

Challenger High School 2023-2024

Modeling Our World with Mathematics

CEDARS Course Code: (I can fill this out for you) Term 1: Aug. 30, 2023 to Nov. 3, 2023
Term 2: Nov. 6, 2023 to Jan. 30, 2024
Term 3: Jan. 31, 2024 to Apr. 12, 2024
Term 4: Apr. 15, 2024 to Jun. 14, 2024

Teacher's Name: Dennis Moon **Phone:** (253) 800-6812 **Email:** dmoon@bethelsd.org

Grade Level: 11, 12 **Credit:** Math, Elective

District Course Code: MTH363/364 **Prerequisite Courses:**

Credits: 1.0

Course Description:

This course contains five thematic units where students use high school mathematics to analyze everyday life experiences and to support informed life choices. The math applications support student interest and career connections and can be sequenced in any order. Units include: Finances for Life, Civic Readiness, Health and Fitness, Digital World, Music and Art.

Course Objective and Goals:

Modeling Our World with Mathematics (MOWWM) is a five-module mathematics course developed locally by OSPI with input from educators across Washington, and is designed to follow Geometry. It contains career-connected thematic units where students use high school mathematics to analyze everyday life and work. The content and instructional strategies support increased attainment of the common core high school content standards while developing the standards for mathematical practice. There will also be ACT and SBA preparatory lessons throughout the course.

MTH363

Quarter 1: (8/30/2023 – 11/3/2023) (.25 credit)

1. Getting Started
2. Health and Fitness (Linear equations)

Quarter 2: (11/6/2023 – 1/30/2024) (.25 credit)

3. Finance 1 (Ratio/Proportion/Percent and Linear functions)
4. Finance 2 (Exponential functions vs Linear functions)

MTH364

Quarter 3: (1/31/2024 – 4/12/2024) (.25 credit)

5. Finance 3 (Credit)
6. Graphing Quadratics
7. Trigonometric Functions

Quarter 4: (4/15/2024 – 6/14/2024) (.25. credit)

8. Digital World
9. Systems of Linear Equations

Bethel School District Priority Standards (or industry standards addressed):

- Refer to: *Common Core State Standards for Mathematics* (which can be found on line at http://www.k12.wa.us/CoreStandards/Mathematics/pubdocs/CCSSI_MathStandards.pdf) for more detail and to identify specific standards.

CCSS – M Clusters covered in this course:

- N-RN 1-3: The Real Number System
- N-Q 1-3: Quantities.
- A-SSE 1,3: Seeing Structure in Expressions
- A-CED 1-4: Creating Equations
- A-REI 1,3,6,7,10-12: Reasoning with Equations and Inequalities
- F-IF 1,2,4-9: Interpreting Functions
- F-BF 1,3: Building Functions
- F-LE 1-3,5: Linear, Quadratic, and Exponential Models
- S-ID 1-3, 5-8: Interpreting Categorical and Quantitative Data
- S-IC 1-2: Making Inferences and Justifying Conclusions
- S-MD 6,7: Using Probability to Make Decisions
- G-CO 1,3-5: Congruence
- G-MG 1-3: Modeling with Geometry
- G-MD 4: Geometric Measurement and Dimension
- G-SRT 6-8: Similarity, Right Triangles, and Trigonometry
- Math Practices 1 – 8

Teacher and Course Expectations:

Each student is responsible for their own behavior and act in a manner that will not detract from the learning environment for other students. Refer to the District Students Rights and Responsibilities handbook for further detail on behavioral expectations. Failure to abide by these expectations may result in a warning, removal from the class for a specified time period, parent phone call and/or conference, or additional discipline as spelled out in the Students Rights and Responsibilities.

Student assignments may be found on their Canvas course and they may download and access missing assignments at any time. These assignments are updated daily and include directions and often examples. Their grades are also kept up to date in family access (at least weekly if not more often). If there are any questions as to a grade or an assignment I can be contacted at 253-800-6812 or at dmoon@bethelsd.org.

Attendance is crucial in this class. Please be in class, **on time**, regularly. Many experiences we do cannot be re-created on an individual basis. We have learned that students who miss even a few days of school each month are at a greater risk of academic failure and dropout. We have set a goal that every student in our school attends school regularly (no more than nine absences per year, approximately one absence per month, and that includes excused absences). It is the student's responsibility to get assignments and activities that have been missed due to absence.

Grading Policy:

Course Grading Categories:

- Formative Assignments will make up 0% of your grade.
- Summative Assignments will make up 100% of your grade.

Summative Assessments (may include but not limited to)

- Oral/Written expression for mastery understanding of course concepts and demonstration of the application of course concepts.
- Performance based evaluations through labs and projects.
- Summative Assessments will be given at the end of each unit through the on-line assessment function of the curriculum being used (Agile Minds).
- Progress reports will be done monthly by the instructor.

Grading Scale:

- **A** (90-100%) Student demonstrates exemplary abilities through scores earned; student showed outstanding mastery of expected skills.
- **B** (80-89%) Student demonstrates adequate abilities through scores learned on assessments; student shows adequate mastery of expected skills.
- **C/P** (70-79%) Student demonstrates average abilities through scores earned; students showed average mastery of expected skills.
- **NC** (69% or below) Student unable to demonstrate mastery of expected skills.

This grade will come from demonstrating mastery of the standards being measured through formative and summative assessments.

Progress

- Student progress is monitored weekly. Student monthly progress is at the discretion of the certificated teacher based on weekly evaluations and the students' ability to complete the required learning benchmarks for that month.
- If a student fails to make collective progress for all weeks, then monthly progress is unsatisfactory. Student monthly progress is specifically evaluated against progress benchmarks, which are clearly defined in the course for each month.
- In addition to the course schedule, these benchmarks may also come in the form of lesson, unit, assignment and/or assessment completion dates.
- These established progress benchmarks will allow teachers and students to assess the students' educational progress in meeting the course learning standards.

Material Used:

- District approved curriculum (to include Desmos and Agile Minds), Internet Sites, Lab experiences, Computer based learning models, Reading materials, Videos, calculator
- iPad
- Desmos account
- Paper - lined and graph
- Pencil
- Ruler or straightedge