

BOE/CO Friday Packet December 10, 2021

Upcoming Meeting Dates

K-12 Math Curriculum Presentation

12-10-2021 Business Course Memo re Accounting II Curriculum Revision





Upcoming Board of Education Meeting Dates 2021 and 2022

December 14	6:00 PM	Special Meeting/Executive Session Superintendent's Conference Room
	7:30 PM	Regular Meeting CO Board Room and Virtual 501 Kings Hwy East
January 4	5:00 PM	Policy Committee Meeting Superintendent Conference Room 501 Kings Hwy East
January 5	3:30 PM	Finance Committee Meeting Superintendent Conference Room 501 Kings Hwy East
January 11	7:30 PM	Regular Meeting/Budget Presentation CO Board Room and Virtual 501 Kings Hwy East
January 18	7:30 PM	Special Meeting/Budget CO Board Room and Virtual 501 Kings Hwy East
January 25	7:30 PM	Special Meeting/Budget CO Board Room and Virtual 501 Kings Hwy East
January 27 Thursday	7:30 PM	Regular Meeting/Budget Vote CO Board Room and Virtual 501 Kings Hwy East



FAIRFIELD PUBLIC SCHOOLS

K-12 Mathematics Curriculum Review/Update

Fairfield Public Schools Board of Education December 14, 2021

Guiding Questions

- 1) What was the process used to review & revise the curriculum/resources?
- 2) What are the issues with the current curriculum and supporting resources?
- 3) What are the proposed changes?
- 4) What are the budgetary implications of the curriculum and resource changes?







Top 10 skills of 2025



Analytical thinking and innovation



Active learning and learning strategies



Complex problem-solving



Critical thinking and analysis



Creativity, originality and initiative



Leadership and social influence



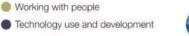
Technology use, monitoring and control



Technology design and programming



Resilience, stress tolerance and flexibility



Type of skill

Problem-solving

Self-management



Reasoning, problem-solving and ideation

The Future of Jobs



FPS Vision of a Graduate

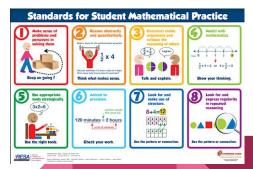
- Innovators
- Communicators
- Collaborators
- Critical Thinkers
- Responsible Citizens
- Goal Directed- Resilient Learners



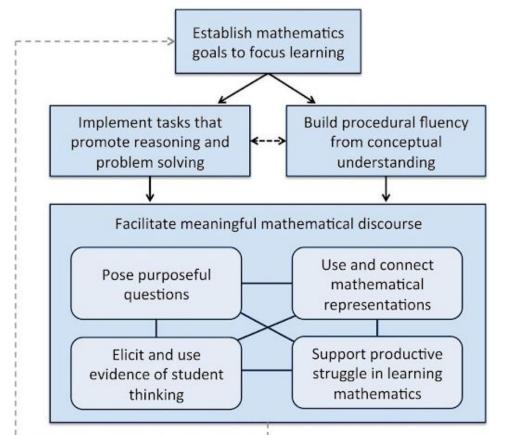
Math Practice Standards

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.





Equitable Mathematics Instructional Practices



NCTM (2018). Catalyzing Change

What was the process used to review & revise the curriculum/resources?

Month	Activity
September 2019	Steering Committee Initial Meeting
November 2019	BOE Data Presentation
February 2020	Steering Committee Subgroup Work
March 2020 - March 2021	COVID-19 Pause
March 2021- May 2021	Steering Committee Conclusions/Recommendations
May - November 2021	ES review of additional challenge resources ES Revision of units for greater emphasis on some standards MS & HS resource review and selection
December 2021	BOE Presentation



What are the issues to the current curriculum and supporting resources?



Elementary

- Greater emphasis needed on Mathematical practices, Vision of the Graduate, and Academic Expectations
- Instructional resources are meeting expectations; however, there is an opportunity to improve extension or challenge problems for students.
- Trends in PK-5 grade levels reveal a need for greater instructional emphasis on some standards.

