AGENDA AD HOC LOCAL SCHOOL COMMITTEE Thursday, June 14, 2018 7:00 p.m. Burr Ridge Village Hall Board Room

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF MAY 24, 2018 MINUTES
- 4. FOLLOW UP ON ADMINISTRATIVE COMPLAINT FILING
 - Supplemental Filing
- 5. DISCUSSION OF FILING WITH THE STATE OF ILLINOIS
- 6. DISCUSSION OF ADVISORY REFERENDUM
- 7. PUBLIC COMMENT
- 8. OTHER BUSINESS
- 9. ADJOURNMENT

DISTRIBUTION:

Trustee Zach Mottl, Co-Chairperson Trustee Anital Mital, co-Chairperson Marianne Begy Adolph Galinski Vivek Ghai Alan Hruby Clair Kovar Betsy Levy Cindy Mottl Paragi Patel Becky Singh Doug Pollock, Village Administrator Scott Uhler, Village Attorney



VILLAGE OF BURR RIDGE

MEMORANDUM

RE:	Staff Summary for June 14, 2018 Meeting
DATE:	June 12, 2018
FROM:	Doug Pollock, AICP, Village Administrator
TO:	Mayor Straub and Board of Trustees

Below is a summary of the agenda items for discussion at the June 14, 2018 meeting:

4. Follow Up On Administrative Complaint Filing - Supplemental Filing: As previously reported via email, the administrative complaint was filed by residents on June 1, 2018. Additionally, residents filed a supplemental addendum to the complaint on Tuesday, June 12, 2018. Attached is a copy of the supplemental filing. Members of the Committee will provide an update on this filing at our meeting.

5. Discussion of Filing with the State of Illinois; The Committee had previously discussed supporting residents' efforts to file a similar civil rights complaint with the State of Illinois. That consideration will be further discussed at Thursday's meeting.

6. Discussion of Advisory Referendum: At Thursday's meeting, there will be an opportunity for further discussion regarding an advisory referendum on the November ballot.

MINUTES

LOCAL SCHOOL COMMITTEE MEETING

Thursday, May 24, 2018

CALL TO ORDER

The meeting was called to order by Co-Chairpersons Anita Mital and Zach Mottl at 7:00 PM

ROLL CALL

- Present: Co-Chairpersons Anita Mital and Zach Mottl, Committee Members Marianne Begy, Adolph Galinski, Alan Hruby, Clair Kovar, Betsy Levy, Cindy Mottl, and Becky Singh.
- Absent: Committee Members Paragi Patel, and Vivek Ghai

Also Present: Village Administrator Doug Pollock and Village Attorney Scott Uhler

APPROVAL OF MINUTES

Committee Member Kovar made a motion to approve the minutes of the May 10, 2018 meeting. The motion was seconded by Committee Member Singh and unanimously approved by a voice vote of the Committee.

DICUSSION OF ADMINISTRATIVE COMPLAINT FILING

Chairperson Zach Mottl asked each member to provide an update on their collection of signatures for the petition. Each member then provided an update.

Chairperson Mottl summarized the Committee members' summaries as overwhelmingly positive with very little opposition or refusals to sign the petition. He said that he will collect the petitions from each member and file the petitions with the U.S. Department of Education on June 1, 2018. Chairpersons Mottl and Mital thanked the Committee members for their work in collecting the signatures.

DISCUSSION OF ADVISORY REFERENDUM

It was agreed that further discussion regarding the advisory referendum would be postponed.

PUBLIC COMMENT

There were no public comments.

OTHER BUSINESS

Chairperson Mottl asked Attorney Uhler about filing the second complaint with the State of Illinois. Mr. Uhler said he would provide a draft document for the Committee's review.

The Committee agreed to meet again on Thursday, June 14, 2018 at 7 pm at the Village Hall. There was no other business discussed by the Committee. Minutes – Local School Committee Meeting of May 24, 2018 Page 2

ADJOURNMENT

There being no further business, a **motion** was made by Committee Member Levy to adjourn the meeting. The motion was **seconded** by Committee Member Kovar and **approved** by a unanimous voice vote. The meeting was adjourned at 7:15 PM.

Respectively submitted,

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Doug Pollock Village Administrator

DP:bp

U.S. DEPARTMENT OF EDUCATION OFFICE FOR CIVIL RIGHTS CHICAGO OFFICE 500 West Madison Street, Suite 1475 Chicago, IL 60661

SUPPLEMENTAL INFORMATION FOR ADMINISTRATIVE COMPLAINT

COMPLAINANT

_____ [name(s)]

[Address(es)]

BASIS FOR COMPLAINT

The complainants are currently residents in Hinsdale Township High School District #86, 55 S. Grant Street, Hinsdale, Illinois 60521 (hereinafter "District") and are signatories to an original complaint dispatched by courier to the Office of Civil Rights (hereinafter "Original Complaint") on June 1, 2018.

This filing contains further information germane to the disposition of the previously filed Administrative Complaint that has come to our attention subsequent to its filing. The purpose in filing this SUPPLEMENTAL INFORMATION FOR ADMINISTRATIVE COMPLAINT is to call attention to additional facts in support of our argument that the Hinsdale Township High School District #86 Board of Education is unlawfully failing to provide students at Hinsdale South High School with equal access to Educational Resources.

PRELIMINARY STATEMENT

- 1. On October 1, 2014, the United States Department of Education, Office for Civil Rights, issued a "Dear Colleague Letter" (hereinafter "Letter") that was described in its accompanying press release as "...Guidance to Ensure All Students Have Equal Access to Educational Resources."
- 2. In the Letter, the Office for Civil Rights provided detailed descriptions of how it would determine whether a school district engaged in unlawful conduct in the allocation of educational resources, whether that conduct amounted to intentional discrimination (pp.6-8), or conduct having a disparate impact (pp. 8-9).
- 3. Conduct exhibited by the District's Board of Education plainly falls within the descriptions provided by the Office for Civil Rights of unlawful conduct in the allocation of educational resources.
- 4. Complainants file this Complaint pursuant to 20 U.S. Code § 1703 "Denial of Equal Educational Opportunity Prohibited".

JURISDICTION

5. OCR is responsible for ensuring compliance with, among other issues related to discrimination in education under federal law, the Elementary and Secondary Education Act (hereinafter "Act") and its implementing regulations and guidelines and its purpose of ensuring "full educational opportunity" for all students in the District. At 20 U.S. Code § 1703 it is specifically provided that the denial of equal educational opportunity by the actions or decision making of a local board of education is prohibited.

STATEMENT OF FACTS

6. In a May 25, 2018 article of a Chicago Tribune-affiliated local newspaper, the reporter quotes the District Superintendent commenting on the 20 U.S. Code § 1703 (c) violation alleged in the Original Complaint which had been shared with the public during a signature collection period:

"The observations (the complainants) make about proximity and attendance boundaries have merit," said District 86 superintendent Bruce Law. "The board has discussed using proximity to eliminate the buffer zone at two meetings."

