Geary Lesson Plans

Teacher Name	Subject	Grade Level
Danny Blackshear	Algebra II	10-11

Title of Unit/Lesson
Unit 1: Systems and Functions

Duration of Lesson		Date(s)
35 Days – October 2		9/28/20 – 10/2/20

Learning Goals/Objectives	Language Objectives	Standards
- I can specify domain and range using: ✓ Algebraic notation ✓ Set notation ✓ Interval notation - I can evaluate a function at a given point in its domain. - I can perform the following operations using function notation: ✓ Add ✓ Subtract ✓ Multiply - I can recognize restrictions on the domain. - I can combine functions by composition.	Teacher - I will use the proper vocabulary and language of mathematics. Student - My students will be reminded to use proper vocabulary at all times.	- A2.F.1.1 - A2.F.2.1 - A2.F.2.2 - A2.A.1.8 - A2.F.1.2 Supporting Standards - A2.F.1.8

Learning Targets (list what students should be able to do or understand at each level)		
2.0 Foundational Skills Can the student: With help I am having some success at the 3.0 level.	3.0 Learning Goal/Objective Can the student: - I can use interval and set notations to specify domain and range of functions of various types and evaluate a function at a given point in its domain. - I can add, subtract, multiply and divide functions using function notation and recognize domain restrictions. - I can combine functions by composition and recognize the inverse of a function. - I can represent and solve real-world and mathematical	4.0 More Complex Knowledge Can the student: In addition to the 3.0 level, I can interpret the solutions in context.

	problems using a system of linear equations using graphing, substitution, and elimination. • I can recognize the transformations of exponential, radical, quadratic and logarithmic functions	

Assessment & Monitoring (How will you know you've attained the desired effect?)

Constant monitoring. Can the student explain their reasoning? Can the student reproduce independent work?

Instructional Strategies/Lesson Activities/Transitions

Anticipated Date	Assignments	Resources, Materials and Technology Needed
9.28.20	Aspire testing for all 9th, 10th and 11th grade.	N/A
9.29.20	Inverse Functions • Linear • Quadratic	N/A
9.30.20	Substitute Function Aerobics with Mrs. Glasgow.	N/A
10.1.20	Recognizing graphs of various functions and predicting the effects of transformations. • $f(x + c)$ • $f(x) + c$ • $f(cx)$ • $cf(x)$	N/A
10.2.20	Piecewise functions • No more than three branches • Linear only • Identify domain, range, intercepts and intervals	N/A

Adaptations and Accommodations (ELL, Special Education, Gifted, Those without Support)

Hand-picked elbow partners, calculators, additional time on assignments, reduced number of items.

Vocabulary:
• Relation
• Domain
• Function rule
• Function notation

- Output
- Transformation
- Simplify
- System
- Equivalent equations
- Function
- Range
- Restriction
- Inverse
- Vertical line test
- Piecewise function
- Evaluate
- Solution
- Ordered pair
- Set
- Composite
- Input
- Solve
- Equation
- Inverse operation