

2024-2025

EAST SHORE ONLINE COURSE CATALOG



EDITED: MAY 2025

05 Career Technology Education (CTE)

Accounting I.....	6
Individual & Family Relationships	6
Business Communications I.....	7
Business Communications II.....	7
Child Development.....	8
Entrepreneurship.....	8
Foods and Nutrition.....	9
Business Leadership.....	9

10 Digital Studies

Business Office Specialist.....	11
---------------------------------	----

12 General Financial Literacy

Financial Literacy.....	13
-------------------------	----

14 Language Arts Core

English 09.....	15
English 10.....	16
English 11.....	17
English 12.....	18

19 Language Arts Elective

Business Communications I.....	20
Business Communications II.....	20
Creative Writing.....	21
English 12.....	22

23 Mathematics Core

Secondary Math I.....	24
Secondary Math II.....	25
Secondary Math III.....	26

27 Mathematics Elective

Accounting I.....	28
Math Decision Making for Life.....	28
Mathematics of Personal Finance.....	29
Statistics.....	30
Secondary Math III.....	30

31 Physical and Health Education

Health.....	33
Participation Skills.....	33
Fitness for Life.....	34
Lifetime Activities.....	34

34 Science Core

Biology.....	36
Earth Science.....	37
Physics.....	38

38 Science Elective

Astronomy.....	40
Botany.....	40
Zoology.....	41

41 Social Studies Core

Geography.....	43
Government and Citizenship.....	43
United States History.....	44
World Civilizations.....	45

45 Social Studies Elective

Art History.....	47
Psychology.....	48

48 The Arts

Art Foundations.....	50
Art History.....	51
Introduction to Acting.....	52
Theatre.....	52

CAREER TECHNOLOGY EDUCATION

Pages: 6 - 9

COURSE: ACCOUNTING I

TEACHER: Abby Olsen

EMAIL: abigailolsen@alpinedistrict.org

Unit 1: The Basic Accounting Equation

In this unit, students learn the basic accounting equation. Students are taught how business transactions change, the accounting equation and to analyze a transaction into a debit and credit part using T-accounts.

Unit 2: Journalizing & Posting

In this unit, students learn how to record business transactions in a journal, prove and rule a journal, and post amounts from a journal into accounts in a general ledger.

Unit 3: Cash Control and Completing the Fiscal Period

In this unit, students learn to manage cash and bank account transactions and adjusting entries. It also covers completing the worksheet in preparation for and completion of the income statement.

Unit 4: Income Statements, Balance Sheets, & Closing the Fiscal Period

In this unit, students learn how to complete the accounting cycle. It includes the income statement, balance sheet, journalizing and posting closing entries, and post-closing trial balance.

COURSE: INDIVIDUAL & FAMILY RELATIONSHIPS

TEACHER: Malorie Goodman

EMAIL: maloriegoodman@alpinedistrict.org

Unit 1: Personal Wellbeing

This course includes the study of developing skills to build and maintain a healthy self-concept. Students explore factors that influence personal well-being. Students will identify how to evaluate and identify their values and how those values can help decide on a future career.

Unit 2: Communication

Communication might not be easy for everyone. In this course students will learn effective communication skills that establish healthy relationships. Students will learn conflict resolution and demonstrate their ability to communicate with others. Students will learn about different parenting styles and evaluate the roles and responsibilities of parents.

Unit 3: Relationships I

Dating can lead to marriage and marriage can lead to creating a family. In this class students will learn ways to successfully date and decide if marriage is something they want to pursue. Students will learn the differences between a healthy and unhealthy marriage. Students will learn about family structures and family cultures.

Unit 4: Relationships II

***Must have permission slip signed to begin to this course.**

Students will learn to develop and strengthen their ability to make conscious, healthy, and respectful choices regarding dating/romantic relationships, and personal safety when it comes to relationships. Students will learn anatomy and physiology, adolescent development, and reproduction. This unit requires parental/guardian consent.

COURSE: BUSINESS COMMUNICATIONS I

TEACHER: Amy Schuster

EMAIL: aschuster@alpinedistrict.org

Unit 1: Communicating in Your Life

Communicating clearly is essential. In 2020, 81% of recruiters identify interpersonal skills as more important than any other skills. In this unit, students will enhance their communication through exploring the communication process and improving their reading and grammar skills. These skills move students toward creating their own research-based presentation on a communication topic.

Unit 2: Written Communications in Business

According to the National Association of Colleges and Employers, 73.4% of employers want candidates with strong written communication skills. In this unit, students will enhance their written communication skills through the writing process, while exploring common business documents. These skills move students toward creating their own business communication documents such as emails, letters, etc. with a focus on audience and purpose.

Unit 3: Customer Service and Company Communication

According to a 2016 study, 93% of employers see soft skills as "very important" or "essential". In this unit, students will enhance their communication skills by exploring proper responses to inquiries. These skills move students toward creating their own responses (positive, negative, persuasive, etc.) with a focus on how messages change based on audience and purpose.

Unit 4: Collaboration and Presentations in Business

According to Forbes, "Seventy percent of employed Americans who give presentations agree that presentation skills are critical to their success at work..." yet, "the fear of presenting is very real among professionals in corporate America today, so much so that many people are desperate to avoid it." In this unit, students will enhance their presentation skills. These skills will move students toward creating and presenting their own speech. Students will also focus on how to develop a collaborative workplace environment.

COURSE: BUSINESS COMMUNICATIONS II

TEACHER: Amy Schuster

EMAIL: aschuster@alpinedistrict.org

Unit 1: Business Etiquette and Tools for Successful Employees

46% of all new hires fail within 18 months. Students need tools to be successful in business. In this unit, students focus on business policies including technology in business, proper office behaviors, customer service, and minimizing communication barriers in business. These skills move students toward setting goals to be successful in their career objectives.

Unit 2: Job Search Strategies

Employers receive on average 118 applications per job; 20% of applicants are interviewed. In this unit, students will focus on the job finding process. Students will enhance their ability to showcase themselves through interviews and job applications. These skills will move students through creating their own resume, cover letter, and thank you letter.

Unit 3: Creating an Oral Business Presentation

Giving presentations clearly and concisely is an important skill in business. 70% of Americans who give work presentations state that presentation skills are critical to their work success. In this unit, students will enhance their communication skills as they focus on creating their own oral presentation including creating visuals and practicing speaking.

Unit 4: Preparing a Research-based Report

The National Association of Colleges and Employers found that 73.4% of employers want candidates with strong writing skills. In this unit, students will enhance their writing skills as they focus on the research paper writing process. These skills move students toward creating their own 2+ page research paper on a business related topic.

COURSE: CHILD DEVELOPMENT

TEACHER: Malorie Goodman EMAIL: maloriegoodman@alpinedistrict.org

Unit 1: Parenting Responsibilities I

It is common for people to love thinking back on their childhood. Memories of creativity, imagination, play, carefree days, the list goes on of what childhood dreams are made of. Students reflect on their childhood memories and evaluate the roles and responsibilities of parents.

Unit 2: Parenting Responsibilities II

Students will learn about parenting styles and identify what kind of parent they want to become. Students will learn about child theorists and why observing children can be helpful in our efforts to guide and teach children. Students will learn about positive guidance techniques and coping strategies.