7. <u>Per the Dear Colleague Letter at page 6</u>, the OCR clearly indicates that it will investigate and analyze evidence found under two theories of discrimination:

"In assessing the allocation of educational resources, OCR will investigate and analyze the evidence found under both theories of discrimination — intentional discrimination and disparate impact — to ensure that students are not subjected to unlawful discrimination."

8. <u>Per the Dear Colleague Letter at page 6</u>, the OCR begins the description of its analysis method to determine whether a school district intentionally discriminated in the allocation of resources. It poses an initial question regarding the establishment of a *prima facie* case:

"Did the school district treat a student, or group of students, differently with respect to providing access to educational resources as compared to another similarly situated student, or group of students, of a different race, color, or national origin (a prima facie case of discrimination)?"

In elaboration, at page 7, the Letter specifies how the OCR would examine resource disparities between schools:

"First, OCR would examine evidence regarding the quality, quantity, and availability of critical educational resources (as discussed in more detail below) to determine whether there are disparities among schools serving similarly situated students or among similarly situated students within the same school."

With even more specificity, at page 11, The Letter states that OCR examines whether the "full panoply" of courses is made available to students:

"OCR also examines the relative availability of the full panoply of high school courses that prepare students to graduate ready for college and careers, including the range of science, technology, engineering, and mathematics (STEM) courses, as well as middle and elementary school courses that prepare students for college- and career-preparatory high school courses."

- 9. <u>District Policy, Practice or Conduct.</u> The Hinsdale Township High School District #86 School Board (hereinafter "School Board") offered 41 courses at Hinsdale Central with a cumulative enrollment of 1908 students during the fall, 2017 semester that were unavailable to students enrolled at Hinsdale South. They are listed on Exhibit A¹. As pointed out in paragraph 17 of the Original Complaint, Hinsdale Central is 71.4% White whereas Hinsdale South is 55.9% White.
- 10. <u>District Policy, Practice or Conduct.</u> The Hinsdale South science curriculum is commonly referred to as "Physics First", a sequence of science courses unique to Hinsdale South that does not exist at Hinsdale Central. At Hinsdale South, all regular track (not Honors) science students begin with South's "GeoPhysics" course as freshmen. That is their only choice, an Earth Science course that is a *de facto* requirement to meet the science course requirement for non-honor students to graduate, a course whose content is not deemed important enough to be required of Hinsdale South honors students, a course that is not even offered at Hinsdale Central as an option to meet the high school science requirements. It is a common practice at Hinsdale Central to enroll freshmen in Biology (or either of its two alternative tracks). See table in paragraph 12 for enrollment data. Hinsdale South students are denied the opportunity to begin their high school science classes with Biology.
- 11. <u>District Policy, Practice or Conduct.</u> According to the Hinsdale South Program of Studies, the prerequisites for GeoPhysics are described as follows:

"Prereq (stet): For students recommended for Algebra 1 or lower OR for students recommended for 'Integrated Algebra and Geometry' who have not mastered HSHS algebra skill sheet"

The Course description of GeoPhysics includes the following:

"This course combines Earth Science content and explores the Physics that underlie observable phenomenon."

For regular track students at Hinsdale South to match the preparation provided by the Hinsdale Central Traditional Physics course (03920), they not only have to take South's required GeoPhysics course (3640), but they also have to take South's real Physics course (3970). Furthermore, doing so requires them to double up on science courses as juniors (taking both Biology and Physics), an academic burden not imposed upon Central students. That also means that as juniors, South students likely

¹ Subsequent to filing the original complaint, it was discovered that in the documents provided by the School District in response to FOIA 17 - 80, course enrollment tallies for each school reflected different reporting conventions. Classes at Hinsdale Central that overlapped lunch periods were reported twice in the listings. This led to some instances of double counting of Hinsdale Central course enrollments reported in the original complaint. An additional feature incorporated in Exhibit A is a breakout of registrations by class session tying directly to the FOIA 17 – 80 reply document to aid in the verification of the tallies reported.

either take an overload or forego courses in other departments that they would otherwise like to take in order to catch up with the Central program.

Further underscoring the inadequacy of the Hinsdale South course in GeoPhysics as a substantive course in Physics, the course description for Physics (03970), the actual Hinsdale South Physics course, reads as follows:

"This math-intensive course (requires strong Algebra I skills) is for students who took GeoPhysics as freshmen but who would like to take a full physics course to better prepare them for college."

12. <u>District Policy, Practice or Conduct.</u> As shown in the following table, the School Board offered three tracks of high school level Biology for average and above students at Hinsdale Central. During fall, 2017 semester, 25.2% of Hinsdale Central Biology students were enrolled in General Biology, 50.4% in regular track Biology, and 24.4% were in Biology Honors. There was only one track of Biology, the regular track, for comparable students at Hinsdale South. Hinsdale South also offered two special education classes in Applied Biology (01830) with a total enrollment of 17 students.

Hinsdale Central	Hinsdale South
General Biology (3700G)	
166 Students (25.2% of enrollment)	No comparable offering.
Number of Classes 9	No classes/No enrollment
Average Class Size 18.4	
<u>Biology (03710)</u>	<u>Biology (03720)</u>
332 Students (50.4% of enrollment)	160 Students (100% of enrollment)
Number of Classes 15	Number of Classes 8
Average Class Size 22.1	Average Class Size 20
Biology Honors (03720)	
161 Students (24.4% of enrollment)	No comparable offering.
Number of Classes 8	No classes/No enrollment
Average Class Size 20.1	

See Exhibit B for details.

13. <u>District Policy, Practice or Conduct.</u> Hinsdale Central separates its regular track Chemistry and Physics students into either of two courses—Traditional and Themed. The Traditional courses are designed for students aspiring to future enrollment in Central's Advanced Placement (AP) classes in Chemistry and Physics; the Themed courses are suited for students who don't aspire to enroll in these AP classes. At Hinsdale South, Themed Chemistry and Themed Physics are not offered.

14. <u>District Policy, Practice or Conduct.</u> Hinsdale Central also offers a course entitled Chemistry/Physics 1, an additional targeted science class, whose description includes the following:

"This lab oriented course is taught at a pace that allows students to focus on chemistry and physics content development as well as study skills that could prepare students for a full-year chemistry or physics course."

This course is not offered at Hinsdale South.

15. <u>District Policy, Practice or Conduct.</u> As shown in the following table, the School Board offered three tracks of high school level Physics for average and above students at Hinsdale Central. During fall, 2017 semester, 19.8% of Hinsdale Central Physics students were enrolled in Physics Themed, 58.3% in Physics Traditional, and 21.9% in Chemistry/Physics.

Hinsdale South offered two high school level courses in Physics, each aimed at different year students. The first was Physics Honors (03920) which was offered to freshmen of above average science ability. The second was regular Physics (03970) which was offered to juniors and seniors who began their science education with GeoPhysics (03640).

