

**Recommendations
from the
Graduation
Requirement
Review Committee**

**Presentation to the Board
September 17, 2019**



Why STEM education is important for scientifically literate citizens

- New expectations for high school graduates
- Requirements and opportunities at universities
- Responsibilities of citizenship



Why STEM education is important for scientifically literate citizens

- New standards
- Multi -dimensional learning
- Access and equity in the frameworks



Why STEM education is important for scientifically literate citizens

“...the preparation students receive in high school has been found to be the biggest predictor of bachelor’s degree attainment. The courses students take in high school are more predictive of success than family income and race. In fact, the gap in degree attainment is cut in half when white and minority students all enter college having completed a strong high school curriculum.”

Ready or Not: Creating a High School Diploma that Counts



IRVINE UNIFIED
SCHOOL DISTRICT

Why a proposed increase in IUSD

- Over 85% of students overall take 3-4 years of math
- There are subgroups for which percentages are significantly lower
- Over 70% of students overall take 3-4 years of science
- There are subgroups for which percentages are significantly lower



Why a proposed increase in IUSD

- 80% of graduates overall meet a-g requirements in math and science
- There are subgroups for which percentages are significantly lower
- 70% of students meet or exceed the college readiness benchmark for mathematics on the CAASPP
- There are subgroups for which percentages are significantly lower



Comparative district requirements

- Three OC districts require three years of science to graduate
 - Brea Olinda, Saddleback Valley, and Tustin
- Nine OC districts require three years of mathematics to graduate
 - Anaheim Union, Brea Olinda, Capistrano, Fullerton Union, Garden Grove, Huntington Beach, Laguna Beach, Saddleback Valley, and Santa Ana
- Half of the top 30 districts in the state require three years of mathematics to graduate



Comparative district requirements

IUSD has the lowest total credit requirements (215) to graduate amongst the top 30 districts in the state and amongst all OC districts



Overview of the committee

Principals, counselors, a math teacher, a science teacher, a special education teacher, parents, and students from every high school

- Student board members gave their input at a separate meeting

District Office Staff included:

- Superintendent
- Assistant Superintendent, Ed Services
- Executive Directors
- Director of Secondary Special Education

District Office Staff included:

- Director of Human Resources
- Director of VAPA
- Director of English Learning
- Directors of Literacy and STEM
- Coordinators of Science, Mathematics, Counseling, and Gifted
- TOSAs from Mathematics and Science

Four meetings

An interest -based decision making process was followed



Recommendations of the committee

Mutual Interests

- College and Career Readiness
- Student Wellness and Balance
- Equity and Access
- Choice and Flexibility
- Student Engagement, Ownership & Independence
- Cultivating Lifelong Learners
- Student Success & Competence
- Capable Learners
- Foster a sense of belonging and feeling supported



Recommendations of the committee

- Students must complete 30 credits of college preparatory course work in *both* math and science that directly address math and science standards
 - Completion of Math II
 - Exposure to Physics standards

To begin with the Class of 2027, current Grade 5 students

An increase in total credits to graduate from 215 to 225



Closing comments and next steps

- Equity of opportunity
- College and career readiness, and post -secondary options, for all
- This recommendation best meets the mutual interests, increasing the credit requirements for math and science *and* the overall credit requirement
- A committee of school site staff, including teachers, and district staff will meet upon Board approval to plan for the implementation of these shifts



Supplemental Information and Data

Recommendations of the committee

Math Examples:

- Math 1AB, Math 1 CD, Math 2
- Math 1, Math 2, Math 3
- Enhanced Math 2, Enhanced Math 3, Calculus



Recommendations of the committee

Science Examples:

- NGSS Biology, NGSS Chemistry, 3rd year course with NGSS Physics Strand
- NGSS H Biology, NGSS H Chemistry, AP Physics
- Integrated Science 1/ HS 1, Integrated Science 2/ HS2, Integrated Science 3/ HIS3 or other science elective

