**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 and9744 state, “All classes in grades 9-12 shall have a final exam.”***

1. Does this course issue a mark/grade for the report card?  Yes  No
2. Does this course issue a Pass/Fail mark?  Yes  No
3. Is the course mark/grade part of the GPA calculation?  Yes  No
4. Is the course eligible for Honor Roll calculation?  Yes  No
5. What is the academic weight of the course?

|  |  |  |
| --- | --- | --- |
| No weight/Non credit | Standard weight | Enhanced weight |