It is noteworthy that, as shown in the following table, in the Fall, 2017 semester a total of 429 Hinsdale Central sophomores, juniors and seniors were enrolled in one of their three Physics course offerings in contrast to only 23 juniors or seniors being enrolled in Hinsdale South's single regular track high school level Physics course. Hinsdale South is a smaller school, therefore a smaller enrollment might be expected, but not so much smaller as to explain why Hinsdale Central had 18 times more sophomores, juniors and seniors enrolled in Physics classes than did Hinsdale South. Even though, in response to this disproportionality, it could be pointed out that there were 92 freshmen enrolled in Physics Honors, the prospect of doubling up on science classes as an upperclassman at Hinsdale South in order to catch up with the Hinsdale Central program (as described in paragraph 11 and illustrated in the chart in paragraph 20) seems to weigh heavily against continued enrollment in Physics courses at that school. This disproportionality is mirrored in AP Physics classes as well as is described in paragraph 17.

Hinsdale Central	Hinsdale South	Hinsdale South
	Freshmen	Junior/Senior
Physics Themed (3900)		
85 Students (19.8% of enrollment)	No comparable offering.	No comparable offering.
Number of Classes 4	No classes/No enrollment	No classes/No enrollment
Average Class Size 21.3		
Physics Traditional (03920)	Physics Honors (03920)	Physics (03970)
250 Students (58.3% of	92 Students (80% of	23 Students (20% of
enrollment)	enrollment)	enrollment)
Number of Classes 12	Number of Classes 5	Number of classes 1
Average Class Size 20.8	Average Class Size 18.4	Average Class Size 23
Chemistry/Physics (03800)		
94 Students (21.9% of enrollment)	No comparable offering.	No comparable offering.
Number of Classes 5	No classes/No enrollment	No classes/No enrollment
Average Class Size 18.8		

See Exhibit C for details.

- 16. <u>District Policy, Practice or Conduct.</u> Whether Hinsdale South students decide to double up on science as juniors, as described in paragraph 11, or just catapult themselves all the way from GeoPhysics as freshmen to a college level Physics course as seniors (which they are allowed to do), they and their Hinsdale Central counterparts ultimately face the same metric of success—the AP Physics 1 exam. According to FOIA 17-39, there were 130 students in the Central AP Physics 1 class in 2016, 116 took the test and 86 scored a 3, 4, or 5 on the exam. 74% passed the exam. At South in 2016 there were only 23 students enrolled in AP Physics 1, 18 took the test and just 11 scored a 3, 4 or 5. 61% passed.
- 17. <u>District Policy, Practice or Conduct.</u> An analysis of the distribution of AP science course enrollment at Hinsdale Central and Hinsdale South during the fall, 2017 semester yielded the following result:

	Hinsdale Central	Hinsdale South
AP Biology	95 (20.2% of Total AP	149 (43.4% of Total AP
	Science Courses)	Science Courses)
AP Chemistry	59 (12.6%)	49 (14.3%)
AP Physics 1	173 (36.8%)	24 (7.0%)
AP Physics 2	21 (4.5%)	0 (0.0%)
AP Physics C	34 (7.2%)	38 (11.1%)
AP Environmental Science	88 (18.7%)	83 (24.2%)
AP Total	470	343

See **Exhibit D** for details².

²In addition to the courses listed there were two other Science AP courses offered at Hinsdale Central—AP Seminar: Science with a registration of 13 students and AP Research: Science with a registration of 7 students. These courses

This table shows a notable concentration of Hinsdale South AP enrollment in AP Biology (43.4% of total AP science course enrollment) as well as a notable paucity of AP enrollment in AP Physics 1 (7.0% of total) and a complete absence of enrollment in AP Physics 2 (0.0% of total).

A Biology course is regarded as almost a necessity for college admission. At Central most students meet that requirement as freshmen, so AP Biology would be a second Biology course for them, a choice probably more attractive to those students envisioning a career in medicine. However, for the rest of Central's top science students, including future engineers, chemists and physicists, AP Biology is a course that has to compete against a variety of alternative science courses that may be more in tune with their aspirations. At Hinsdale South, it's different. Biology isn't offered until junior year. At that point college-bound students have a forced choice to make—either AP Biology or high school Biology. They are going to spend a school year taking Biology, so students go for the chance to earn college credit while they are at it. So higher enrollment in AP Biology at Hinsdale South should be expected.

While Hinsdale Central enrolled 194 students in AP Physics 1 and AP Physics 2, Hinsdale South enrolled only 24. That is more than 8 times as many students enrolled in AP Physics 1 and 2 classes at Hinsdale Central than at Hinsdale South. This should come as no surprise. At Central, access to AP Physics 1 and AP Physics 2 is unrestricted by previous coursework. At Hinsdale South, only regular track students (those who took GeoPhysics) are allowed to enroll in AP Physics 1 and AP Physics 2, if it were ever offered there. As stated in paragraph 40 of the original complaint, The District's reply to FOIA 17-39 fails to cite even one student from Hinsdale South to have ever sat for the AP Physics 2 exam since its national inception as an AP course in the 2014-2015 school year. Hinsdale South students who took Physics Honors as freshman have no choice but the highly demanding, Calculus-based, engineering college-equivalent AP Physics C. Not every student in Hinsdale South's top quartile that enrolls in Physics Honors is destined to become an engineer (there were only 38 Hinsdale South students enrolled in AP Physics 1 or AP Physics 2, but that opportunity is not open to them.

As was pointed out in Paragraph 34 of the original complaint, the Hinsdale Central Science Department Chairperson told the School Board:

"By moving life science to junior year, you can almost guarantee that students are going to enroll in that third year. No one's going to leave high school without having taken Biology. So, it was very strategic in terms of their placement there. Did we have that need at Hinsdale Central? No, that wasn't a concern for us."

The disproportionalities of enrollment in AP Physics between Hinsdale Central and Hinsdale South, as well as the disproportionalities of enrollment in high school level Physics discussed in paragraph 15, lead to only one conclusion—at Hinsdale Central, choice of science class is driven

were open to Hinsdale South students who would have to travel to Hinsdale Central to take them. These courses are not included in the analysis since it is not determinable from records supplied under FOIA 17-80 whether some of these 20 students were from Hinsdale South.

by student choice; at Hinsdale South choice of science class is driven by a strategy to boost third year science enrollment, at the expense of a compromised curriculum that denies students access to equal educational opportunities. Any requirement imposed upon the School Board to provide the same science curriculum at both schools might force structural changes--be they boundary changes, grade level centers or other solutions--in how education is delivered throughout the School District because science curriculum parity likely could not be supported at less-populated Hinsdale South, as it exists today. This, of course, would force the School Board to find solutions that would be unpopular with Hinsdale Central area residents. As detailed in paragraph 21, we believe this conclusion follows from recent public comments made by the School Board President.