Unit 3: Prenatal Development ***Must have permission slip signed to begin to this course.**

Students will learn to develop and strengthen their ability to make conscious, healthy, and respectful choices regarding dating/romantic relationships, and personal safety when it comes to relationships. Students will learn anatomy and physiology, adolescent development, and reproduction. This unit requires parental/guardian consent.

Unit 4: Growth and Development

Students will learn about the safety and health of children. Students will learn generalization of growth and development as well as the specific growth and development of newborns, infants, toddlers, and preschoolers.

COURSE: ENTREPRENEURSHIP

TEACHER: Abby Olsen EMAIL: abigailolsen@alpinedistrict.org

Unit 1: Introduction to Entrepreneurship

In this unit students will learn about the character traits of an entrepreneur, the skills needed to be successful, which organizations are available to help along the way, and how to complete a Lean Canvas.

Unit 2: Ownership & Economy

This unit introduces business concepts and business plans as well as basic business marketing.

Unit 3: Managing Marketing Strategies

This unit covers creating a marketing plan, determining a price point, and important aspects of choosing a business location.

Unit 4: The Promotional Mix & Financing Your Business

This unit discusses important aspects of running a business such as promotional strategies, financial management, and the basics of business capital.

COURSE: FOODS & NUTRITION I

TEACHER: Malorie Goodman EMAIL: maloriegoodman@alpinedistrict.org

Unit 1: Foods and Nutrition I, Unit 1

Students learn to recognize and use kitchen tools and appliances. Students gain experience following recipes and preparing food while practicing safe and sanitary kitchen standards. Students even get to eat their homework!

Unit 2: Foods and Nutrition I, Unit 2

Students learn all about carbohydrates, fiber, quick breads, rice, and pasta. Food preparation in each of these areas is included. And yes, students will be eating their homework!

Unit 3: Foods and Nutrition I, Unit 3

Students learn about protein, vitamins, and minerals. Food preparation in each of these areas is included and kitchen safety and sanitation will also be practiced. Students get to eat their homework.

Unit 4: Foods and Nutrition I, Unit 4

Students learn all about fats, water, and living a healthy lifestyle. Resources for good health are provided. Applying appropriate food preparation techniques in these areas while practicing safe and sanitary kitchen standards is included. Eating your homework is strongly encouraged!

COURSE: BUSINESS LEADERSHIP

TEACHER: Abby Olsen EMAIL: abigailolsen@alpinedistrict.org

Unit 1: History and Theories of Leadership

This unit addresses the history of leadership, its theories and styles, and how to articulate a vision to an organization.

Unit 2: Leading an Organization; Roles and Responsibilities

In this unit students will learn the importance and fundamentals of a vision, a mission, and establishing goals. They will be introduced to the roles and responsibilities of different positions within an organization.

Unit 3: Team Building

This unit discusses the decision-making process, tools used in dealing with conflict, the development of personal and socialized power, and elements needed in building an effective team.

Unit 4: Managing Organizational Changes

This unit discusses how leaders deal with change, the role of ethics within an organization, and the skills needed in coaching organizational members.

D I G I T A L S T U D I E S

Page: 11

Unit 1: Presentations

In this unit, students will focus on developing basic and more advanced presentation skills using Microsoft PowerPoint. These skills move students toward creating their own presentation using Microsoft PowerPoint or Google Presentations.

Unit 2: Word Processing

In this unit, students will focus on developing basic and more advanced word processing skills using Microsoft Word. These skills move students toward creating their own word processing documents using Microsoft Word or Google Docs.

Unit 3: Spreadsheets

In this unit, students will focus on developing basic and more advanced spreadsheet skills using Microsoft Excel. These skills move students toward creating their own spreadsheet documents using Microsoft Excel or Google Sheets.

Unit 4: Database

***Must complete units 1-3 before signing up for this unit.**

In this unit, students will focus on developing basic and more advanced database skills using Microsoft Access. Students will also use the skills learned throughout the units to create an integrated project using presentations, word processing, and spreadsheets.

GENERAL FINANCIAL LITERACY

Page: 13

Unit 1: Decision Making and Goals

Students will focus on understanding social and economic influences and the role they play in the decision making process, goal setting, and financial planning. This will help students to create their own SMART goals and guide them in creating two Financial Plans.

Unit 2: The Money You Earn

Students will explore different careers and their potential earnings to see how this relates to how much their lifestyle may cost. This will help students work towards understanding the paycheck and practice filling out tax forms.

Unit 3: The Money You Save

Students will explore the purpose of financial institutions, savings, and investments. Students will learn about different types of insurance and how insurance can reduce financial risk.

Unit 4: The Money You Spend

Many Americans do not learn how to manage their money, but it's an important skill in order to be financially stable. In this unit, students will explore how to manage the money they spend by learning about budgeting, credit scores, credit reports, and how to protect themselves financially.

LANGUAGE ARTS CORE

Pages: 15-18

Unit 1: Introductory Language Skills

This unit is for students to build a foundation for language and grammar skills. This unit comes first in the series of units as a basis for understanding basic concepts of English language. The goal is for students to feel confident and proficient in ELA language skills moving forward with their individualized curriculum.

Unit 2: Introductory Reading Skills

This unit is designed to teach students reading strategies to use before, during, and after reading to increase comprehension.

Unit 3: Narrative Writing

In this unit, students will learn how to write a narrative. Students will read a couple of short stories to better understand narrative writing as well.

Unit 4: *Walk Two Moons*, Part 1

Students will read the novel, *Walk Two Moons* by Sharon Creech and discuss plot, characters, setting, and symbols within the novel.

Unit 5: *Walk Two Moons*, Part 2

Students will read the novel, *Walk Two Moons* by Sharon Creech and discuss plot, characters, setting, and symbols within the novel.

Unit 6: Poetry and Short Stories

In this unit, students will read, analyze, and apply literary elements to two short stories and two poems.

Unit 7: Informative Writing

The purpose of this unit is for students to gain the secondary skill of informative writing, especially according to the 9th grade ELA core writing standards. This unit will follow a "I do, we do, you do" approach, as students observe examples of informative writing, practice the skills necessary, and finally submit a final writing assignment. Students will gain the skills of introducing an informational topic, organizing ideas to make connections, developing a topic with relevant facts, using evidence and examples, utilizing academic vocabulary, and writing with appropriate conventions. This unit will carry a theme of "Disneyland"/theme parks to keep it fun and engaging. This unit comes seventh in the series of units built for understanding the fundamental concepts of English Language Arts and related skills. It is the third unit in the course dedicated specifically to writing (first narrative writing, then argument writing, and now informative writing). The overall goal is for students to complete an entire informative work independently, and be confident and proficient in ELA research and writing skills moving forward in their secondary coursework.

Unit 8: Informative and Persuasive Writing

In this unit, students will learn how to write to inform and how to write to persuade and practice integrating sources into their writing.

Unit 1: Mythology

Students will read a variety of short myths from various cultures including Greek, Norse, Celtic, and Japanese mythologies with a focus on their figurative language, themes, author's choices, and narrative elements. We will explore how these ancient stories impact the stories and media we enjoy today. Students will create their own myth as a final written project.

Unit 2: Compare and Contrast

This unit covers the analysis of informational texts. A compare and contrast essay will be completed in this unit with a complete works-cited page using the program TurnItIn.

Unit 3: *A Doll's House*

In this unit, students will be reading and analyzing a play. understanding the format and sequencing of both the setting within the play and various characters will be studied.

