**Snake River High School**

**Class: Algebra II A**

**Course Description –The students will study equations, inequalities, linear functions, systems of equations and inequalities, and matrices to increase their knowledge of mathematic.**

**Textbook-** Algebra 2 by Glencoe & McGraw/Hill

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| **Chapter 1** | **Equations and Inequalities** |
| 1-1 | Be able to Solve Expressions and Formulas. (A.SSE.1.a, A.SSE.1.b) |
| 1-2 | Know Properties of Real Numbers & Real Number Sets. (A.SSE.2) |
| 1-3 | Be able to Solve Equations. (A.CED.1) |
| 1-4 | Be able to Solve Absolute Value Equations. (A.SSE.1.b, A.CED.1) |
| 1-5 | Be able to Solve Inequalities. (A.CED.1, A.CED.3) |
| 1-6 | Be able to Solve Compound and Absolute Value Inequalities. (A.CED.1, A.CED.3) |

Approximately 12 days.

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| **Chapter 2** | **Linear Relations and Functions** |
| 2-1 | Determine if ordered pair and graphs are Relations or Functions. (F.IF.4, F.IF.5) |
| 2-2 | Determine if equations or graphs are Linear Relations or Functions. (F.IF.4, F.IF.9) |
| 2-3 | Know and use rate of change and slope formula. (F.IF.4, F.IF.6) |
| 2-4 | Be able to find equations of lines from a point and a slope, or two points. (A.SSE.1.b, A.CED.2) |
| 2-5 | Be able to graph a scatter plot and find a regression equation. (F.IF.4) |
| 2-6 | Be able to graph absolute value functions, piecewise functions, step functions, and greatest integer functions. (F.IF.4, F.IF.7.b) |
| 2-7 | Be able to perform the 8 base moves on the Parent Functions. (F.IF.4, F.BF.3) |
| 2-8 | Be able to graph and shade Linear and Absolute Value Inequalities. (A.CED.3) |

Approximately 12 days.

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| **Chapter 3** | **Systems of Equations and Inequalities** |
| 3-1 | Be able to solve Systems of Equations by graphing. (A.CED.3, A.REI.11)) |
| 3-2 | Be able to solve Systems of Equations by Substitution and Elimination. (A.CED.3, A.REI.11) |
| 3-3 | Be able to solve Systems of Inequalities Graphically. (A.CED.3) |
| 3-4 | Be able to Optimize with Linear Programming. (A.CED.3) |
| 3-5 | Be able to solve Systems of Equations with Three Variables. (A.CED.3) |

Approximately 12 days.

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| **Chapter 4** | **Matrices** |
| 4-1 | Introductions to Matrices. |
| 4-2 | Be able to perform Addition and Subtraction on Matrices. |
| 4-3 | Be able to Multiply Matrices. |
| 4-4 | Be able to Transform Matrices. |
| 4-5 | Be able to use Determinants and Cramer’s Rule to solve Matrix Equations. (A.CED.3) |
| 4-6 | Be able to use Inverses to solve Matrix Equations. (A.CED.3) |

Approximately 12 days.

**Grading Breakdown:**

Homework- 25% Retakes will be given according to the retake policy

Quizzes- 5% which was designed by the leadership team.

Tests- 60%

Final Test- 10%