18. <u>Per the Dear Colleague Letter at page 7</u>, in the event that the OCR determines that a school district treated students having a different race, color or national origin differently, the Letter articulates a test to avert a finding that the different treatment amounted to intentional discrimination:

"Can the school district articulate a legitimate, nondiscriminatory, educational reason for the different treatment?"

In the event that a School Board provides an explanation to justify its different treatment of students having a different race, color or national origin, the Letter provides the following additional inquiry:

"Is the allegedly nondiscriminatory reason a pretext for discrimination?"

In further elaboration, the Letter specifies how the OCR would assess the school districts explanation:

"OCR would then assess whether the explanation is a pretext for unlawful discrimination — in other words, not the true reason for the different treatment but rather a mere cover for racial discrimination."

19. <u>District Policy, Practice or Conduct.</u> Based on its public posturing in response to this complaint, it is believed that the School Board will respond with two points. The first will be to cite achievements of Hinsdale South science students as recognized in state or national school rankings. The second will be to cite academic research that supports a belief that offering a physics-chemistry-biology (Physics First) sequence is a more effective way to teach science. It is not within the scope of this complaint to either discredit the achievements of Hinsdale South science students or to challenge academic research that favors a Physics First sequence³.

³ Nonetheless, in the event that the OCR chooses to attach relevance to such assertions, complainant asks for the opportunity to respond to them to provide possibly needed clarification. For example, at the June 4, 2017 School Board meeting, in response to this complaint, the Hinsdale South principal publicly pointed out that Hinsdale South scored higher than Hinsdale Central on the Illinois State Science Assessment Test. The mean score for Hinsdale South was 324 while the mean for Hinsdale Central was 321. However, she neglected to point out that this test was administered to high school students, "...while taking their first biology course in high school." See Exhibit E. That means Hinsdale Central's 321 mean score was for freshmen (14 and 15-year-olds) while Hinsdale South's 324 mean score was for juniors (16 and 17-year-olds who already had two more years of high school science than their

However, it is within the scope of this complaint to argue that the particular implementation of Physics First solely at Hinsdale South in fact serves as the pretext for the School District to deny Hinsdale South students access to, in the words of the Letter, *"the full panoply of high school courses that prepare students to graduate ready for college and careers"* and continue its unlawful discrimination against them.

Remarkably absent from the dialogue over the last 10 years during which Physics First has been offered at Hinsdale South is any clamor from the Hinsdale Central community to offer the same program at their school. Where are the Central voices beseeching the School Board to swap out Hinsdale Central's three high school level Biology tracks and funnel all their children into one? Where are the Central voices pleading that the School Board cancel Hinsdale Central's Themed Chemistry course, or its Themed Physics course, or its Chemistry/Physics course so they could be just like Hinsdale South? And finally, where are the Central voices imploring the School Board to deny their children access to AP Physics 1 and AP Physics 2 simply because they were bright enough (falling approximately within the upper quartile) to enroll in Physics Honors as freshmen?

20. The inequitable implementation of the School District's Physics First sequence for Hinsdale South students becomes clear when it is held up in comparison to the implementation of the Physics-Chemistry-Biology ("PCB") at the New Trier High School District with schools in Northfield and Winnetka, IL. According to illinoisreportcard.com, New Trier Township High School District 203, is a high school that is educating a total of 4,006 students. In comparison, Hinsdale Township High School District 86 is educating 4,316 students, 310 more students. Exhibit F is an extract from the New Trier Program of Studies that includes the following passage:

"The Science Department offers three laboratory courses for freshmen: Biology, Environmental Geoscience, and Physics PCB. Students are encouraged to choose the course that best matches their interests and draws on their academic strengths. Each course appeals to students for different reasons...."

Exhibit G is another document published by New Trier identifying 13 "Common Pathways" for students to choose from in planning their science education. The first two Pathways are "PCB Common Pathways". The next five are "Biology Common Pathways". Then there are three "Environmental Geoscience Common Pathways", and finally a "No Science 1st Year Common Pathway". Setting aside possible quibbling over course topic differences, virtually all of the 11 non-PCB Common Pathways can be replicated at Hinsdale Central. None of the 11 non-PCB Common Pathways can be replicated at Hinsdale South.

So, while at New Trier, and no doubt at Hinsdale Central as well, "Students are encouraged to choose the course that best matches their interests and draws on their academic strengths.", at

Biology-enrolled freshmen counterparts at Hinsdale Central). Thank goodness Hinsdale South students scored higher.

Hinsdale South it's different. At Hinsdale South, as a freshman, if you are an above average student, you likely will enroll in Physics Honors; otherwise you will likely enroll in GeoPhysics or maybe Geophysics AR. From there, according to the Hinsdale South Program of Studies chart on page 63, here is your future (note the lack of flexibility and need to double up on science courses to keep pace):

9 th Grade	10 th Grade	11 th Grade	12 th Grade
	Concepts in Chemistry (AR)		Electives
Geophysics (AR option available)	Chemistry	Biology	Electives
Physics Honors	Chemistry Honors	AP Biology	Electives
	Can be taken concurrently with Chemistry or Chemistry <u>Honors:</u> AP Seminar: Science	Can be taken concurrently with Biology or AP Biology Physics Earth Science Anatomy & Physiology AP Physics 1 AP Environmental Science AP Chemistry AP Seminar: Science AP Research: Science	Physics Earth Science Anatomy & Physiology AP Physics 1 AP Physics 2 AP Physics C AP Environmental Science AP Chemistry AP Biology AP Seminar: Science AP Research: Science

HSHS SCIENCE DEPARTMENT COURSE SEQUENCE:

21. <u>District Policy, Practice or Conduct.</u> During a June 4, 2018 School Board meeting, after severely criticizing the complainants, the School Board President opined on the motivation of those seeking science curriculum equity, making the following statement:

"I could stop here and probably should, but I won't, because I will ask what is their motivation. That's what I asked earlier. Part of their motivation is to create grade level centers..."

Thus, in a moment of unfiltered candor, The School Board President conflated science curriculum equity between the high schools with conversion to grade level centers (freshmen/sophomores at one school; juniors/seniors at the other). Setting aside the questions of whether grade level centers would be viable (he says they would not) or desired (a School District survey that would have asked voters that question was cancelled by the School Board in Fall, 2017 after Central area residents objected), the President clearly revealed his apprehension that the perpetuation of the compromised science curriculum at Hinsdale South is critical to the corresponding perpetuation of the District's business as usual, which in turn amounts to a perpetuation of all the inequities that are the very essence of this complaint. Notwithstanding the School Board

President's comment, the relief sought in this complaint asks that OCR take all necessary steps to remedy curriculum disparities between Hinsdale Central and Hinsdale South to assure the full panoply of courses are available to students throughout the District regardless of where they live, but complainants do not insist that grade level centers are the only means to that end.

