2:07	Block A4	Block B4	84

# Why: Past Public Presentations

- BOE meeting: [May 4, 2015](#)
- BOE meeting: [December 18, 2017](#)
- BOE meeting: [December 13, 2018](#)
- BOE meeting: [April 1, 2019](#)
- Two exploratory, site visit groups

# WHY: Highlights

Ability to reallocate time

Fewer passing times and transitions, more calmness

Opportunities for use of unit lunch time, students have lunch with peers

Greater opportunity for teaching and learning in longer periods

Rotation of periods avoids the same periods from being missed

Rotation of periods helps students be at their best in more periods

Reinvigorate the building with a new culture

Fewer daily preps for students

Similar to college schedules

Equity in time



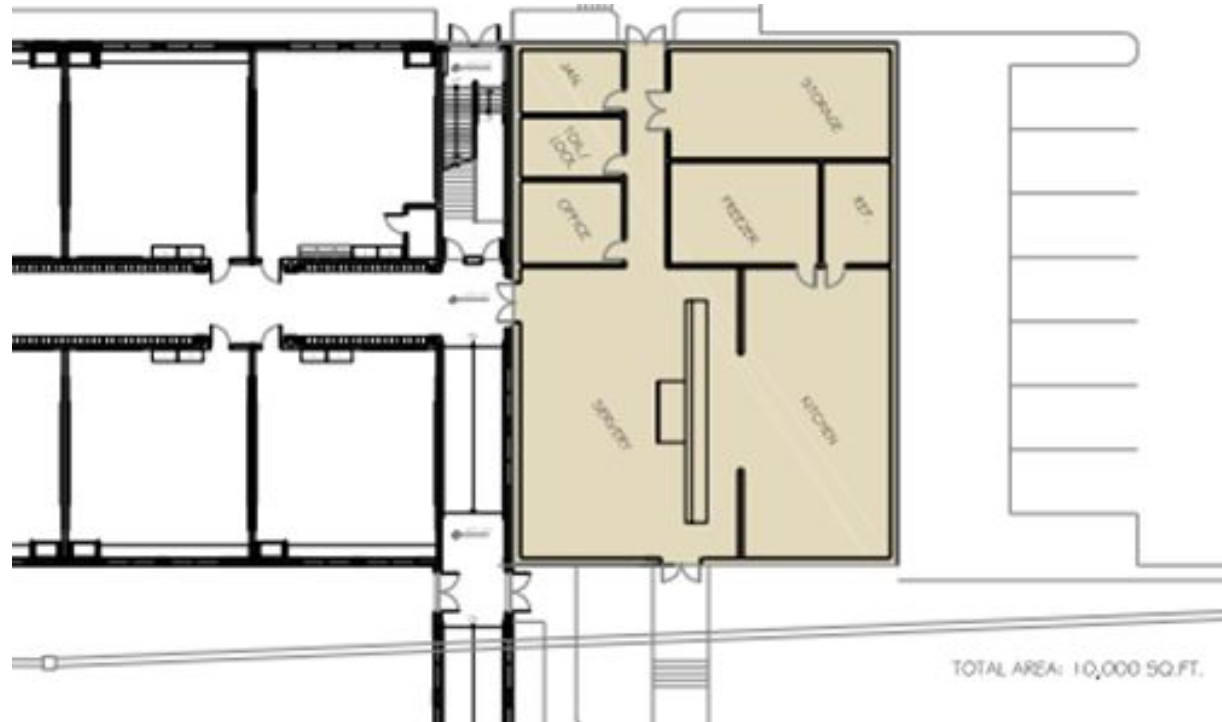
# Why: Support District Goals and Strategic Plan