Unit 4: *Metamorphosis*

This unit delves into the analysis of both literary and informational texts. Students will be reading a novella and formulating responses to the novella. Students will also be studying and using semicolons.

Unit 5: Extended Definition

This unit examines the criterion that defines the word courage. Students will read and analyze literary and informational texts to support their criterion and create an extended definition essay. Students will submit this essay using the program TurnItIn.

Unit 6: Literary Text Analysis

This unit explores both literary and informational text that deal with the Holocaust. Students will both connect and understand this time in history.

Unit 7: Argumentative Essay

This unit analyzes text from the Civil War. Students will also be analyzing speeches given on both the Confederate and union sides. Students will analyze these texts and use the texts to back up their claim in an argumentative essay.

Unit 8: Historical Fiction Poem

In this unit, students will be analyzing poems from both the Confederate and Union sides. Students will create their historical fiction poem based on a character from the Civil War time.

Unit 1: Who I Want to Be

Do you know who you are and who you want to be? In this course, we'll dive in and analyze articles and videos that help you with discovering who you are, how you want to treat others, and your life goals. You'll complete a mini-essay as the cumulative assignment for this course. Use this course to decide your core values and what is important to you as an individual about to move on to adulthood.

Unit 2: Conquering Death

Throughout time all humans have had one thing in common to them, death. In this course, you will be analyzing various interpretations and responses to death from various literary authors. By studying their writing, we can understand how others have conquered death when it came their way. It is important to know that the culminating assignment for this unit is studying and analyzing poems.

Unit 3: National Independence

As a nation, we went through various steps, including war, to get where we are today. In this course, we will look at many of the famous texts that brought us to becoming a free country. The culminating assignment is a formal letter written as if you were someone during this Revolutionary time period.

Unit 4: *Taming of the Shrew*

Students will read, view, and analyze Shakespeare's play "*Taming of the Shrew*". Students will gain an understanding of both figurative and connotative language as well as character descriptions within the play.

Unit 5: Social Media

Social Media is a highly debated topic. In this course, articles on both sides will be analyzed to create an argumentative essay on social media. Within the essay will be sources cited from the articles analyzed within the course as well as a counterclaim and a completed Works Cited page.

Unit 6: Career Choice

In this course you will conduct research from valid sources to find which career choice is right for you. You will be creating goals now, looking at schooling and/or training, and knowledge needed to get that specific career. You will complete a Career Choice essay, where you will learn how to complete a Works Cited page with properly cited sources.

Unit 7: Our Town, Part 1

Students will read, view, and analyze Thornton Wilder's play, "Our Town". Students will learn important definitions and how to analyze a play.

Unit 8: Our Town, Part 2

Now that students have analyzed the play, "Our Town", they'll take a deeper look at the author's reasoning behind writing the play. Students will create their own modern scene from "our Town" and study word changes and word parts.

Unit 1: Beliefs

This unit discusses the beliefs of the United States as well as personal beliefs. Students will study beliefs through U.S. Seminal Documents including The Declaration of Independence, Lincoln's Second Inaugural Address, and The Bill of Rights.

Unit 2: *The Good Earth*, Part 1

During this unit, students will read *The Good Earth* by Pearl S. Buck. Students will learn background knowledge about Chinese culture, increase vocabulary, learn how to better understand the text while reading, and improve essay writing.

Unit 3: *The Good Earth*, Part 2

During this unit, students will read *The Good Earth* by Pearl S. Buck. Students will learn background knowledge about Chinese culture, increase vocabulary, learn how to better understand the text while reading, and improve essay writing.

Unit 4: Short Stories and Poetry

During this unit, students will read a short story and study poetry. While studying these pieces, they will review literary elements, expand vocabulary, write a poetry explication, and examine how a setting can impact a text.

Unit 5: *Things Fall Apart*

During this unit, students will venture into African Literature by reading *Things Fall Apart*. While reading, they will cover reading strategies to improve comprehension. Students will write a final essay analyzing the theme of dignity as presented in the novel.

Unit 6: Middle Eastern Literature, Part 1

During this unit, students will choose and read one of three Middle Eastern books. While reading, students will identify and analyze the author's choice and use of literary elements including chronology, setting, theme, point of view, etc.

Unit 7: Middle Eastern Literature, Part 2

During this unit, students will choose and read one of three Middle Eastern books. While reading, students will identify and analyze the author's choice and use of literary elements including chronology, setting, theme, point of view, etc. Students will also learn basic MLA formatting.

Unit 8: *Frankenstein*

During this unit, students will read *Frankenstein* by Mary Shelley. By the end of this unit students will be able to identify literal incidents and their proper sequence in the plot, discuss themes, note author style, and discuss the significance of the book's title and note the examples of Gothic and Romantic periods of literature.

LANGUAGE ARTS ELECTIVE

Pages: 20-22

COURSE: BUSINESS COMMUNICATIONS I

TEACHER: Amy Schuster

EMAIL: aschuster@alpinedistrict.org

Unit 1: Communicating in Your Life

Communicating clearly is essential. In 2020, 81% of recruiters identify interpersonal skills as more important than any other skills. In this unit, students will enhance their communication through exploring the communication process and improving their reading and grammar skills. These skills move students toward creating their own research-based presentation on a communication topic.

Unit 2: Written Communications in Business

According to the National Association of Colleges and Employers, 73.4% of employers want candidates with strong written communication skills. In this unit, students will enhance their written communication skills through grammar and exploring common business documents. These skills move students toward creating their own business communication such as emails, letters, etc.

Unit 3: Customer Service and Company Communication

According to a 2016 study, 93% of employers see soft skills as "very important" or "essential". In this unit, students will enhance their communication skills by exploring proper responses to inquiries. These skills move students toward creating their own responses (positive, negative, persuasive, etc.) with a focus on how messages change based on audience and purpose.

Unit 4: Collaboration and Presentations in Business

According to Forbes, "Seventy percent of employed Americans who give presentations agree that presentation skills are critical to their success at work..." yet, "the fear of presenting is very real among professionals in corporate America today, so much so that many people are desperate to avoid it." In this unit, students will enhance their presentation skills. These skills will move students toward creating and presenting their own speech. Students will also focus on how to develop a collaborative workplace environment.

COURSE: BUSINESS COMMUNICATIONS II

TEACHER: Amy Schuster

EMAIL: aschuster@alpinedistrict.org

Unit 1: Business Etiquette and Tools for Successful Employees

46% of all new hires fail within 18 months. Students need tools to be successful in business. In this unit, students focus on business policies including technology in business, proper office behaviors, customer service, and minimizing communication barriers in business. These skills move students toward setting goals to be successful in their career objectives.

Unit 2: Job Search Strategies

Employers receive on average 118 applications per job; 20% of applicants are interviewed. In this unit, students will focus on the job finding process. Students will enhance their ability to showcase themselves through interviews and job applications. These skills will move students through creating their own resume, cover letter, and thank you letter.

Unit 3: Creating an Oral Business Presentation

Giving presentations clearly and concisely is an important skill in business. 70% of Americans who give work presentations state that presentation skills are critical to their work success. In this unit, students will enhance their communication skills as they focus on creating their own oral presentation including creating visuals and practicing speaking.

Unit 4: Preparing a Research-Based Report

The National Association of Colleges and Employers found that 73.4% of employers want candidates with strong writing skills. In this unit, students will enhance their writing skills as they focus on the research paper writing process. These skills move students toward creating their own 2+ page research paper on a business related topic.