22. <u>Per the Dear Colleague Letter at page 7</u>, in recognizing that evidence submitted by a school district seeking to justify different treatment of students having a different race, color or national origin may be pretextual, the Letter further allows for the incorporation of additional evidence of pretext:

"Evidence that an explanation is pretextual may include, but is not limited to, that...witnesses or documents credibly offer evidence that contradicts the explanation offered (by the school district)"

Then, in elaborating on the question of whether an allegedly nondiscriminatory reason was serving as a pretext for discrimination, the Letter at page 8 specifically identifies racial stereotyping as an example:

"For example, the actual purpose or explanation for the different treatment could be a stereotype about a particular race not opting for or valuing advanced coursework. If OCR finds that the reason for the different treatment is pretextual, then the recipient would be found in violation of Title VI."

23. <u>District Policy, Practice or Conduct.</u> It is believed that in its reply to this complaint the School District might seek to defend its inequitable treatment of Hinsdale South students based on either an overt or implied assertion that students at Hinsdale South are so different from students at Hinsdale Central that offering them the same curricular choices that Hinsdale Central students enjoy would be inappropriate for their lesser-prepared academic readiness.

As was stated in paragraph 21 of the Original Complaint, District administrative staff members engaged the community twice to present information from the Strategic Planning process (February 6 and February 12, 2018). Under the watch of the School Board and without noticeable objection from any of its members, a series of charts and messaging showed differences in what they defined as "High School Readiness" between students entering Hinsdale Central and those entering Hinsdale South. As is shown in **Exhibit I of the Original Complaint**, their charts averaged the eighth-grade scores for the students from each sender school. Their analysis and messaging stated that the students entering Hinsdale South, the significantly more racially and socioeconomically diverse school, were below the targeted level of reading and math, and therefore not ready for high school. The messaging included the following statement by the Principal of Hinsdale Central:

"What you are currently looking at here is the Hinsdale South Students. Eighth grade students preparing to enter in the Fall of 2017. That's our class of 2021, our current freshmen. As you can see, they are below or barely at level of reading and math from the feeder schools feeding into South. At Central, it's a little bit different story. Our students are at or above their reading and math levels as they enter our building in the fall of 2017. Again, this is our last year's eighth grade scores, our current freshman."

The Hinsdale Central Principal's messaging continued:

"The last three years at Hinsdale Central, they are at the reading level and they are at the math level, and you can see the feeder schools, students entering Hinsdale South, are both below reading and below math, as they enter those buildings. So, recognizing this has nothing to do with the current status at South or Central, it's how the students are coming to us."

These statements were made at both public meetings. The use of "averages" to compare students at Central and South betrays a presentation tactic aimed at camouflaging the actual remarkable preparedness of a substantial portion of the students entering Hinsdale South, and fosters, in the words of the Letter, "a stereotype about a particular race not opting for or valuing advanced coursework."

It is believed that the purpose of these statements and tactics, as well as the accompanying presentation as a whole, was to lay the groundwork for the School Board to further differentiate curricular offerings between the schools so that it could offer even more advanced and refined courses at Hinsdale Central while overlooking students at Hinsdale South who are every bit as ready to benefit from them as well, but who happen to live in a less favored area.

24. <u>Per the Dear Colleague Letter at page 8</u>, the OCR begins its description of the second analysis method it would use to determine whether a school district engaged in unlawful conduct, specifically whether it adopted facially neutral policies or practices that, while not intended to be discriminatory, had an unjustified, adverse disparate impact on students based on race, color, or national origin:

"Does the school district have a facially neutral policy or practice that produces an adverse impact on students of a particular race, color, or national origin when compared to other students?"

Then, the Letter poses a test over whether such a facially neutral policy or practice that creates access disparities is important to the quality of education a student receives:

"The first prong of this analysis requires OCR to identify a policy or practice that creates racial disparities in access to educational resources that are important to the quality of education a student receives, such that the disparity has an adverse impact on a racially defined group of students."

At page 9, the Letter clearly describes the importance test. The answer is clear and simple. A decision of a school district to provide a resource at any school is evidence that that resource is important. The school district would be expected to equitably provide the resource to all students. No, not just for some--but for everyone.

"Additionally, OCR would also consider the school district's decision to provide a particular resource to students, such as technology or a gifted and talented program, as evidence that the district believes the resource is important. OCR would expect these resources to be equitably provided without regard to students' race, color, or national origin."

25. <u>District Policy, Practice or Conduct.</u> It is believed that in its reply to this complaint the School District might seek to defend a particular facially neutral policy that produces an adverse effect on Hinsdale South students based on an assertion that providing curriculum parity across the district would be uneconomical because some of these classes could not be filled at Hinsdale South.

The School Board not only has a practice of flat-out not offering certain Hinsdale Central courses to Hinsdale South students, but also has a practice of offering some other courses every year at Hinsdale Central but only every other year at Hinsdale South, ostensibly because the lower and steadily shrinking enrollment at Hinsdale South makes doing so uneconomical. In addition, the School Board has a practice of cancelling courses at Hinsdale South when enrollment is insufficient to economically offer them. These courses are shown by asterisks on **Exhibit A**.

Irrespective of its merits, any such excuse is based on economics, not education. Under the OCR's own test for importance, an asymmetric denial of or restraint upon course offerings to students attending a less-favored high school has a disparate effect that should be viewed axiomatically as, in the words of the Letter, "*important to the quality of education a student receives*". It must not be condoned.

This school board, whose members over the last 12 years have neglected an enrollment plunge of over 400 students at Hinsdale South, has the power to alleviate these problems through a variety of common-sense actions to increase the utilization of Hinsdale South. However, such actions would require the Board to prioritize the provisioning of equal education opportunities to Hinsdale South students over their current practices that favor Hinsdale Central students and property owners, a prioritization that they have not yet demonstrated a willingness to make. Instead, while continuing to offer these courses to students at Hinsdale Central, its members merely deny them to students at Hinsdale South.

LEGAL ALLEGATIONS

26. In addition to the allegations set forth in the Original Complaint, we further allege that the practice of the District in approving and providing a compromised curriculum for Hinsdale South students not only constitutes a denial of equal education opportunities for these students, but also clearly contradicts and violates the compliance guidance stated in great depth by the Office for Civil Rights in its October 1, 2014 letter.

RELIEF REQUESTED

- 27. **One District/One Curriculum--**Complainants respectfully request that OCR take all necessary steps to remedy curriculum disparities between Hinsdale Central and Hinsdale South across all subject areas to assure the full panoply of courses are available to students throughout the District regardless of where they live.
- 28. With regard to disparities in the science curriculums specifically, we request the OCR to mandate that Hinsdale South provide its average and above average students with a Central-style science curriculum alternative, one that would offer the benefits of greater preparation for AP Biology and a more robust selection of AP Physics courses. If Hinsdale South's current Physics First curriculum can stand on its own against a Hinsdale Central-style science curriculum alternative, so much the better.