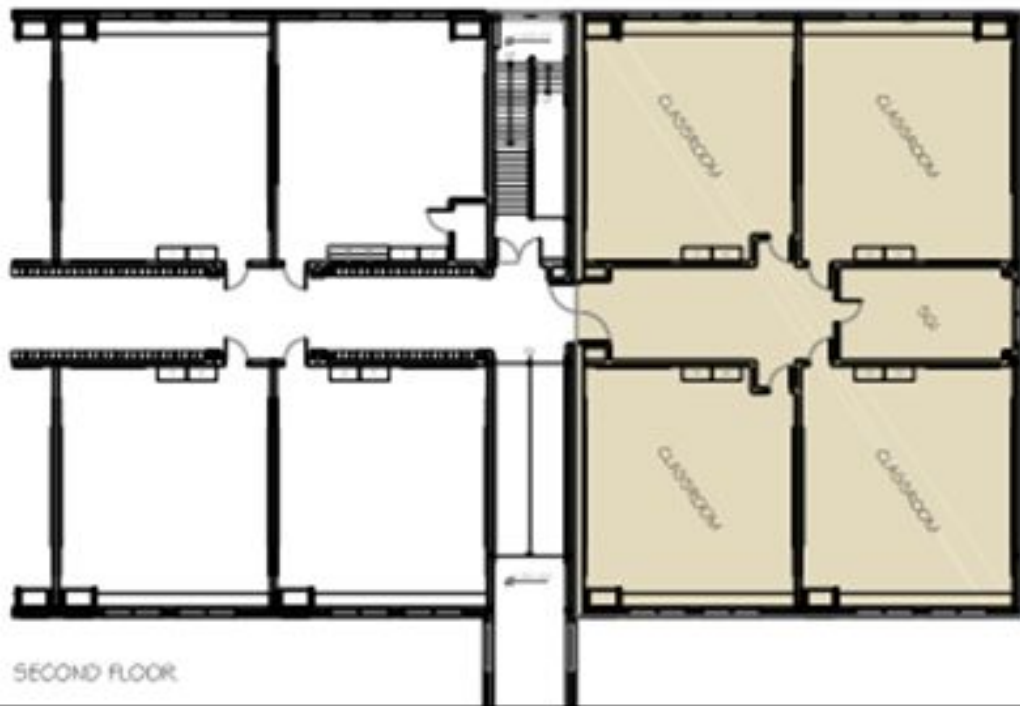
- Strengthen the ability of the staff to promote social, emotional, health and well-being outcomes through staff development. Reinventing the master schedule to create intentional opportunities for regular meetings of PLCs.
- 1.3.B Investigate policies and logistics that impact student and staff wellness and social emotional competencies.

# How: With an Addition to Ridge High School

- Expand the end of the 700 wing: 1st floor kitchen/server, 2nd floor classrooms, completing the project prior to September 2021
- Relocate supervisors office room....to gain one additional classroom
- Utilize a unit lunch which will allow for all study halls to go to the cafeteria freeing up the 2 lecture halls for instruction.
- With 4 classrooms in the addition a total of 7 instructional spaces are gained.
- Existing programs maintained.
- Similar level of food service maintained which helps to offset an increase in daily operating expenses for expanded kitchen and serving costs.

# First Floor Kitchen & Servery





SECOND FLOOR

# Financing

Estimated all in cost including soft costs: \$6.8 million

~\$5.15 million Capital Reserve + Short term (5 year loan)  
~\$1.65 million

Loan payments are expected to increase our annual budget in the range of \$182,000 to \$282,000 on the high end if project costs exceed \$6.8 million.

# How: Without an Addition to Ridge High School?

- Relocate supervisors - gains one additional classroom
- Utilize a unit lunch which will allow for all study halls to go to the cafeteria freeing up the 2 lecture halls for instruction.
- 3 instructional spaces are gained.
- Collapse sections, eliminate some offerings and raise class size as necessary to fit in available instructional spaces.
- Some staff teaching in many and inappropriate spaces.
- Lunch service becomes a major challenge requiring the import of food and kiosk service in the hallways - a daily struggle.. Increased cost to run with likely decrease in food service revenue.

