APPENDIX #3

PROPOSED NEW COURSE/PROGRAM
OR MAJOR CURRICULUM REVISIONS

Please check the appropriate item:

School Middletown High **New Course/Program** MATH 1030Q Discrete Mathematics

Department Mathematics

Date 6/4/2025

1. **Proposed Change** – Please give a brief description of the course and/or program with an explanation of the content.

This course introduces fundamental concepts in discrete mathematics, which are essential for computer science and advanced mathematics. Topics include logic, set theory, functions, relations, combinatorics (counting techniques), graph theory, and discrete probability. Students will develop problem-solving skills, logical reasoning, and an understanding of mathematical structures through a variety of applications. Emphasis will be placed on proofs, algorithmic thinking, and connections to real-world scenarios.

2. **Rationale** – What is the purpose of the proposed new course or course change? To what extent will it benefit the students?

ECE (Early College Experience) courses offer a more integrated college experience, with credit based on course performance. This ECE is offered through UConn by one of our department's Mathematics teachers, who is also an adjunct professor at UConn.

3. **Target Population** – Which group of students will be directly affected (grade level, academic level)?

Students will be offered this course with a prerequisite of Algebra 2

4. **Evaluation** – How do you plan to assess the implementation of the a proposed new course or the course change?

Students' academic success is through college credit given. They will be using a college-based standards rubric grading system.

A+ 4+"100%

A 4.0" 94%

B+ 3.5 88%

B+ 3.0"""" 82%

C 2.5 74%

D 2.0"""" 66%

F 1"""" 50%

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(continued)

5. **Cost** – What are the anticipated costs for staff, textbooks, materials, other?

No additional cost needed