But we think it can't. Once given the choice to take a Hinsdale Central-style science course sequence, how many South freshmen will opt for Physics Honors, a course that overlaps some of the content of AP Physics 1, but for which no AP credit can be obtained?

These students would more likely opt for the much less risky pathway to AP Physics C, the pathway currently offered by Hinsdale Central to its students. Why wouldn't they simply choose AP Physics 1 as juniors, and if successful there, opt to take AP Physics C as seniors? And after finishing AP Physics 1, if some of them didn't feel ready for AP Physics C in their senior year, they could enroll in AP Physics 2. Less risk. More options. More opportunity for AP credit.

29. Put Hinsdale South on an equal footing with Hinsdale Central.

Respectfully submitted,

Exhibit A

	86 Courses Suitable for Average				Breakout o	negi	strat	aons	y ·	cour	38.3	331			
Offered	Exclusively at Hinsdale Central	During Fal	, 2017 Semes	ter											
		Course #	Registrations												
Art					Session:	1	2								
	Jewelry, Metal and Glass*	5351	22			14	8								
	Advanced Jewelry, Metal and Glass														
	Honors	5363	2			2		-							
				24		-		-	-				-		
Business					Session:	1	2	3							
	Accounting*	6170	36			16	20								
	Accounting Honors*	6180	45			21	24								
	Investment Planning*	6111	79			27	26	26							
	Sports Marketing	6183	12	470		12		-					-		
F				172	Caralteria		-								
English	1 4	4054			Session:	11	2								
	Journalism 1	1651 1660	11					-							
	Newsmagazine Journalism Honors	1000	20			20									
	Newsmagazine Online Journalism	1000	20			20									
	Honors British Literature I	1665 1581	20			20	20								
	British Literature II	1581	20			20	20								
	U.S. Literature & Composition	1391	38			18	20								
	Senior Literature	1491	23			23	20								
	Senior Ellerature	1491	23	172		2.3		-							
Family &	Consumer Sciences	-		1/2	Session:	1	2	3							
ranny o	Fashion Merchandising*	6571	22		Jession.	7	15								
	Single Survival	6441	34			21	13								
	Shiple Surviva	0441		56		~ 1	10								
Music					Session:	1	2								
india	Concert Orchestra	5680	12		Session.	12	-	-					-		
	Concert Orchestra Honors	5685	13			13									
	Symphony Orchestra	5690	9			9		-							
	Symphony Orchestra Honors	5695	27			27									
	Chamber Orchestra Honors	5700AN	18			18									
	Orchestra Winds and Percussion	5870BN	28			26	2								
	Jazz Lab Honors	5679BN	57			28	29								
	Jazz Ensemble Honors	5675AN	10			10									
				174											
Science					Session:	1	2	3	4	5	6	7	8	9	
	General Biology	3700G	166			17	19	20	20	21	22	8	17	22	
	Biology Honors	3720	161			19	18	23	20	14	23	21	23		
	General Earth Science	3740G	116			21	18	18	18	22	19				
	Earth Science Honors	3760	76			16	22	21	17						
	Chemistry/Physics 1	3800	94			17	17	22	22	16					
	Themed Chemistry	3810	115			22	23	24	23	23					
	Themed Physics	3900	85			24	17	21	23						
	Meteorology and Astronomy	3771	117			19	19	18	24	17	20				
	AP Physics 2*	3950	21			13	8								
				951											
Social St	udies				Session:	1	2								
	Western Civilization	2261	56			29	27								
	East Asian Studies*	2241	51				26								
	Philosophy Honors*	2393	32			13	19								
				139											
World La	inguages				Session:	1	2	3							
	Etymology*	4371				17									
	French 4 Honors	4145				27									
	Latin 3 – 4 Caesar/Vergil	4360					16	16							
	AP Spanish Literature	4565	13			13									
	Spanish 5 Honors in Latin American														
	Studies	4550				26		23							
	Introduction to Spanish	4505	39			25	14								
				220											
				1908											

Exhibit B

	Hinsdale Ce	entral - Fall, 201	L/ Enrollment			Hinsdale So	uth - Fall, 20	17 Enrollment	
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
190	03700G - 7	General Biology	9	8	Room Number	course Number	course rice	Class Fellou	LIIIOIIIIIEIIU
190	03700G - 8	General Biology	10	17	No Comparable (Offering to Gener	Riology		
192	03700G - 1	General Biology	1	17	No comparable v	onening to denen	al blology		
192	03700G - 3	General Biology	2	20					
192	03700G - 9	General Biology	3	20					
192	03700G - 4	General Biology	4-5	22					
192	03700G - 5	General Biology	6-7	20					
192	03700G - 6		9						
192		General Biology	10	22					
192	03700G - 2	General Biology		19					
			Total Enrollment		· · · · · · · · · · · · · · · · · · ·				
			Average Class Size	18.4					
			Percentage of Total	25.2%					
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
132	03710 - 8	Biology	1	23	107	03720 - 4	Biology	4 - 5	21
132	03710 - 9	Biology	2	20	107	03720 - 5	Biology	6 - 7	18
132	03710 - 15	Biology	3	20	108	03720 - 1	Biology	1	20
132	03710 - 10	Biology	6 - 7	23	108	03720 - 2	Biology	2	20
132	03710 - 4	Biology	10	22	108	03720 - 3	Biology	3	19
188	03710 - 11	Biology	1	23	108	03720 - 6	Biology	6-7	21
188	03710 - 12	Biology	2	22	108	03720 - 7	Biology	9	18
188	03710 - 1	Biology	3	20	108	03720 - 8	Biology	10	23
188	03710 - 2	Biology	5-6	24			8/	Total Enrollment	160
188	03710 - 3	Biology	7-8	24				Average Class Size	20
188	03710 - 13	Biology	9	23				Percentage of Total	100%
188	03710 - 14	Biology	10	22				r crocinage or rotar	10070
197	03710 - 5	Biology	2	20					
197	03710 - 6	Biology	3	23					
197	03710 - 7	Biology	4 - 5	23					
157	03710 7	DICIOBY	Total Enrollment	332					
			Average Class Size	22.1					
			Percentage of Total	50.4%					
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
132	03720 - 5	Biology Honors	9	14					
189	03720 - 1	Biology Honors	1	19	No Comparable	Offering to Biolog	y Honors		
189	03720 - 2	Biology Honors	2	18					
189	03720 - 3	Biology Honors	3	23					
189	03720 - 4	Biology Honors	5 - 6	20					
189	03720 - 6	Biology Honors	7 - 8	23					
189	03720 - 7	Biology Honors	9	21					
189	03720 - 8	Biology Honors	10	23					
			Total Enrollment	161					
			Average Class Size	20.1					
			Percentage of Total	24.4%					