## Rotating Drop Schedule vs. A-day/B-day Schedule

Both utilize the same 8 period schedule with a unit lunch.

Both schedules would need more classroom space and food production.

Plan is to start with a mock schedule of the rotating drop option keeping in mind the A-day/B-day alternative in overcoming challenges.

# What are the challenges in the new schedule?

- Science
- Music
- Lunch



# Example Student Schedule under current 9 Period System

	Mon	Tues	Wed	Thurs	Fri
Per 1	Science	Science	Science	Science	Science
Per 2	Sci Lab	Health/ PE	Health/ PE	Health/ PE	Health/ PE
Per 3	Math	Math	Math	Math	Math
Per 4	English	English	English	English	English
Per 5	History	History	History	History	History
Per 6	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
Per 7	Wrld Lang	Wrld Lang	Wrld Lang	Wrld Lang	Wrld Lang
Per 8	Elective 1	Elective 1	Elective 1	Elective 1	Elective 1
Per 9	Elective 2	Elective 2	Elective 2	Elective 2	Elective 2

Science is highlighted due to the extra lab period once per week in CP Conceptual, CP Mathematical, and Honors Science

The lab period places constraint upon room usage and, subsequently, upon the parameters used to generate student schedules (*more on a coming slides*)

# Science Room Usage

## Understanding the Constraints

Ex: RHS Room 302

Maximum number of classes/sections in a single science room: 6

To accomplish this:

Pers 1 & 3 have lab per 2

Pers 4 & 6 have lab per 5

Pers 7 & 9 have lab per 8

The stacking of classes to share a lab period is called *"dovetailing"*

	Mon	Tues	Wed	Thurs	Fri
Per 1	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 2	Lab Per 1	Lab Per 3	Lab Per 1	Lab Per 3	
Per 3	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 4	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 5	Lab Per 4	Lab Per 6	Lab Per 4	Lab Per 6	
Per 6	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 7	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 8	Lab Per 7	Lab Per 9	Lab Per 7		
Per 9	Hnrs Bio	Hnrs Bio	Hnrs Bio	Hnrs Bio	Hnrs Bio

# CONTINUED: Science Room Usage

## Understanding the Constraints

	Mon	Tues	Wed	Thurs	Fri
Per 1		Lab Per 2			
Per 2	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 3	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 4		Lab Per 3	Lab Per 5		
Per 5	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 6	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 7		Lab Per 6	Lab Per 7		
Per 8	AP Bio	AP Bio	AP Bio	AP Bio	AP Bio
Per 9					

Ex: RHS Room 302

This example illustrates how room use is less optimal if the Pers 1 & 3 sharing Per 2, Pers 4 & 6 sharing Per 5, and Per 7 & 9 sharing Per 8 partnerships are not adhered to:

Only 5 classes scheduled (instead of 6) as some sections do not dovetail

Room is unused Per 9; the Honors Biology section shown on the previous slide is currently unable to run as there is no classroom to house it

# Outlining the Impact on Scheduling

For the 19-20 School Year there are 87 total sections of science. Of these, 77 sections have an extra lab period.

*The elective science courses- Forensic Science, Principles of Biomedical Science, Human Body Systems, and Medical Interventions do not have an extra lab period.*

Period	1	2	3	4	5	6	7	8	9
# Extar Lab Period Sections Running	0	25	2	2	19	0	1	28	0

This imbalance is created by the need to run 6 sections per classroom as outlined on the previous series of slides.