COURSE: CREATIVE WRITTING

TEACHER: Megan Hennessy EMAIL: mhennessy@alpinedistrict.org

Unit 1: Short Story

In this unit students will understand how to create a Plot Outline and a Short Story. They will be learning how to incorporate the following in their short story: Symbolism, Theme, and Foreshadowing. They will see these concepts used in the short story, *To Build a Fire*. Students will also use these concepts to create their own short story using the program TurnItIn.

Unit 2: Poetry

In this unit, writing two poems will be covered and the following will have to be incorporated within the poems: Similes, Metaphors, Rhyme Scheme, and Author's Purpose. The objectives that are included below will be met throughout the entirety of the course. The focus is on narrative writing, analyzing literary and informational text, and using appropriate grammar and conventions in writing.

Unit 3: First Chapter

In this unit, students will learn how to incorporate character development, imagery and descriptive language, and conflict in a book's first chapter. Students will then apply these concepts in the first chapter of *The Hunger Games*. students will create their own first chapter using the program TurnItIn that will show their understanding of character development, imagery and descriptive language, and conflict.

Unit 4: Scene

In this unit, writing a scene and analyzing a scene will be covered. The following will be incorporated within your scene: Dialogue Juxtaposition, and Climax. The objectives will be met throughout the entirety of the course. The focus is on narrative writing, analyzing literary and informational text, and using appropriate grammar and conventions in writing.

Unit 1: Beliefs

This unit discusses the beliefs of the United States as well as personal beliefs. Students will study beliefs through U.S. Seminal Documents including The Declaration of Independence, Lincoln's Second Inaugural Address, and The Bill of Rights.

Unit 2: *The Good Earth*, Part 1

During this unit, students will read *The Good Earth* by Pearl S. Buck. Students will learn background knowledge about Chinese culture, increase vocabulary, learn how to better understand the text while reading, and improve essay writing.

Unit 3: *The Good Earth*, Part 2

During this unit, students will read *The Good Earth* by Pearl S. Buck. Students will learn background knowledge about Chinese culture, increase vocabulary, learn how to better understand the text while reading, and improve essay writing.

Unit 4: Short Stories and Poetry

During this unit, students will read a short story and study poetry. While studying these pieces, they will review literary elements, expand vocabulary, write a poetry explication, and examine how a setting can impact a text.

Unit 5: *Things Fall Apart*

During this unit, students will venture into African Literature by reading *Things Fall Apart*. While reading, they will cover reading strategies to improve comprehension. Students will write a final essay analyzing the theme of dignity as presented in the novel.

Unit 6: Middle Eastern Literature, Part 1

During this unit, students will choose and read one of three Middle Eastern books. While reading, students will identify and analyze the author's choice and use of literary elements including chronology, setting, theme, point of view, etc.

Unit 7: Middle Eastern Literature, Part 2

During this unit, students will choose and read one of three Middle Eastern books. While reading, students will identify and analyze the author's choice and use of literary elements including chronology, setting, theme, point of view, etc. Students will also learn basic MLA formatting.

Unit 8: *Frankenstein*

During this unit, students will read *Frankenstein* by Mary Shelley. By the end of this unit students will be able to identify literal incidents and their proper sequence in the plot, discuss themes, note author style, and discuss the significance of the book's title and note the examples of Gothic and Romantic periods of literature.

M A T H E M A T I C S C O R E

Pages: 24-26

Unit 1: Equations and Inequalities

This unit covers solving basic equations, inequalities, and absolute values. Including, multi-step equations/inequalities, variables on both sides of the equations/inequalities, literal equations/inequalities, and absolute value equations/inequalities. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 2: Introduction to Functions

This unit covers the relationship between quantities on a graph, functions, graphing, and graph behaviors such as maximums and minimums. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 3: Arithmetic Sequences and Linear Functions

This unit covers arithmetic sequences, rate of change, slope intercept equations, point slope equations, and the slope of parallel and perpendicular lines. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 4: Systems of Equations and Inequalities

This unit covers solving systems of equations by graphing, solving systems of equations by substitution, solving systems of equations by elimination, application of linear systems, linear inequalities, and systems of linear inequalities. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 5: Exponential Functions

This unit covers zero and negative exponents, exponential functions, comparing linear and exponential functions, exponential growth and decay, solving exponential equations, and combining functions. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 6: Data Analysis

This unit covers frequency and histograms, measures of central tendency and dispersion, box-and-whisker plot, scatter plots and trend lines, and two-way frequency tables. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 7: Transformations and Constructions

This unit covers basic geometrical translations, reflections, rotations, compositions of isometries, and constructions. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 8: Congruent Triangles

This unit covers congruent figures, triangle congruence, isosceles and equilateral triangles, congruence of right triangles, and congruence of overlapping triangles. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 1: Rational Exponents and Polynomials

Students will learn how to simplify expressions involving rational exponents. They will also learn to perform arithmetic operations on polynomials. By the end of the unit, students will be familiar with multiplying binomials so that they are ready to simplify factored quadratic expressions coming up in future units.

Unit 2: Basic Quadratics

Students will be introduced to quadratic relationships. They will learn how to graph quadratic functions given their equation. They will apply quadratic functions to real life situations. Lastly, students will learn to factor quadratic expressions and solve quadratic equations using factoring.

Unit 3: Advanced Quadratics

Students will learn how to transform the parent quadratic equation $y=x^2$ on a graph using translations, reflections, and dilations. Students will also learn how to describe these transformations using an equation. Students will learn how to complete the square on a quadratic expression so that they can write a quadratic equation given in standard form in vertex form. Lastly, students will be introduced to the complex number system.

Unit 4: Functions & Inequalities

Students will learn how to solve quadratic inequalities. They will be introduced to absolute value and piecewise functions. Students will then be able to compare these new functions to previously learned functions: linear, exponential, and quadratic, to find similarities and differences.

Unit 5: Similarity

Students will review what it means for two figures to be similar. They will find scale factors and perform dilations on figures. They will find that all right triangles are similar. And lastly, students will perform a sequence of transformations to move given triangles.

Unit 6: Trigonometric Functions

Students will use theorems about triangles to find missing values on diagrams. They will learn about different types of centers of a triangle: circumcenter, orthocenter, etc. Students will learn that since all right triangles are similar they can create proportions to find missing side lengths. And further, they can use trigonometry to find missing side lengths and angles.

Unit 7: Circles and Volume

Students will begin with finding the area of a sector of a circle. Then they will focus on tangent lines, chords, and arcs of a circle. Students will also find the volume of spheres, cylinders, and pyramids. Then they will find the scale factors between corresponding similar three dimensional figures.

Unit 8: Probability

Students will learn about the difference between experimental and theoretical probability and probability distributions. They will learn about compound probability and probability models. Lastly, they will focus on permutation and combinations.

Unit 1: Drawing Conclusions from Data

Students will analyze data using measures of center (mean, median, and mode) and spread (range and standard deviation). Students will learn about the importance of having good samples and surveys when drawing conclusions about a population. Students will be introduced to and learn basics about analyzing normal distribution curves.

Unit 2: Polynomials and Polynomial Functions

Students will review polynomial functions and polynomial arithmetic from Secondary Math 2: adding, subtracting, and multiplying. Then they will expand their knowledge to dividing polynomial expressions. Students will also use polynomial functions to model data and describe real world situations.