Exhibit C

	Hinsdale Ce	entral - Fall, 2017	Enrollment			Hinsdale Sou	th - Fall, 201	7 Enrollment	
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
195	03900 - 3	Physics Themed	1	21	noomnumber	course Humber	course mac	clussificitiou	Enronnen
195	03900 - 4	Physics Themed	2	23	No Comparable	Offering to Physi	cs Thomad		
195	03900 - 1	Physics Themed	7-8	24	No comparable	Offering to Physi	cs memeu		
195	03900 - 2	Physics Themed	10	17					
195	03900 - 2	Physics memed	Total Enrollment	85					
		1		21.3					
			Average Class Size	19.8%					
		0	Percentage of Total	19.8%					
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
134	03920 - 10	Physics Traditional	4 - 5	23	102	03920 - 1	Physics Honors	1	17
134	03920 - 11	Physics Traditional	6 - 7	23	102	03920 - 2	Physics Honors	2	16
134	03920 - 12	Physics Traditional	9	21	102	03920 - 3	Physics Honors	5 - 6	20
182	03920 - 1	Physics Traditional	9	24	102	03920 - 4	Physics Honors	7 - 8	22
182	03920 - 2	Physics Traditional	10	22	102	03920 - 5	Physics Honors	10	17
187	03920 - 7	Physics Traditional	1	24				Total Enrollment	92
187	03920 - 8	Physics Traditional	2	22				Average Class Size	18.4
187	03920 - 3	Physics Traditional	3	22				Percentage of Total	80.0%
187	03920 - 4	Physics Traditional	4 - 5	23					
187	03920 - 5	Physics Traditional	7 - 8	23	Room Number	Course Number	Course Title	Class Period	Enrollment
187	03920 - 6	Physics Traditional	9	23	100	03970 - 1	Physics	2	23
			Total Enrollment	250				Total Enrollment	23
			Average Class Size	20.8				Average Class Size	23
			Percentage of Total	58.3%				Percentage of Total	20.0%
Room Number	Course Number	Course Title	Class Period	Enrollment	Room Number	Course Number	Course Title	Class Period	Enrollment
190	03800 - 1	Chemistry/Physics	1	17					
190	03800 - 2	Chemistry/Physics	2	17	No Comparable	Offering to Chem	istry/Physics		
190	03800 - 4	Chemistry/Physics	3	22	ine semperatore				
190	03800 - 3	Chemistry/Physics	4 - 5	22					
190	03800 - 5	Chemistry/Physics	6-7	16					
150	00000 0	ccinisci y/i nysics	Total Enrollment	94					
			Average Class Size	18.8					
			Percentage of Total	21.9%					
			Percentage of Total	21.370					
		-							

Exhibit D

Room Number	r Course Number	Course Title	Class Period	Enrollment	% of Total	Room Number	Course Number	Course Title	Class Period	Enrollment	% of Total
	03730 - 1	AP Biology	1	24			02740 4			40	
197						106	03740 - 1	AP Biology	1	19	
197	03730 - 2	AP Biology	7 - 8	24		106		AP Biology	2	21	
197	03730 - 3	AP Biology	9	23		106	03740 - 3	AP Biology	3	22	
197	03730 - 4	AP Biology	10	24		106	03740 - 4	AP Biology	4 - 5	23	
		AP Biology				106	03740 - 5	AP Biology	6 - 7	19	
		AP Biology				106	03740 - 6	AP Biology	9	23	
		AP Biology				106	03740 - 7	AP Biology	10	22	
				95	20.2%					149	43.4%
134	03840 - 1	AP Chemistry	1	21		103	03820 - 1	AP Chemistry	2	14	
134	03840 - 2	AP Chemistry	2	17		103	03820 - 2	AP Chemistry	3	14	
134	03840 - 2	AP Chemistry	3	21		103	03820 - 2	AP Chemistry AP Chemistry	3 4 - 5	20	
134	03040 - 3	onemistry	5	59	12.6%	103	03020 - 3	A Chemistry	4-0	49	14.3%
				J 3	12.0%					49	14.3%
100	03930 - 1	AP Physics 1	1	18		100	03910 - 1	AD Dhusiss 1	2	24	
182	03930 - 7	AP Physics 1 AP Physics 1	1	10		100		AP Physics 1	3	24	
183	03930 - 7 03930 - 8	AP Physics 1 AP Physics 1	2	23				AP Physics 1			
183	03930 - 8 03930 - 2	AP Physics 1 AP Physics 1	3	19				AP Physics 1			
183								AP Physics 1			
183	03930 - 3	AP Physics 1	4 - 5	24				AP Physics 1			
183	03930 - 4	AP Physics 1	7 - 8	24				AP Physics 1			
183	03930 - 5	AP Physics 1	9	24				AP Physics 1			
183	03930 - 6	AP Physics 1	10	22				AP Physics 1			
				173	36.8%					24	7.0%
182	03950 - 1	AP Physics 2	4 - 5	13				AP Physics 2			
182	03950 - 2	AP Physics 2	7 - 8	8				AP Physics 2			
102		,		21	4.5%			,		0	0.0%
					4.570					v	0.070
182	03960 - 1	AP Physics C	2	15		102	03940 - 1	AP Physics C	3	19	
182	03960 - 2	AP Physics C	3	19		102	03940 - 2	AP Physics C	9	19	
102		,	-	34	7.2%	102			5	38	11.1%
131	03770 - 3	AP Environmental	2	17		104	03670 - 1	AP Environmental	1	20	
131	03770 - 4	AP Environmental	3	15		104		AP Environmental	7 - 8	21	
131	03770 - 1	AP Environmental	7 - 8	17		104	03670 - 3	AP Environmental	9	23	
131	03770 - 5	AP Environmental	9	23		104	03670 - 4	AP Environmental	10	19	
131	03770 - 2	AP Environmental	10	16				AP Environmental			
				88	18.7%					83	24.2%
					100.001					2.5	405 -01
		Total AP Registrat	ons	470	100.0%			Total AP Registrat	tions	343	100.0%



Illinois State Board of Education

100 W. Randolph St., Suite 14-300 • Chicago, Illinois 60601

James T. Meeks Chairman

Tony Smith, Ph.D. State Superintendent of Education

FAQ Illinois Science Assessment Scores

February 14, 2018, ISBE Office of Communications

1. What is the Illinois Science Assessment (ISA)? Who takes this assessment?

The Illinois Science Assessment is an online statewide student performance assessment that aligns to the <u>Illinois Learning Standards for science</u>, which incorporate the national Next Generation Science Standards. Students take the assessment once per year in the spring in the fifth grade, eighth grade, and while taking their first biology course in high school. The test is untimed, but designed to take approximately one hour.

The ISA is designed to reflect classroom experiences. Students who have taken the ISA have said it seems more like instruction than a test. The ISA pushes students to apply their knowledge when they give answers instead of only filling in the bubble of a multiple-choice test, thus better preparing students for higher education and a career. All students deserve the opportunity to demonstrate what they know.