# Outlining the Impact on Scheduling (continued)

Below is a chart that demonstrates how the imbalance in science scheduling impacts the rest of the master schedule

Period	1	2	3	4	5	6	7	8	9
# Sections ELA	7	8	10	14	11	10	15	5	13
# Sections Math	10	7	14	11	11	11	14	8	10
# Sections Social Studies	12	8	10	12	7	12	10	9	11
# Sections World Language	11	4	11	13	7	12	6	8	13

# Ripple Effects

The current schedule forces students to obligate a second period of science for their lab, period 2, 5, or 8 for almost all students (adjacent to their science class period). Consequently these students can only schedule study hall or health/PE in the period that they have their lab, a change in how labs are scheduled may open additional opportunity for students

A natural imbalance to the master schedule follows the current lab structure

- 432-1st period
- 1966-2nd period
- 592-3rd period
- 272-4th period
- 1127-5th period
- 375-6th period
- 279-7th period
- 1177-8th period
- 523-9th period

*\*These values are the number of student seats needed, by period, needed across all 4 quarters for Health/PE*

# Example Schedule: Rotating Drop; No Additional Lab Periods

	A Day	B Day	C Day	D Day
Period 1	Science	Social Studies	Wrld Lang	Math
Period 2	Social Studies	World Lang	Math	Science
Period 3	Wrld Lang	Math	Science	Social Studies
LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
Period 4	Health/PE	Elective 1	Elective 2	English
Period 5	Elective 1	Elective 2	English	Health/PE
Period 6	Elective 2	English	Health/PE	Elective 1

# Example Schedule: Lunch Lab Periods

	A Day	B Day	C Day	D Day
Period 1	Science	Social Studies	Wrld Lang	Math
Period 2	Social Studies	Wrld Lang	Math	Science
Period 3	Wrld Lang	Math	Science	Social Studies
LUNCH	LUNCH	LUNCH	Lab	LUNCH
			LUNCH	
Period 4	Health/PE	Elective 1	Elective 2	English
Period 5	Elective 1	Elective 2	English	Health/PE
Period 6	Elective 2	English	Health/PE	Elective 1

Once per week- when a student's science class abuts lunch- the student has an extended lab/shortened lunch period

Constraint- this produces some staffing constraints (next slide)



# Scheduling Constraints for Lunch Labs in Rotating Drop Schedule

## STAFF

- Teachers cannot teach certain period combinations as those combinations would result in a staff member instructing through the entire unit lunch
  - Not Viable: Per 3 w/ Per 5; Per 4 w/ Per 6; Per 1 w/ Per 7; Per 2 w/ Per 8
- To maximize room (8 classes per science course) use there is little/ no time to “flip” the classroom
- Science staff receive a portion of their contractual lunch period during the Unit Lunch but must receive the other portion of that lunch during their rotating periods (when not scheduled to teach)

## STUDENTS

- Students who take two sciences cannot have a schedule where they lose lunch entirely on one day of the cycle. Invalid science course period offerings mimic the teacher restrictions above
  - Can't take science: Per 3 & 5; Per 4 & 6; Per 1 & 7; Per 2 & 8
  - 50% of the school year, a student in two science courses would have a shortened lunch

# Reducing the scheduling constraints of Science with the A/B Block

The A/B block does not involve extra lab periods.

Ex: RHS Room 302

This not only reduces the impact that science had upon study hall and health/PE but also **increases the maximum number of sections/classes that can be accommodated in a room from 6 on the current system to 8**

There is also no constraint imposed upon lunch periods as there would be in the A/B Modified Block schedule

	A Day	B Day
Per 1	AP Bio	AP Bio
Per 2	AP Bio	Honors Bio
Per 3	AP Bio	*Additional Section
Per 4	AP Bio	*Additional Section

# Comparison of Annual Instructional Timing

	Current Schedule	Rotating Drop	A/B Modified Block
All courses with no lab period	7,560 min 5 days per week	7,830 min 3 consecutive school days then 1 "drop day" <b>+270 min</b>	7,920 min Every other day <b>+360 min</b>
CP & Honors Science Courses	9,072 min 5 days per week + 1 Lab Period per week	8,730 min 3 consecutive school days then 1 "drop day" + 20 Lab Period from lunch once every 4 days <b>-342 min</b>	7,920 min Every other day No Extra Lab Periods <b>-1,152 min</b>
AP Science Courses	10,584 min 5 days per week + 2 Lab Periods per week	10,440 min 3 consecutive school days then 1 "drop day" + 1 Lab Period from Study Hall once every 4 days <b>-144min</b>	7,920 min Every other day No Extra Lab Periods <b>-2,665 min</b>