Secondary

- Greater emphasis needed on Mathematical practices, Vision of the Graduate, and Academic Expectations
- Instructional resources not meeting expectations
- Need for more elective options in the high school



Big Ideas Math (2013)

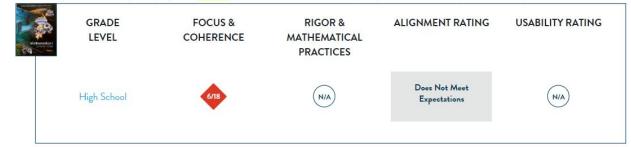
Published By: Big Ideas Learning, LLC | Date Published: 2015/02/13 | EdReports Review Tool v1 | View These Reports





Pearson Integrated (2014)

Published By: Savvas Learning Company (f/k/a Pearson) | Date Published: 2016/06/01 | EdReports Review Tool v1 | View These Reports





What are the proposed changes?



Elementary

- ES Curricula will remain consistent with minimal changes.
- Maintain current resources, Bridges 2nd edition and FPS units.
- Additional supplemental resources will be added to provide enrichment.
- Revision of units to place greater emphasis on some standards and enrichment
- Purchase PK Bridges 2nd ed.
- Focus on professional development to address needs around equity and vision of a graduate.



Middle School

- MS Curricula will remain consistent with minimal changes
- Adopt EdGems instructional resource for MS course sequence
- Focus on professional development to address needs around equity and vision of a graduate.



Bridges In Mathematics (2015) Published By: The Math Learning Center | Date Published: 2016/03/31 | EdReports Review Tool v1 | View These Reports **▼edreports.**org GRADE FOCUS & RIGOR & ALIGNMENT RATING **USABILITY RATING** LEVEL COHERENCE MATHEMATICAL PRACTICES Kindergarten Meets Expectations First Grade Meets Expectations EdGems Math (2018) Second Grade Published By: EdGems Math LLC | Date Published: 2019/11/07 | EdReports Review Tool v1 | View These Reports GRADE **FOCUS &** RIGOR & ALIGNMENT RATING **USABILITY RATING** Third Grade LEVEL COHERENCE MATHEMATICAL **PRACTICES** Fourth Grade Sixth Grade Meets Expectations Fifth Grade Seventh Grade Meets Expectations Eighth Grade Meets Expectations

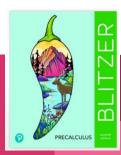
What are the proposed changes?



High School

- Updated Algebra-1, Geometry, Algebra-2 & Precalculus curricula for better content alignment
- No changes to Calculus, AP Curricula (AB/BC & Statistics), Probability & Statistics, Financial Algebra, Multivariable
 Calculus
- Remove Trigonometry and Math Modeling courses
- Added Applied Mathematics elective courses
 - Modern Mathematics
 - Transition to College Math
 - Advanced Mathematical Decision Making
- Adopt new instructional resources
 - o Illustrative Mathematics Algebra-1, Geometry, Algebra-2 instructional resource
 - Blitzer Precalculus instructional resource (Pearson)
 - Modern Mathematics instructional resource (Pearson)
 - Transition to College Mathematics instructional resource (Agile Mind)
 - Advanced Mathematical Decision Making instructional resource





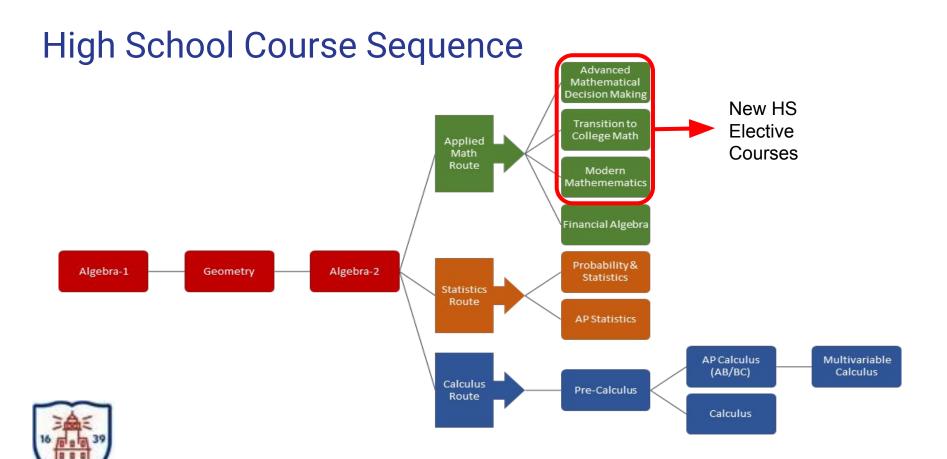


McGraw-Hill Illustrative Mathematics AGA (2021)

