

New Fairfield Public Schools

New Course Proposal

Directions:

Before completing this form, please discuss this proposal with the appropriate administrator(s) in your school. Complete this proposal form thoroughly, and attach any supporting documentation that would help the Board of Education's Curriculum Sub-Committee understand this proposal better. Be sure that you adhere to all deadlines, and be certain to acquire all required signatures. To ensure that a course can be properly planned for, if it is intended for a coming school year, please complete it by October 31. All other proposals can be forwarded at any time of the year.

Course Being Proposed: History of Mathematics: How Math Shapes the World Around Us

Proposal submitted by: Catherine Hall- NFHS Mathematics Department Chair

School: New Fairfield High School

1. Indicate the department/grade level in which this course/program will run.

The mathematics department proposes to run a course titled History of Mathematics: How Math Shapes the Future for students as an elective upon completion of their math graduation requirements.

2. Please indicate if the new course or instructional program is a semester long or year long, and indicate the applicable grade levels. Please indicate the course level if applicable.

The course is a semester long course. It would be open to any students who had already met their math graduation requirements, typically students in grades 11-12. It would be a CP level course.

3. Please give the rationale for this proposal, and include its relationship to the past, current and future development of curricular offerings in New Fairfield.

This course would be for students who may not want to take another year of procedural math, but would rather learn about some of the history of how mathematics developed and how it shapes our world today. While historians are mentioned throughout math courses, there has not been a course like this offered in recent years at NFHS.

4. Please indicate the target population for this proposal.

Students in grades 11-12 who have already completed their graduation requirements for mathematics.

5. Please explain if this course or instructional program is an addition or a replacement for an existing course or program.

This course is a new elective course and would not be replacing any particular course.

6. List any prerequisites for this course or instructional program.

This course would be available to students who had already met their graduation requirements for mathematics, typically by taking an Algebra 2 course.

7. Please write a short description of the new course or instructional program that would be suitable for the high school *Program of Studies* or for a curriculum document.

In mathematics classes, students usually ask “when will we ever use this?” This course will help them to see how math has been used throughout time from its beginnings in creating number systems all the way to present day events such as rocket launches, modern day medicine and the internet. Without mathematics, the world today would not be the one that we know.

8. Please list the long-term course or program goals that define the broad outcomes that this course or program seeks to help students achieve.

Students will see how math throughout time has shaped the world to be where we are today. Students will learn about various mathematicians and the theorems that they created years ago and how they have evolved over the years.

9. Please indicate what topics, units, or material will be used to meet the long-term goals listed above. What assessment strategies will be used in this course or program? What are the unique components of this course or program content that make it a worthwhile addition for our students?

This course would be in an alternate format to a typical mathematics course where assessments would be project or presentation based. The course would be divided into different eras, and would explore the lives and theorems of famous mathematicians that lived within that era all with a focus on how what they discovered or proved has shaped history.

10. Please enumerate the resources – both human and financial – that you anticipate will be needed to develop this course or program correctly. What impact would this proposal have on scheduling, staffing, and resources? Consider training, equipment and space needs.

The curriculum will need to be written, although several free online articles and abstracts exist. The course would be staffed by current staff, it would replace a section of one of the upperclassmen electives currently offered.

11. If this course will require a textbook, what is the title and cost estimate of a likely text?

A textbook would need to be purchased, several options are available. This is a sample: Significant Figures by Ian Stewart. Books are available for approximately \$20 each and we would need about 30 for a total of \$600.

12. What impact will this course/program proposal have upon other courses/programs currently being offered in the district?

This course does not impact any other courses that are currently being offered at this time, except that it may reduce the number of sections of other upperclassmen elective courses.

Signatures of those making this proposal:

Catherine Heel
Teacher/Department Chair

11/21/22
Date

[Signature]
Principal

11/21/22
Date

Julie Luby
Assistant Superintendent

11/22/22
Date