Unit 3: Rational Expressions and Functions

Students will learn how to add, subtract, multiply and divide rational expressions. They will be introduced to the reciprocal function family. Finally, they will learn to graph and solve rational functions.

Unit 4: Radical Expressions and Functions

Students will perform radical expression arithmetic. They will learn to graph and solve radical equations. Students will also discover composition of functions and inverse functions. Students will use composition of functions to verify inverse functions.

Unit 5: Exponential and Logarithmic Functions

Students will learn about exponential functions and how they model real life situations including compound interest models and radioactive decay. They will discover that logarithmic functions are the inverse of exponential. Students will learn to simplify logarithmic expressions.

Unit 6: Trigonometric Functions

Students will focus on trigonometric functions and their characteristics including periodicity. They will use the unit circle to evaluate trigonometric expressions. They will use the law of sines and cosines to find missing angles of triangles. Students will also learn the trigonometric identities.

Unit 7: Sequences and Series

Students will compare and contrast arithmetic and geometric sequences. They will build on their knowledge of sequences to learn about arithmetic and geometric series. Lastly they will learn about the binomial theorem and its connection to series.

Unit 8: Applying Geometric Concepts

Students will learn how to relate the perimeter and area of two-dimensional similar figures. Then they will extend this reasoning to comparing the surface area and volume of similar three-dimensional figures. Students will also learn about geometric probability.

M A T H E M A T I C S E L E C T I V E

Pages: 28 - 30

COURSE: ACCOUNTING I

TEACHER: Abby Olsen

EMAIL: abigailolsen@alpinedistrict.org

Unit 1: The Basic Accounting Equation

In this unit, students learn the basic accounting equation. Students are taught how business transactions change, the accounting equation and to analyze a transaction into a debit and credit part using T-accounts.

Unit 2: Journalizing and Posting

In this unit, students learn how to record business transactions in a journal, prove and rule a journal, and post amounts from a journal into accounts in a general ledger.

Unit 3: Cash Control and Completing the Fiscal Period

In this unit, students learn to manage cash and bank account transactions and adjusting entries. It also covers completing the worksheet in preparation for and completion of the income statement.

Unit 4: Income Statements, Balance Sheets, and Closing the Fiscal Period

In this unit, students learn how to complete the accounting cycle. It includes the income statement, balance sheet, journalizing and posting closing entries, and post-closing trial balance.

COURSE: MATH DECISION MAKING FOR LIFE

TEACHER: Matney Jorgensen

EMAIL: mjorgensen@alpinedistrict.org

Unit 1: Finance - Income & Expenses

This unit covers different ways employers pay their employees, computing gross earnings, income and expenses, the cost of owning a car, and budgeting. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 2: Finance - Investments, Loans, & Data Analysis

This unit covers investments, retirement income, loans, data analysis, and spreadsheets. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 1: Income & Expense

This unit covers financial responsibility, income, and expenses. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 2: Budgeting

This unit covers budgeting, large purchases, adjusting for life, and government programs. This unit will help students think critically and improve their understanding of the way mathematics affects the world around them. Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 3: Employment

This unit covers the questions, what kind of job are you looking for as an adult? How are you paid? What did you earn? Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 4: Employment Choices

This unit covers the questions, which job is right for you? How much money will you take home? What is your career plan? Students will explore real world problems in each lesson and apply what they have learned to their own lives.

Unit 5: Investments & Retirement

This unit covers the basics of investments and retirement income. Students will learn how to compute basic interest, the difference between short term vs long term loans, and how low-risk investments and stock market investments work. Students will learn about good retirement practices including social security benefits and diversifying your portfolio.

Unit 6: Loans & Data

This unit covers the basics of loans including: monthly payments, total cost of a loan, saving for a purchase compared to borrowing. Data analysis is also included.

Unit 7: Financial Planning

In this course, students will learn how to use graphs, charts, and tables to make smart financial decisions. They will analyze financial data, compare options like employee benefits and investments, and use functions to predict future financial outcomes. By the end, students will be able to visually represent and interpret key financial concepts.

Unit 8: Credit

This unit provides essential knowledge on understanding and responsibly using credit, managing money, and improving financial literacy. It covers topics like credit ratings, debt remediation, consumer protection, bankruptcy, and government programs to help you make informed financial decisions and avoid common pitfalls.

COURSE: STATISTICS

TEACHER: Darci Rhoades

EMAIL: drhoades@alpinedistrict.org

Unit 1: Exploring One-Variable Data

Statistics is all about analyzing data. In this unit students will learn the basics for organizing and interpreting one-variable data sets as they explore some local climate information. Topics include histograms, box plots, center, variation, and normal distribution. A guided data project gives students a chance to apply what they have learned.

Unit 2: Introduction to Correlation

This unit covers the basics of correlation and linear regressions.

COURSE: SECONDARY MATH III

TEACHER: Emily Poai

EMAIL: epoi@alpinedistrict.org

Unit 1: Drawing Conclusions from Data

Students will analyze data using measures of center (mean, median, and mode) and spread (range and standard deviation). Students will learn about the importance of having good samples and surveys when drawing conclusions about a population. Students will be introduced to and learn basics about analyzing normal distribution curves.

Unit 2: Polynomials and Polynomial Functions

Students will review polynomial functions and polynomial arithmetic from Secondary Math 2: adding, subtracting, and multiplying. Then they will expand their knowledge to dividing polynomial expressions. Students will also use polynomial functions to model data and describe real world situations.

Unit 3: Rational Expressions and Functions

Students will learn how to add, subtract, multiply and divide rational expressions. They will be introduced to the reciprocal function family. Finally, they will learn to graph and solve rational functions.

Unit 4: Radical Expressions and Functions

Students will perform radical expression arithmetic. They will learn to graph and solve radical equations. Students will also discover composition of functions and inverse functions. Students will use composition of functions to verify inverse functions.

Unit 5: Exponential and Logarithmic Functions

Students will learn about exponential functions and how they model real life situations including compound interest models and radioactive decay. They will discover that logarithmic functions are the inverse of exponential. Students will learn to simplify logarithmic expressions.

Unit 6: Trigonometric Functions

Students will focus on trigonometric functions and their characteristics including periodicity. They will use the unit circle to evaluate trigonometric expressions. They will use the law of sines and cosines to find missing angles of triangles. Students will also learn the trigonometric identities.

Unit 7: Sequences and Series

Students will compare and contrast arithmetic and geometric sequences. They will build on their knowledge of sequences to learn about arithmetic and geometric series. Lastly they will learn about the binomial theorem and its connection to series.

Unit 8: Applying Geometric Concepts

Students will learn how to relate the perimeter and area of two-dimensional similar figures. Then they will extend this reasoning to comparing the surface area and volume of similar three-dimensional figures. Students will also learn about geometric probability.

PHYSICAL & HEALTH EDUCATION

Pages: 32 - 33

COURSE: HEALTH

TEACHER: Emily Bahr

EMAIL: edrechtsler@alpinedistrict.org

Unit 1: Mental & Emotional Health

***Must have permission slip signed to begin to this course.**

Students learn coping strategies and techniques to improve their overall mental health and well-being. They engage in discussions with students and teachers to share thoughts and feelings. Students have opportunities to practice techniques learned through personal goal setting, reviewing of personal values and stress management techniques.

Unit 2: Nutrition, Exercise, Body Image, & Eating Disorders

Students explore connections between nutrition and physical fitness that promote lifelong health. Students help each other evaluate and improve their nutrition. They track daily nutrition, physical activity and set goals to improve self-knowledge and lifelong health.