Published By: McGraw-Hill Education | Date Published: 2021/05/20 | EdReports Review Tool v1.5 | View These Reports







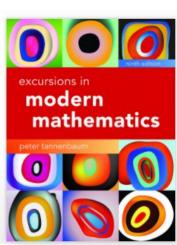
Modern Mathematics



Course Purpose:

 An application-based course for students looking to head into the liberal-arts, political science fields

- Topics Include:
 - Mathematics of Social Choice
 - Elections, Fair-Division
 - Management Science
 - Paths, Networks, and Scheduling
 - Shape and Form
 - Symmetry & Fractal Geometry
- Resource: Excursions in Modern Mathematics (Pearson)



Transition to College Mathematics (TCM)



Course Purpose:

- Provide support to students who may not have met the college readiness expectations
- Built-in Social-Emotional Standards
- Resources developed through the University of Texas Dana Center and Agile
 Mind



Advanced Mathematical Decision Making (AMDM)



Course Purpose:

- Applied Math Course to provide students with an opportunity to use mathematics to make effective decisions.
- Problem-based course
- Topics Include:

 statistical information and summaries, methods of designing and conducting statistical studies, modeling of data, basic financial decisions, and use network models for making informed decisions.

 Resources developed through the University of Texas - Dana Center

What are the budgetary implications of the curriculum and resource changes?

Elementary

- No purchase of new elementary primary math resource
- \$20,136 for additional challenge support resources
- \$15,980 unit revisions and updates
- \$11,800 for professional learning support for teachers

Secondary

- \$190,000 for EdGems Resource (6 year)
- \$333,000 for Algebra-1, Geometry, Algebra-2 (6 year)
- \$115,000 for Blitzer Precalculus (6 year)
- \$22,000 for Modern Math Resource
 (6 year)
- \$8,400 for Transition to College Math Resource (6 year)
- \$3,000 for Advanced Math Decision Making Resource
- \$50,000 Implementation Work and Professional Development



FPS Vision of a Graduate

- Innovators
- Communicators
- Collaborators
- Critical Thinkers
- Responsible Citizens
- Goal Directed- Resilient Learners



Thank you

mank you	xxx	Robyn Walters	Tina Brown	Caitlyn Viesto
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James Zavodjancik

Executive Director of Instruction, Curriculum, and Assessment

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To: Members of the Fairfield Board of Education

From: Dr. James Zavodjancik, Executive Director of Instruction, Curriculum, and Assessment; Mrs. Robin Terwilliger, Business Department Curriculum Coordinator

Date: December 10, 2021

RE: Accounting II Curriculum Revisions

The Fairfield Public Schools business faculty is recommending that Accounting II be revised from a year long course to a semester course. The last time the course was created and submitted for approval was nearly two decades ago. During that time period, students' technology comfortability and usage has expanded. All instructional curriculum topics no longer need as much time to complete as a result of technology integration. Specifically, Excel and Quickbooks are harnessed to complete many of the accounting content and skills in the course.

In addition, the following topics, skills, and units were altered in the proposed Accounting II course:

Original Accounting II	Proposed Accounting II
Units on Accounting for Notes Payable and Notes Receivables	 These units are now covered in Accounting I. They will be covered as part of the review at the beginning of course but no longer require instruction in Accounting II. Estimated time saved is approximately 5-6 weeks of instruction.
Unit on Accounting for Corporations: organization, capital stock, taxes, dividends, bonds, and retained earnings	 Corporations are still included but will be covered more broadly. We will cover corporate organization, capital stock and taxation, but we will no longer study in detail bonds, dividends, and retained earnings. Corporate accounting is 5 chapters in our textbook. Given our pacing, we usually cover 3-4 chapters a grading term. Weeks of instruction are reduced as a result of the overview versus detail change in corporate accounting. Estimated time saved is about 10 weeks.



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• Included instructional time to introduce students to technology of computer hardware and software.

- Instructional time on use of computer is no longer necessary as students are comfortable using computers daily.
- There will be instruction on specific software, but this will only require approximately 1 class of instruction before it is embedded into accounting practice problems and assessments.
- Estimated time saved is about 1 week.