HIGH SCHOOL MATHEMATICS

AND

HONORS COURSES FOR MATHEMATICS AND SCIENCE FAQ

On January 17, 2017, proposals were made and approved for our new high school math curriculum. Working under the goals established in our District Strategic Plan (2014-1018), Integrated Math was determined to provide all learners with the math tools needed for success.

This report summarizes the information in an executive report found on the district website at www.birmingham.k12.m.us. Recently there has been much discussion at the district level and within the BPS community regarding changes to the secondary math curriculum and the area of honor courses for math and science. It has also been expressed by some concerned parents that the District lacks transparency in communications with parents and students. These concerns related to transparency need to be addressed. The District values open communication with parents and it is important that we repair this relationship. There is a great deal of confusion and mistrust about the changes in honors courses and the issue of Integrated Math. To be clear, the changes are supported by the administration, but now is not the appropriate time to make these changes to our math and science honors courses. A two-way dialogue is needed to develop greater understanding regarding the rationale and cost/benefit of modifying honors courses.

FAQ on Honors Courses for Mathematics and Science

Why did our District propose changing the sequence of honors classes?

The original rationale for not offering honors options in some math and science courses is built on the new standards that embody a new approach to instruction. The intent of this new and more rigorous program was to bring all learners together, including our high-achieving and our more struggling learners, for rich discourse, problem-solving, and modeling.

Will the honors courses in math and science continue?

Yes, there will be honors options for Integrated Math 2 and 3 and biology, chemistry, anatomy and physiology an STEMx R&D.

Will middle school students still have an option of taking high school honors-level math classes?

Yes. Students in the advanced math program in middle school will begin the integrated sequence in eighth grade, taking Integrated Math 1. Eighth-grade teachers of advanced students will continue to recommend whether a student enters high school in Integrated Math 2 or Honors Integrated Math 2.

Students taking our college prep sequence in middle school will begin the integrated math sequence in ninth grade. These students will have the opportunity to accelerate, based on readiness, through the high school math sequence to participate in Calculus as a senior.

What else will be done?

The district will create a Task Force to study all advanced, honors and Advanced Placement courses. The Task Force will be comprised of parents, students, teaching staff and administration. The work of the Task Force will be completed by approximately October, 2018, to allow for various recommendations to be reviewed and implemented for the 2019-2020 school year.
FAQ on Integrated Math

What is Integrated Math?

- The new program, phased in over three years, replaced the former Algebra 1, Geometry, and Algebra 2 sequence. The new courses of Integrated Math 1, 2 and 3 present the same content as the traditional sequence, but in a different order, and with additional concepts not typically found in algebra and geometry.
- The approach to learning math cements the concepts students are learning and also lends itself to addressing the concern many voice over material that appears on college entrance exams such as the ACT and SAT.
- The Integrated Math program affords students opportunities to focus on developing conceptual understanding and to see how the disciplines of math are intertwined.
- The Integrated Math curriculum provides opportunities to investigate other topics such as functions, probability, statistics, trigonometry, and data analysis.
- Integrated Math is problem-based and student-centered curriculum.
- New math standards also dictate a change. Feedback from colleges and employers highlight a different set of skills, both cognitive and non-cognitive, that can, and should be addressed in math classrooms.
- Integrated Math program delivers more content than the program it replaced. In addition, the new program presents the content in a spiral manner.
- With the new program, after the three-year integrated sequence, students will be better prepared for courses like Pre-Calculus and Statistics.

How will parent concerns and questions about Integrated Math be addressed?

There now will be two opportunities now for addressing questions and concerns. These sessions will provide opportunities for the administration and members of the math department to listen to the parents and community about concerns. At these sessions, small group discussions will follow in order to capture all questions and input.

Dates of the sessions are:

Feb. 12, 6:30 to 9:00 p.m.  Groves High School Cafeteria

Feb. 13, 6:30 to 9:00 p.m.  Seaholm High School Cafeteria

We will also hold an additional listening session at the end of the second trimester and at the end of the school year.

Additional Information

Our District will also revise the current curriculum development process to increase opportunities for parent and student involvement during the planning process itself. The input from these opportunities will be considered in finalizing curriculum-related proposals prior to them being presented to the District Learning and Development Council, the Superintendent’s Learning and Character Development Committee, and to the Board of Education.
To summarize the recommendations in the Executive Report:

1. Continue with implementation of the Integrated Mathematics curriculum at the high school level with the following recommended improvements:

   Engage parents in forums specifically around Integrated Math. Please note the sessions/forums information in the first part of this document.

   Continue support for Integrated Mathematics teachers. We will increase the frequency and focus of professional development around the instructional and assessment approach. This includes supporting our staff learning through teacher labs and classroom observations.

   Support students as they continue to transition from traditional mathematics to an integrated approach. We will equip students with the necessary skills and learning strategies necessary to be successful in group work and the “why we are doing what we are doing.”

2. As described in recommendation #1, the priority focus for our district at this time should be on the effective implementation of the new high school mathematics and science curricula. **Regarding the changes in the honors classes, as stated earlier in this letter, now is not the appropriate time to make this change in honors courses. The Task Force being formed will study our Advanced, Honors and Advanced Placement courses and make recommendations regarding the future of these courses. This work will include a review of research, examination of benefits and limitations examination, and inquiry into instructional methods and programs to address the disproportionality of students with disabilities and students of color in these courses.**

3. Our District will revise the current curriculum development process to embed additional opportunities for parent and student involvement during the planning process itself. We will also need to develop new ways to communicate about curriculum changes that are being considered and for those that have been approved.

In closing, our District appreciates the time and earnest commitment of our parents who have had questions and concerns about the proposed changes to honors math and science and the implementation of Integrated Math. It is important that our District take these issues into consideration as we move along the path to greater cooperation and collaboration. We regret the confusion that these proposed changes created. Let’s work together to make sure that Birmingham Public Schools remains the great district it is, fully supported by parents, community and our staff who unite to work for the very best for our children.