Minimum 1 Week Commitment

Unit 3: Diseases, Injury Prevention, & Substance Abuse

Students investigate diseases and how to avoid illness. They learn about various injuries and basic first aid skills. Students explore the risks and complications of illegal drug use and the harmful effects of addiction. Students practice developing safety habits to protect themselves and save lives.

Unit 4: Relationships & Human Life Cycle ***Must have permission slip signed to begin to this course.**

Students develop skills to protect themselves while online and are able to identify dangerous situations. Students understand proper communication and how to identify healthy relationships. "Students learn medically accurate and unbiased facts about human reproduction, anatomy, physiology and disease prevention."

COURSE: PARTICIPATION SKILLS

TEACHER: Khalil Sikander

EMAIL: ksikander@alpinedistrict.org

Unit 1: Heart Rate, Strength & Endurance

Minimum 1 Week Commitment

In this unit, students will discuss heart rate, strength, and endurance. Students will practice strength and endurance in a circuit training workout and learn how to build a custom program. Students will submit one video of themselves participating in physical activity and a total of 10 hours of physical activity must be completed during this unit.

Unit 2: Basics of Nutrition

Minimum 1 Week Commitment

In this unit, students will go over basic nutrition and weight control information and will assess components of common foods. Students will submit one video of themselves participating in physical activity and 10 hours of physical activity must be completed during this unit.

Unit 3: Benefits of Exercise & Flexibility

Minimum 1 Week Commitment

In this unit, students will discuss the benefits of exercise on their social and mental health. Students will also look at the basics of flexibility and try a yoga routine. Students will submit one video of themselves participating in physical activity and at least 10 hours of physical activity must be completed during this unit.

Unit 4: Cardio-Respiratory Endurance

Minimum 1 Week Commitment

This unit covers the MyPlate website and discusses the concepts we will find there. Students will go over cardio-respiratory endurance and its benefits to health. Finally, students will submit one video of themselves participating in physical activity and total at least 10 hours of physical activity during this unit.

COURSE: FITNESS FOR LIFE

TEACHER: Alyssa Evanson

EMAIL: aevanson@alpinedistrict.org

Unit 1: Wellness & Safety

Minimum 1 Week Commitment

Students examine the connection between overall wellness and physical activity. Through discussion and analysis students will work towards designing their own fitness and wellness goals through analysis and discussion of the impact of exercise on overall health.

Unit 2: Self-Management & Lifestyle

Minimum 1 Week Commitment

Students explore the connection between a positive outlook on physical activity and an active lifestyle. Through personal analysis students will work towards understanding which types of exercise fit best into their current lifestyle and how to self manage and insert other important healthy behaviors into their life.

Unit 3: Strength, Endurance, & Flexibility

Minimum 1 Week Commitment

Students examine the connection between health related fitness and skill related fitness. Students will work towards understanding which types of exercise will develop specific aspects of fitness and will create a personal fitness plan using this knowledge to reach their short and long term goals.

Unit 4: Nutrition & Wellness

Minimum 1 Week Commitment

Students explore nutrition and their bodies' nutritional needs. Students will develop the ability to discern the viability of credible diets and supplements. Through discussions, analysis, and practice students will find ways to manage stress and develop a perspective of overall wellness.

COURSE: LIFETIME ACTIVITIES

TEACHER: Khalil Sikander

EMAIL: ksikander@alpinedistrict.org

Unit 1: Introduction to Lifetime Activity

Minimum 1 Week Commitment

This unit will start by introducing the idea of lifetime activity. Students will discuss the benefits, recommendations, and ways to increase physical activity. Students will identify different types of exercises and start a log of the physical activity that they do. Students will find their target heart rate and BMI and end will learn the basics of a few common lifetime activities.

Unit 2: Calories, Diet, Bowling & Racquetball

Minimum 1 Week Commitment

In this unit, students will learn more about calories and the kinds of calories that are best for their bodies. They will track the calories they eat and find ways you can improve their diet. Students will also choose 2 activities that they will record themselves performing and turn in.

Unit 3: Nutrition & Major Food Groups

Minimum 1 Week Commitment

In this unit, students will discuss more in-depth nutrition and the major food groups and they will track the serving they eat in each food group. Students will also discuss some types of exercise they can do at home. Students will learn about some common types of lifetime activities and turn in 2 videos of themselves performing a lifetime activity.

Unit 4: Building a Meal Plan

Minimum 1 Week Commitment

In this unit, students will learn how to build a meal plan. Students will identify motor skills and life expectancy. They will discuss 2 common lifetime activities. They will then turn in their log of the physical activity that they did and make a plan for the physical activity they will do after you finish the course.

SCIENCE CORE

Pages: 35 - 37

Unit 1: Ecology

In this unit, students will learn about: what ecosystems are, populations in ecosystems, energy flow and matter cycling, and stability and change in ecosystems. All concepts are centered on the phenomenon of wolves in Yellowstone National Park. Lessons, quizzes, and virtual labs help students master the essential concepts; a digital lab book helps students make sense of the phenomenon.

Unit 2: Organs & Organ Systems

Our bodies are composed of cells, tissues, organs, and organ systems that are essential in maintaining homeostasis. In this unit, students will learn about levels of organization in the body, how structure determines function, and how the digestive, circulatory, nervous, immune, and endocrine systems work to maintain homeostasis. Lessons, quizzes, and virtual labs help students master the essential concepts while a homeostasis video project helps students apply them.

Unit 3: Cells I

What are our cells made of? How do they obtain the matter they need to maintain homeostasis? In this unit, students will learn about how the food we eat becomes part of us. Students will also learn about how cells transport matter in and out and how that helps our cells maintain homeostasis. Lessons, quizzes, and virtual labs help students master the essential concepts while discussing real world phenomena help students apply them.

Unit 4: Cells II

Cells in our bodies are constantly dying and being replaced—you have a new layer of skin every four weeks! In this unit, students will learn about how our bodies make new cells to grow and maintain existing systems. Students will also learn about the matter cycles and energy flow involved photosynthesis and respiration, as well as the carbon cycle. Lessons, quizzes, a Jamboard project, and virtual labs help students master the essential concepts while discussing real world phenomena help students apply them.

Unit 5: Genetics I

Each human cell has about six feet of DNA wound up inside it. What is the purpose of this DNA? In this unit, students will learn about DNA, RNA, and protein synthesis. Students will also learn about genetic technologies like cloning and genetically modified organisms.. Lessons, quizzes, and assessments help students master the essential concepts.

Unit 6: Genetics II

How do children end up looking like their parents? Or in some cases, having traits that neither parent did? In this unit, students will compare and contrast asexual and sexual reproduction, as well as how gametes are made through meiosis. Students will also learn about Mendelian genetics and use Punnett squares to predict the traits of offspring. Lessons, quizzes, and assessments help students master the essential concepts.

Unit 7: Evolution I

Evolution is the unifying theory of biology. In this unit, students will learn how the theory of evolution developed over time, why mutations drive evolution, and what natural selection means. Students will also learn about geologic time, speciation, and misconceptions about evolution. Lessons, quizzes, and assessments help students master the essential concepts.

Unit 8: Evolution II

All life on Earth is related. In this unit, students will learn about the six kingdoms of life on Earth, how life is classified, and some tools scientists use to visualize the relationships of organisms. Lessons, quizzes, virtual labs, and assessments help students master the essential concepts.

