

BUDGET Q & A

Impact of High School Schedule Change on Science

Q. How will labs be affected, given the loss of a double period in CP and Honors classes?

A. There will be 250 minutes of instructional time in the new model; there are 252 minutes in the current model. Students will meet five times a week instead of six, and one of the days will be a designated lab period. The amount of time provided for instruction is practically the same. The advantage is that teachers will now place a lab in the unit sequence where it logically should go, rather than forcing it around a pre-scheduled lab day, which may or may not coincide with the matching lecture. In other words, if a lab should be introduced on a Monday for a Tuesday lecture, the teacher will be able to do so for all classes. In the current system, the lab may not be completed for as much as a few days later or a week prior to the lecture. This new schedule also does not require the teacher to set up and break down a lab four days per week. In terms of lab content, the Science Supervisor will work with the science teachers this year to examine each lab currently taught to adapt them to the new schedule.

Q. How do colleges view the number of credits assigned to a course?

A. The determination of the amount of credits each course is worth is determined by the individual school; there is no consistency nationwide. In fact, many schools throughout the country assign five credits and colleges pay very little attention to the "credit worth" of a course. There is no negative impact on a student's transcript by reducing the number of credits assigned to a particular course. The most important component of any transcript is the rigor a student has undertaken based on the offerings of the school not how many credits the school assigns to a course. Even in schools where they do not have a strong program like ours, colleges only assess

a student based on what the student's high school offers. By reducing the number of credits in CP and Honors science courses, the playing field is leveled with all other courses offered at Ridge. There will no longer be a GPA advantage for students who, for example, take several science courses compared to students who elect to take several math courses. All honors offerings in science will now be weighted the same as all other honors courses in our high school program.

We called 31 colleges based on the schools most applied to by the class of 2010 which included Princeton, Yale, MIT, Columbia, Stanford, Georgetown, Harvard, Notre Dame, Colgate, NYU, and other competitive colleges. All 31 stated that this change would in no way impact the standing of our students or their ability to get into their colleges. In fact several commented that the increased time in the core areas actually helps students' chances of college acceptance.

Q. What is the impact on a student's GPA?

A. The impact on a student's GPA is the difference in computing 7 vs. 6 weighted credits in an AP course, and 6 vs. 5 weighted credits for an honors class. Of course, this difference carries through for all students in AP or honors sections, and levels the playing field for all content areas. Science will no longer be more advantageous than other subjects in computing a GPA. GPA calculation is almost unaffected by this change with a .001 increase for a CP student in all three years of science who chooses to take an AP class in his/her senior year. For students taking Honors Biology and Honors Chemistry and then AP Physics I and AP Physics II the GPA drops .0012. Finally, a student taking the most challenging science course sequence (Honors Biology, AP Chemistry, AP Physics I, and AP Physics II) the GPA drops .0083. These changes are based

on a comparison to the current GPA. Additionally, colleges recalculate all applicants' GPAs to equalize them according to each college's standards.

Q. Are class sizes increasing and will there then be less contact time with teachers?

A. The enrollment at Ridge has grown each year, and will continue for the next several years. Current class size in lab sciences is capped at 24. Actually, students in science classes will still have the lowest teacher/pupil ratio since class size in lab sciences will now be capped at 26 students. All other core areas are running closer to 28-29 average class size. Contact time with teachers of CP and Honors lab classes will decrease one day a week from approximately 83 minutes to 50 minutes, and on four days a week it will increase from 41 or 42 minutes to 50 minutes.

Q. Can the labs accommodate 26 students?

A. Yes. The Township Fire Code Official has reviewed all Ridge science classrooms for occupancy loads. As usual, we will be required to maintain furniture placement that insures safe egress.

Q. Will there be decreased time for innovative projects or development of new labs?

A. Teachers develop new labs and innovative projects. Their daily preparation period is currently 41 or 42 minutes in length. Next year it will be 50 minutes.

Q. Will the proposed schedule decimate labs in science classes?

A. AP science classes will continue to have a double lab. CP and Honors level classes will not. However, the increased length of time in each class will enable teachers to present eight minutes more of instruction per class, per day. Over the course of five days, this equates to almost an additional period per week. Labs are not static or “canned” documents; they are written by our faculty to meet the New Jersey Core Curriculum Content Standards. There are several labs which will have to be rewritten so that they can more easily fit into the 50 minute time period. In biology there are eight, chemistry has six, and physics has the most at 12. There will be sufficient time given for revisions to take place during the school year and over the summer to ensure all of the curriculum objectives are still met.