# Expanded Comparison of Schedule Options

	Current Schedule	Rotating Drop	A/B Modified Block
Maximum number of sections that can fit into a non-science classroom ( <i>no extra lab periods</i> )	9	8	8
Maximum number of sections that can fit into a science classroom	6	8 <i>(reduced if study halls are used for AP extra lab periods)</i>	8
Maximum number of academic courses that a student may take in a school year	8 (lunch consumes 1 period)	8 (unit lunch is not a period)	8 (unit lunch is not a period)
Maximum number of academic classes a student taking TWO AP SCIENCE COURSES can take in a school year	7 (additional lab periods require study hall)	8 <i>(no additional lab periods or extra lab periods occur during lunch)</i>  7 (additional lab from study hall)	8 <i>(no additional lab periods to contend with)</i>



# Future Scheduling Options for Ridge High School Music

Current, Rotating Double-Drop, A/B Block Schedule



# 2019-2020 Music Teacher Schedules

Period	BAND	CHORAL	ORCHESTRA
1	Concert Band 9	<i>Late Arrival*</i>	
2			Enjoyment of Music
3		Music Theory	
4#	Music Lessons	Choral Sectionals	Music Lessons
5#	Music Lessons	Choral Sectionals	Music Lessons
6#	Honors Wind Ensemble ----- Music Lessons	Choral Sectionals	Symphony Orchestra
7#	Music Lessons	Choral Sectionals	Chamber Orchestra
8#	Concert Band ----- Music Lessons	Concert Choir	Music Lessons
9		Ridge Chorale	
10		*Acapella Choir (Monday evenings)	<i>#lunch period</i>

# Rotating Drop and A-day/B-day Districts

Egg Harbor Township HS	Orange HS
Mainland Regional HS	Paramus
Montgomery HS	Raritan HS
Montville HS	Summit HS
New Providence HS	Washington Township HS
Northern Valley Regional Dist.	Watchung Hills Regional HS
Nutley HS	West Orange HS

*Red = A/B Block Schedule    Black = Rotating Double Drop*

# Questions Asked

- How has either schedule (rotating double drop or A/B Block) worked for your high school, specifically the music department?
- What are some of the pros and cons about the schedule you use?
- How long did it take for your staff to embrace it (or not embrace it at all)?
- How long have you been in your current schedule? Would you go back to what you had prior or to a different model if you had a choice?



# The Biggest Challenge...Lessons & Sectionals

- Currently, teacher schedules are developed to include teaching ensembles and instrumental lessons (band and orchestra) or choral sectionals.

How can we continue to offer lessons and sectionals in a new schedule format while not having students miss their lunch period?

# Explore a Rotating Pull-Out Lesson Schedule

- Already in place at elementary and middle school levels
- Student would have a 20-minute lesson (no different than current offering)
- Could a rotation be set up across a child's entire schedule to share time from other courses to fit in lessons?

# Instrumental Lesson/Choral Ensemble Options

- Utilize lunch periods
  - Current schedule model
  - Rotating Double Drop
  - A/B Schedule
- Utilize “Zero Period”
  - Before School
- Team-teaching Model
  - Potential additional staff needed

# Timeline

June of 2019 Authorize Architect to Design and Assemble Bid Package

July 2019 - November 2019 more work on pros and cons of schedule types, build mock schedule, conduct meetings with parents, students, and staff

Award construction contract Winter 2020

Construction begins Spring of 2020

Staff development focused on new schedule Summer 2020 and onward

New Master Schedule Built January 2021 to August 2021

Addition completed end of August 2021

September 2021 - open RHS with new schedule