TEACHER: Shauna Horne EMAIL: shaunahorne@alpinedistrict.org

Unit 1: Atmosphere and Energy

The role of the atmosphere in nourishing life on earth is the theme for this unit. Interactive lessons will help students learn how solar energy affects the atmosphere and the climate. Sunlight heating of the surface and the greenhouse effect illustrate how energy flows into and out of the atmosphere forming global winds. Students will model how the earth's energy budget helps explain climate change.

Unit 2: Climate Change

Virtually all climate models predict more powerful hurricanes and storms. Students will examine the role of water vapor and solar energy on the formation of fronts and intensity of severe weather events. Storm survivor research and data analysis skills will be used to help students learn about weather hazards and develop home safety plans.

Unit 3: The World of Water

No other substance dominates the physical and biological aspects of the earth like water. Online labs will help students discover the chemical properties, physical behavior, and biologic effects of this remarkable substance. Students will calculate their household water budget and examine how water is used, polluted, and reclaimed.

Unit 4: Wild Blue Oceans

Human survival is completely interconnected with the health of the oceans and is the focus of this unit. Online labs and research projects will help students understand the physical, chemical, and biological aspects of the ocean including ocean currents and climatic effects. Student directed research on how organisms adapt to the rigors of ocean environments will conclude the unit.

Unit 5: Earth's Tectonics

Plate tectonic theory has revolutionized how humans understand the earth and deal with its many geologic hazards and is the theme of this unit. Mapping, modeling, and data interpretation activities will be used to build student understanding of the theory and its implications for the earth and human endeavors. Interpreting tectonic maps and reconstructing past continents will develop student critical thinking skills.

Unit 6: Earthquakes and Volcanoes

Two out of three Utah residents live on or adjacent to the Wasatch Fault, one of the highest risk quake zones in the US. This unit will focus on the physics and dynamics of both quakes and volcanoes. Mapping, modeling, and data interpretation activities will be used to build student understanding of Utah's earthquake risk and the implications for its citizens. Preparing home safety plans and interpreting risk maps of Utah County will develop student critical thinking skills.

Unit 7: Utah Earth Systems

This unit will focus on how the science concepts of the first six units directly affect Utah's people and environment. Data interpretation activities on weather hazards, temperature inversions, water availability, biodiversity, carbon footprint, geologic hazards, and liquefaction potential will build student understanding of Utah's unique earth science issues. Surveys, online pollution calculators, and student chosen communication activities will build analysis and reasoning skills.

Unit 8: Earth, Solar System and Universe

This is a review of previously learned earth science concepts and the earth's place in space. Online labs and models will cover the Big Bang theory, expansion of the universe, and formation of the elements. The effect of natural laws on the solar system, atmosphere, hydrosphere, geosphere, and climate systems will be reviewed. The unit concludes as students analyze data on the carbon cycle and predict associated climate change.

Unit 1: Velocity

In this unit, students will explore the forces that shape our universe. Students will learn how to measure and describe a moving object in terms of position and velocity. This includes motion maps, data tables, graphs, and equations.

Unit 2: Momentum

In this unit, students will focus on what happens to velocity when moving objects interact. The main topics are impulse and momentum. This includes inertial, delta v, Newton's First and Second Laws, and force vs. time graphs.

Unit 3: Acceleration

In this unit we analyze velocities that change over time. Our focus will be free fall, skydiving and SpaceX reusable rockets. Topics include motion graphs, motion equations, and Newton's Second Law.

Unit 4: Conservation

In this unit students will learn how to track energy and momentum as it moves within a system and is transferred between systems. Our focus will be on pendulums, Newton's Cradle, and the stacked ball drop phenomenon. Topics include conservation, systems, energy, and momentum.

SCIENCE ELECTIVE

Pages: 39 - 40

COURSE: ASTRONOMY

TEACHER: Shauna Horne EMAIL: shaunahorne@alpinedistrict.org

Unit 1: Introduction to Astronomy

Discoveries by past astronomers gave humans the first hint of the vast distances in the universe along with an understanding of our place in it. Analyzing electromagnetic radiation and atomic spectra provides evidence of what the universe is made of, its motions, and its fundamental laws. Through data analysis, and modeling, students will be able to construct explanations for the structure and size of the universe.

Unit 2: Our Solar System

Space probes and telescopic observations have greatly expanded our understanding of our solar system. This unit will help students discover the solar system, its members, structure, laws, and amazing evolutionary history. Through data analysis, and classification, students will be able to construct a more comprehensive model of interplanetary space.

Unit 3: Sun and Stars

Everything in our world, including the atoms in our bodies, is made of star stuff. The life, death, and function of stars and our sun is the focus of this unit. Stellar temperatures, sizes, magnitudes, and distances along with the “life cycles” of low mass and high mass stars will be modeled. The relationship between luminosity and temperature (HR diagram) will be discussed. White dwarfs, supernovae, neutron stars, and black holes, as end products of stellar evolution, will be investigated.

Unit 4: Galaxies and the Big Bang

This unit explores the structure, classification, and nature of galaxies in the universe. Galactic structures, types, formation, and mergers will be investigated. The effect of supermassive black holes, dark matter, and dark energy in the universe will be explored. Two dimensional models will be used to understand how the universe expands and the Big Bang theory.

COURSE: BOTANY

TEACHER: Haylee Stewart EMAIL: hferguson@alpinedistrict.org

Unit 1: The Plant Kingdom & Plant-Like Organisms

What is a plant? Why are some organisms plants and others not? In this unit, students will learn what a plant is and will learn about organisms that may seem like plants, but are not plants at all. Students will then learn about various plant phyla, including mosses, ferns, conifers, and flowering plants.

Unit 2: Plant Tissues & Organs

Carrot. Celery. Lettuce. Apple. What do these four things have in common? They are all the organs of plants! In this unit, students will learn about plant tissues and about roots, stems, and leaves, which are plant organs. Students will also learn about how seed plants reproduce with cones or flowers.

Unit 3: Plants of Utah

Plant life is diverse, and there is a good deal of diversity in your very own yard. In this unit, students will study 50 plants common in Utah. Students will work on identifying these plants by their common name, scientific name, and family name. Students will also learn about the characteristics of leaves, which will help them in identifying plants.

Unit 4: Plant Physiology

Plants do a lot more than just photosynthesis. They grow, obtain energy, respond, and adapt. In this unit, students will learn about photosynthesis, cellular respiration, mitosis, plant hormones, plant responses, and plant adaptations.

Unit 1: Sponges, Cnidarians, & Flatworms

Sponges, sea jellies, tapeworms—some animal life on Earth may not look like an animal at all. In this unit, students will learn about the six kingdoms of life and about what makes an animal an animal. Students will also learn about sponges, cnidarians (sea jellies, anemones, and hydra), and flatworms.

Unit 2: Roundworms, Segmented Worms, & Mollusks

The animals in this unit are diverse! We go from parasitic roundworms to incredibly intelligent octopi. Students will review flatworms and then learn about roundworms and segmented worms. Students will also learn about the incredible diversity found in phylum Mollusca.

Unit 3: Arthropods and Echinoderms

Insects are the most diverse group of animals on Earth. There are more than a million described species, and they represent more than half of all known living organisms. In this unit, students will learn about arthropods, which includes insects, spiders, and crustaceans. Students will also learn about echinoderms like sea stars and sea urchins.

