MATH 8 COURSE OUTLINE
FAIRVIEW HIGH SCHOOL
2021-2022

INSTRUCTOR: MISS WYNESS

RESOURCE: MATH LINKS EIGHT, McGRAW-HILL RHYERSON, 2008

COURSE OBJECTIVE:

The main goals of mathematics education are to prepare students to:
- use mathematics confidently to solve problems
- communicate and reason mathematically
- appreciate and value mathematics
- make connections between mathematics and its applications
- commit themselves to lifelong learning
- become mathematically literate adults, using mathematics to contribute to society.

Students who have met these goals will:
- gain understanding and appreciation of the contributions of mathematics as a science, philosophy and art
- exhibit a positive attitude toward mathematics
- engage and persevere in mathematical tasks and projects
- contribute to mathematical discussions
- take risks in performing mathematical tasks
- exhibit curiosity

GENERAL EXPECTATIONS:

- **REGULAR ATTENDANCE** – After an absence it is YOUR responsibility to catch up on work that you missed. Students must discuss the making up of exams and quizzes with me immediately upon returning to school from an excusable absence.
- **ARRIVE ON TIME** – When you arrive to class, please take your seat and quietly wait for instruction. If lateness is unavoidable, please enter the classroom with a minimum of disruption.
- **COME PREPARED** – Please bring binder, textbook, pencils, calculators, etc. to class each day. All math is to be done in **pencil**. All handouts, quizzes, assignments, and exams are to be kept in order in a binder. These will assist you as a study guide.
- **ASSIGNMENTS** - Assignments must be turned in in a timely manner. If you need extra time for an assignment, please make arrangements with me.
- **WORK HABITS** – Class time will frequently be given to complete assignments. Please stay on task during these times. While I am providing instruction, I expect you to be listening and **NOT** talking. You may of course raise your hand to ask questions or make comments.

COURSE OUTLINE:

*Dates are approximate

| UNIT 1: | REPRESENTING DATA | September 6 – September 24 |

- Advantages and disadvantages of different graphs
- Misrepresenting data

| UNIT 2: | INTEGERS | September 27 – October 15 |

- Review rules of addition and subtraction of integers
- Multiplication and division of integers
- solving problems involving integers
- order of operations with integers

| UNIT 3: | RATIOS, RATES AND PROPORTIONS | October 18 – November 5 |

- equivalent ratios and proportion
- rate, unit rates, and unit prices
- slopes

| UNIT 4: | SQUARES AND SQUARE ROOTS | November 8 – November 19 |

- Squares and square roots
- Estimating square roots

| UNIT 5: | UNDERSTANDING PERCENTS | November 22 – December 10 |

- representing % pictorially
- finding the percent
- converting fractions to % to decimals
- applications and problems involving percent

| UNIT 6: | PYTHAGOREAN RELATIONSHIP | January 4 – January 21 |

- Pythagorean theorem
- applications and problems Pythagorean theorem

| UNIT 7: | FRACTION OPERATIONS | January 24 – February 11 |

- Review addition and subtraction of fractions
- Multiplication of fractions
- Division of fractions
- Applications of the above skills
- Order of operations involving fractions

| UNIT 8: | PROBABILITY | February 14 – March 4 |

- Collecting data
- Making predictions
- Probability and independent events

UNIT 9:	LINEAR RELATIONS	March 28 – April 14

- creating a table of values from a graph
- determining a table of values from an equation
- solving two step equations with parentheses
- using equations to solve problems
- Translations, reflections, rotations

UNIT 10:	SOLVING LINEAR EQUATIONS	April 18 – April 29

- writing equations
- Solving one step and two step equations
- Using equations to solve problems

UNIT 11:	SURFACE AREA	May 3 – May 20

- Review basic area formulas
- Names of different 3D solids
- Label and draw 3D shapes and objects
- Label and draw nets of 3D objects
- Surface area of right prisms and cylinders
- Problems involving the above skills

UNIT 12:	VOLUME	May 23 – June 10

- Determining volume of rectangular prisms, triangular prisms and right cylinders
- Problems involving the above skills

UNIT 13:	TESSELLATIONS	June 13 – June 17
- Transformations
- Demonstrating congruency with regular and irregular polygons

FINALS:		June 20 – June 24

EVALUATION:
45% Assignments/Quizzes

30% Unit Exams

25% Final Examination

Keep track of your marks as they will be posted online regularly. Our online marks system is used as a tool for teachers to communicate with students and parents about such things as attendance, marks, discipline, schedules, assignments, events, fees and graduation requirements.