Q. How will the administration know whether the changes are having an adverse effect on science education?

A. The faculty will work with the Supervisor of Science to revise those labs that require longer than 50 minutes to complete. The content of labs will not change, and in the majority of labs neither will the method. The administration will review grades on assessments in the revised labs, and will meet with staff throughout the year to obtain feedback on their implementation. They will also watch trends in the results of SAT II and AP tests.

Q. How will colleges view the change in our schedule?

A. We contacted 31 colleges. Not all colleges gave us authorization to use their name, so the following data does not identify schools.

COLLEGE	COMMENT
1	length of time in courses not important... are students taking a rigorous curriculum and the courses needed for graduation

- 2 would not have an effect on admissions -- at most other schools students have to make difficult choices... the students they are looking to accept will be in honors and AP science and therefore have the double lab experience... would not change where they stand in the pool
- 3 as long as it doesn't change the course offerings, changing the schedule would have no impact... doesn't change the curriculum... Ridge students are year to year very competitive and this would not change that... every school has their own way of running programs
- 4 can't think of a negative... as long as students are still able to take challenge courses they won't view them any differently
- 5 most of their students are taking the highest level math and science classes, so the fact that AP classes maintain the double lab is good, she noted that while it might impact their success in science it would not impact how they are viewed in the admissions process
- 6 no effect at all... look at high school profile when reading all applications... look at students across nation and world, so very flexible when it comes to school course offerings and scheduling... no negative impact at all
- 7 this kind of change not a big deal... just looking to see if students have taken the most rigorous courses available to them... students must continue to take 5 core classes
- 8 doesn't matter to them-- only want to see students taking 5 solid academic classes every year, taking AP's etc, will evaluate students based on what is available to them
- 9 no impact -- still a full curriculum so it would not matter
- 10 would not make an impact in the admissions process
- 11 does not see any systematic problems... it would still be a "lab science" and they don't distinguish between single and double labs anyway... as long as students maintain the basic requirements for whichever major they are seeking it should be fine
- 12 just note the change on the school profile and it should be fine... can email kschultz@elon.edu for more info
- 13 look at everything in the context of the school... if you note the changes in the school profile it should not make a difference in admissions (atoine@gwu.edu)

- 14 suggested we explain the move in our profile (side note: she thinks we have a "great" profile)... certainly not going to hold that against the student... will not impact admissions one way or the other... what they are looking for is that the student has challenged himself/herself, performed well, taken the highest level courses available to him/her
- 15 would not be seen as a negative as long as students continue to take same number of core classes, suggest that we note the change in the school profile (esp. the difference in instruction time between AP and regular science classes)
- 16 no real impact... most of the students they accept would be taking AP and would have that AP anyway
- 17 do what you feel would be best for the students... the admissions process does not pit them against students from other schools but rather looks at the resources available at the school they attended and what they were able to do with them... important to take rigorous courses and make good decisions
- 18 no impact
- 19 something they see very often, would not impact students in admissions
- 20 since they don't have a lab requirement it will have no impact on admissions
- 21 shouldn't impact them at all -- every school is different... they have no idealized parameters of what a school should look like... if a school has to make changes to meet their needs NYU will look at students through that lens
- 22 doesn't sound like anything too dramatic that would be a concern... keep taking solid core courses with a rigorous curriculum... length of periods doesn't matter to them... note changes in profile... do not compare students across high schools (i.e. student A had a lab whereas student B didn't) but rather look at what they have done with what is available to them
- 23 should not be a problem...all high schools have different scheduling
- 24 don't penalize the students for things out of their control... certainly don't expect them to switch schools or anything like that... suggest we maintain a rigorous program... suggest we clearly spell out changes we make (such as in the school profile)
- 25 would evaluate applications the same... length of time in lab doesn't matter, only thing that matters is that students are taking a lab science class... need to take 18 strong college prep courses during high school... admissions takes

into account limitations of the school

- 26 do not believe it would impact the way the University of Richmond looks at that student
- 27 sounds fine -- would not impact decision
no impact on how a student's application would be read... they are really only evaluating the core courses so the loss of an elective would not matter... students need to keep 5 solid courses in schedule each year and pick between electives... would be wise to make sure they still get some kind of lab time/ keep up test and AP scores
- 28
- 29 no impact... every school is different so they look very closely at the school profile to understand nuances, outline those changes in the school profile
- 30 would not impact admissions -- would be like plenty of high schools out there
- 31 would not impact much at all -- most top students would take AP classes anyway and have the double lab... they want to see the substance of classes, the attitude students bring to their studies... in fact the longer instruction time would probably be a benefit allowing students to delve into the material more