

Warren County School District
PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Grade 7 Math Elective – Authentic Math

Course Number: 00278

Course Prerequisites: None

Course Description:

Through project based learning the students will use math skills to solve real world situations. Concepts of this course include ratios and proportions; probability and statistics; planning a trip; money; and mathematics within the world of art.

Suggested Grade Level: Seventh Grade

Length of Course: ☒ One Semester ☐ Two Semesters ☐ Other (Describe)

Units of Credit: .5 Middle Level Credit (Insert *None* if appropriate)

PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:
CSPG - Middle level Math or Secondary Math 7-12

Certification verified by WCSD Human Resources Department: ☒ Yes ☐ No

TEXTBOOK AND SUPPLEMENTAL MATERIALS

Continue using Board approved textbook? ☐ Yes ☒ No (*If yes, then complete the information below.*)

Board Approved Textbooks, Software, Supplemental Materials:

Title:

Publisher:

ISBN #:

Copyright Date:

Date of WCSD Board Approval:

BOARD APPROVAL:

Date Written: March 22, 2018

Date Approved: April 9, 2018; March 11, 2019 Revised Credit

Implementation Date: 2018-2019

SPECIAL EDUCATION AND GIFTED REQUIREMENTS

The teacher shall make appropriate modification to instruction and assessment based on a student's Individual Education Plan (IEP) or Gifted Individual Education Plan (GIEP).

COURSE OVERVIEW

(List the content to be taught)

For standards, essential questions, content, and skills see Curriculum Map –

Topic # 1 – Ratios and Proportions to complete Scale Drawings (2-3 weeks)

- Teach or reteach ratios and proportions
- Teach or reteach about unit conversions
- Scale factors to create scaled drawings
- Unit measurement and conversions
- Mini art lesson on scale drawing
- Math Shell lesson on creating a scale drawing of a garden (under grade 7, geometry, titled: Drawing to Scale: A Garden)

Topic # 2 – Probability and Statistics (2-3 weeks)

- Teach or reteach theoretical probability, sample size, independent events, and outcomes.
- Math Shell lesson on analyzing chance and probability (under grade 7, probability and statistics, titled: Game of Chance)

Topic #3 – Plan a Trip! (3 -4 weeks)

- Positive and Negative numbers in context (flights, temperature, money in/out, etc.)
- Give students a budget and have them plan a vacation.
- Students create PowerPoint/presentation on vacation.

(see student road trip project on multiplication.com for ideas on implementation)

Topic #4 and #5 – Money, Money, Money! And Recipe Math (4-5 weeks)

- Teach or reteach ideas of fractions and decimals as it relates to percentages

- Math Shell lesson on percentages (under grade 7, number and quantity, titled: Increasing and Decreasing Quantities by Percent)
- Teach or reteach Unit Rate and Comparison Shopping and Taxes when shopping
- Project on shopping using coupons, grocery list and where to get the best buy for your buck, go out to eat and leave a tip, etc.)
- Research recipes and create a 5-course meal for a dinner party for 4.
- Create a recipe as a class to make in the crockpot.

Topic # 6 – Art and Math (4 weeks)

- Research different artists and the math behind the artwork they created.
- Make your own art design. Teacher stipulates what type of shapes or requirements are needed to complete art work. Different materials may be used. Each student will have 3 artists to create a math/art portfolio.
- Students will find area, circumference, perimeter, etc. of the shapes used to create the artwork.
- Videos on art and math watched and class discussions held on where art is used in math.
- Mini project on using transformations.
- Virtual Tour to see real artwork.

ASSESSMENT

Portfolio Assessment: ☐ Yes ☒ No

District-Wide Common Final Examination Required: ☐ Yes ☒ No

Course Challenge Assessment (Describe): none

WRITING TEAM: Warren County School District Teachers

WCSD STUDENT DATA SYSTEM INFORMATION

1. Is there a required final examination? ☐ Yes ☒ No
**Warren County School District Policy 9741 and 9744 state, "All classes in grades 9-12 shall have a final exam."*
2. Does this course issue a mark/grade for the report card? ☒ Yes ☐ No
3. Does this course issue a Pass/Fail mark? ☐ Yes ☒ No
4. Is the course mark/grade part of the GPA calculation? ☒ Yes ☐ No
5. Is the course eligible for Honor Roll calculation? ☒ Yes ☐ No
6. What is the academic weight of the course?

☐ No weight/Non credit

☒ Standard weight

☐ Enhanced weight