2. Why do students take the Illinois Science Assessment?

Federal accountability law requires that all students take statewide assessments in specific subjects and grades. Students must take an achievement exam in science three times between third and 12th grades. In Illinois, students take the Illinois Science Assessment in the fifth grade, eighth grade, and while taking their first biology course in high school.

A high-quality science assessment is one component of a high-quality science education. The assessment results help us identify local successes in implementing the Illinois Learning Standards for science. The ISA provides educators and administrators with additional data to inform broad curriculum adjustments over time. The ISA helps families understand how well their students are performing academically in science. The ISA represents Illinois' commitment to equity and to preparing all students for college and careers, including in the high-demand science, technology, engineering, and mathematics (STEM) fields. The science curriculum is designed to develop the scientific, investigative process in students. Through a variety of learning experiences, students engage in scientific inquiry and explore principles of science through careful observation. Students learn the historical contributions of scientists and develop a sense of excitement regarding the discovery process.

GOALS OF THE SCIENCE DEPARTMENT

Upon completion of any course of study within the science department, students will:

- Understand how science is incorporated into the human experiences of history, society, culture, politics, and technology;
- Use scientific models and theories to explain the concepts and principles of the world; and
- Use the inquiry process of science that includes recognition of natural phenomena, collection of data, and testing of hypotheses using experiments.

GRADUATION REQUIREMENTS

New Trier requires students to take two years of science: Biology and a physical science course (Environmental Geoscience, Chemistry, Physics, or IGSS Integrated Environmental Science).

Most New Trier students take at least three years of science because many colleges require three years of laboratory science courses for admission, with two of the three years in biology, chemistry, or physics. New Trier considers Environmental Geoscience to be a core science course, equivalent in importance and rigor to the other three areas of science.

Students with a strong interest in and orientation toward science should consider taking **four** years of laboratory science.

All courses in this department receive major credit (0.5 credit/semester or 1.0 credit/year).

SCIENCE PATHWAYS

There are multiple pathways through the science curriculum at New Trier, which have been designed so that students have options to explore their interests and utilize their talents. The Science Pathways charts on the department website exemplify the most common science pathways at New Trier. (www.newtrier.k12.il.us/sciencepathways)

In addition, there are many interesting elective courses and AP courses available. Please refer to the following course descriptions for specific prerequisites and additional offerings.

SUCCESS IN SCIENCE COURSES

Success in science can be achieved through effective study skills and appropriate level placement. Such success is driven primarily by the student's independence as a learner, engagement in class, completion of the requisite work outside of class, and related abilities demonstrated in English and/or math courses.

FRESHMAN COURSES

The Science Department offers three laboratory courses for freshmen: Biology, Environmental Geoscience, and Physics PCB. Students are encouraged to choose the course that best matches their interests and draws on their academic strengths. Each course appeals to students for different reasons, but all three courses provide students with an opportunity to experience science in a laboratory setting. Each course has a double-period lab that meets twice a week, and all three courses require students to work independently and collaboratively. Placement in levels is linked to English placement for Biology and Environmental Geoscience and to math placement for Physics PCB. For some students, it may be appropriate to delay taking a science course until sophomore year.

ELECTIVE COURSES

The following science elective courses provide students with the unique opportunity to pursue specific science interests.

- Advanced Topics in Physical Sciences
- Anatomy & Physiology
- Astronomy
- Biomechanics and Sports Medicine 1 & 2
- Forensic Science
- IGSS Integrated Environmental Science
 - Marine Biology

Except for IGSS Integrated Environmental Science, these courses do NOT fulfill the New Trier graduation requirement in science.

AP COURSES

AP science courses are equivalent to college courses, both in content and expectations. In order to be successful in AP courses, students must be highly motivated, independent learners. Before enrolling in an AP course, students should consider the rigor and demands of an AP course in relation to expectations for other courses as well as their total course load, extracurricular activities, activities outside school, and performance in previous science classes.

EARLY BIRD SCIENCE CLASSES (WINNETKA ONLY)

Early bird science classes are offered based on student demand as well as teacher and lab room availability. Since there are usually more requests for early bird classes than can be accommodated, students who request early bird science classes are entered in a lottery that determines enrollment status. Given the tentative nature of early bird course registration, students should have an alternate plan. Early bird science classes meet every day from 7:10 a.m. to 8:05 a.m.

SUMMER SCHOOL

Selected science courses are offered in summer school; please refer to the Summer School Brochure. AP and 2-level courses are not offered during summer school.

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New Trier High School Science Department PCB Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
3 PCB Physics	3 PCB Chemistry	3 PCB Biology	AP Biology AP Chemistry AP Environmental AP Physics 1 & 2 AP Physics C 3, 4 Geoscience Electives
4 PCB Physics	4 PCB Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 & 2 AP Physics C 4 PCB Biology 3, 4 Geoscience IGSS Electives	AP Biology AP Chemistry AP Environmental AP Physics 1 & 2 AP Physics C 4 PCB Biology 3, 4 Geoscience Electives

Biology Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
E, 2, 3 Biology	2E, 2, 3, 4 Chemistry	2, 3 Physics	AP Biology AP Chemistry AP Environmental AP Physics 1 & 2 AP Physics C 2E, 2, 3 Geoscience Electives

1

New Trier High School Science Department Biology Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
2E, 2, 3 Biology	2E, 2, 3 Geoscience	2E, 2, 3, 4 Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 2, 3 Physics Electives
4 Biology	4 Chemistry	AP Biology AP Chemistry AP Environmental 4 Geoscience Electives IGSS	AP Biology AP Chemistry AP Environmental AP Physics 1 4 Geoscience Electives
4 Biology	4 Chemistry	AP Physics 1	AP Biology AP Chemistry AP Environmental AP Physics C 4 Geoscience Electives
4 Biology	2E, 2, 3 Chemistry	2, 3 Physics IGSS	AP Biology AP Chemistry AP Environmental AP Physics 1 & 2 AP Physics C 2E, 2, 3, 4 Geoscience Electives

New Trier High School
Science Department
Biology Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
4 Biology	4 Geoscience	4 C'hemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 2, 3 Physics Electives
4 Biology	4 Geoscience	2,3 Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 2, 3 Physics Electives

Environmental Geoscience Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
E, 9 Geoscience	2E, 2, 3 Biology	2E, 2, 3, 4 Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 2, 3 Physics Electives
4 Geoscience	4 Biology	4 Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 Electives

New Trier High School Science Department Environmental Geoscience Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
4 Geoscience	4 Biology	2 ,3 Chemistry	AP Biology AP Chemistry AP Environmental AP Physics 1 Electives

"No Science" 1st Year Common Pathways

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
No Science	2E, 2, 3 Biology	2E, 2, 3, Chemistry	2E, 2, 3 Geoscience 2, 3 Physics Electives