Unit 4: Phylum Chordata

Name an animal. What did you think of? Mostly, likely, something like a cow, sheep, cat, or dog. These animals are in phylum Chordata. In this unit, students will learn about chordates, which includes some uniquely bizarre animals, as well as fish, amphibians, reptiles, birds, and mammals.

S O C I A L S T U D I E S C O R E

Pages: 42 - 44

COURSE: GEOGRAPHY

TEACHER: Katie Pickett

EMAIL: kpickett@alpinedistrict.org

Unit 1: Physical Geography & Mapping

The study of geography focuses on three key questions: What is where? Why there? Why care? In this introduction to geography students will learn how the earth's physical features are formed, the impact of natural disasters and how to read and use maps. Students will research and describe local physical features.

Unit 2: Movement & Culture

Our world is made up of tectonic plates which shift and move. The movement of plates causes mountains to rise and earthquakes to shake. Students will learn about the natural processes which shape and grow our world.

Unit 3: Governments and Geography

This class explores how people organize into different political structures and the reasons behind it. Students will learn how physical features like mountains or rivers, and human factors like culture, help shape political boundaries. The course will also cover how cooperation and conflict arise from issues such as boundary disputes, resource control, and diverse identities.

Unit 4: Understanding the World

Making a t-shirt can be an international process, as cotton is grown in one country, fabric is made in another and it is sewn in another before being shipped around the world. Students will learn about different types of political and economic systems and the connections between them. Students will research an environmental issue and describe its political, economic and cultural impacts.

COURSE: GOVERNMENT & CITIZENSHIP

TEACHER: Nicole Kelsch

EMAIL: nkelsch@alpinedistrict.org

Unit 1: Government Foundations

The purpose of this course is to foster informed, responsible participation in public life. Knowing how to be a good citizen is essential to the preservation and improvement of the United States. In this unit, students will develop an understanding of how basic principles of government are applied in the U.S. Constitution.

Unit 2: Branches of Government

The Constitution distributes authority between the legislative, executive, and judicial branches. In this unit, explore how each branch of government functions and interacts with each other, as well as the impact all three branches have on U.S. citizens.

Unit 3: Civil Liberties, Rights & Responsibilities

Prepare to become an active, engaged citizen by learning about your rights and responsibilities. Knowing the extent of your rights will help you defend them for yourself and for others. Our nation's future rests on the ability and willingness of every generation to engage in civic action.

Unit 4: Distribution of Power & Globalization

Explore the distribution of power between federal, state, and local governments. Discover how individuals can use a range of strategies to wield political power. Finally, learn about the many ways in which the U.S. interacts with the world.

Unit 1: Industrialism & Progressivism (1880-1920)

America's first billionaire and richest American of all time, was John D Rockefeller. He made his fortune during the second industrial revolution, which hit after the end of the Civil War. Students will learn about the "Gilded Age" of America where rapid economic growth and disparity led to mass migration, the rise of labor movements and political changes. Students will choose a topical film and connect it to a current event.

Unit 2: Imperialism & World War I (1900-1919)

In a time where women fought for a chance to vote and the country was still recovering from the Civil War, America jumped into international conflicts. Students will discover and analyze primary sources from World War I. They will use these sources to explain the conflict's impact on the country.

Unit 3: Roaring 20s, Great Depression & New Deal (1920-1940)

After war and a global pandemic, America was ready to party. The roaring 20's saw a great deal of social and cultural change. The Great Depression unexpectedly hit the economy at the end of the decade. Presidents Hoover and Roosevelt took opposite approaches to the disaster. Students will compare the political approach to the Great Depression to modern political leaders' approaches to the Covid-19 economic crisis which hit in 2020.

Unit 4: World War II (1940-1950)

On December 7, 1941 the Japanese attacked the US at Pearl Harbor. The attack drew the hesitant US into another global war. Students will examine primary sources, including propaganda, high school yearbooks and music from World War II.

Unit 5: Early Cold War & Social Changes (1950-1979)

Sock hops, I Love Lucy and the baby boom were signs of changing American culture. In the wake of World War II the US also found a new enemy, Communism. Fear of shifting political and economic systems in the East led to wars abroad and witch hunts back home. Students will review a film on this era and relate it to current events.

Unit 6: Civil Rights & Counter-Cultural Movements (1930-1979)

During a socially turbulent era, the US saw several high-profile assassinations including John F Kennedy, Martin Luther King Jr, Malcom X and Robert Kennedy. With the backdrop of civil unrest and political violence, the Civil Rights movement grew through peaceful demonstrations. The landmark Civil Rights of 1965 came as a result of years of work from social leaders. Students will examine primary sources from this era and connect them to current events.

Unit 7: Late Cold War & Cultural Shift (1968-1989)

In 1972 a group of burglars broke into an office in Washington, DC. Two years later President Richard Nixon resigned over the incident, under threat of impeachment. This unit will cover the Vietnam War, Watergate, and the fall of the Soviet Union. For a final project, students will review a film on this era and relate it to current events.

Unit 8: 21st Century (1990-present)

What was life like before the internet? In this unit students will explore the ways in which the digital revolution, rise of terrorism, increase in political polarization, and cultural shifts have impacted America. Students will choose a project to review the most important themes in this era and make predictions on what is coming next for America.

Unit 1: Prehistory to Classic Societies

Architecture, art, drama, democracy, the Olympics and mathematics are just a few of the enduring contributions of classical civilizations. Students will study the growth of ancient civilizations and the creation of classical civilizations. Students will choose a final project that will demonstrate ways in which our world is still influenced by classical civilizations.

Unit 2: Expanding Connections & Global Interactions

Italy is famous for pizza, but pizza could not have been invented without the age of exploration. Tomatoes came from the Americas and were brought to Europe after 1492. In addition to food exchange, there was an exchange of ideas, a push for political power and demand for slaves. Students will discover primary sources from the Columbian exchange and use them in a guided essay to explain its impact.

Unit 3: Revolutions, Industrialization, & Empires

In 1776 America overthrew the British colonial power. The American Revolution inspired political revolutions around the world. On top of changing political systems, this time period saw a dramatic shift in technology with the Industrial Revolution. Students will study political, cultural and technological revolutions that shifted power in the world and review a modern revolution of their choice.

Unit 4: Global Conflicts & The Contemporary World

World War I shocked the world as over 30 countries declared war. This war was just the beginning of large-scale global conflict. Students will study other global conflicts, including World War II and the Cold War. Students will choose a global problem to research and describe possible solutions.

S O C I A L S T U D I E S E L E C T I V E

Pages: 46 - 47

Unit 1: Ancient Mediterranean

Take a trip to Ancient Greece and Ancient Rome. In this unit, students will learn how to identify, analyze, and interpret the sculptures, paintings, and architecture from the ancient empires of the Mediterranean, as well as understand their impact on the rest of the Western art world.

Unit 2: Indigenous Americas

Learn about the art of the Maya, Aztec, and Inca empires, as well as the native tribes of North America. In this unit, students will identify, analyze, and interpret artworks from these early cultures and discover the important role they play in the art world, then and now.

Unit 3: The Pacific Islands

From feathered Hawaiian capes to the massive moai sculptures of Rapa Nui, the islands in the Pacific are home to some of the most fascinating and the least recognized art in the world. In this unit, students will learn about the form, function, content and context of various artworks from Melanesia, Micronesia, and Polynesia.

Unit 4: Africa

African art is some of the oldest and most influential in the art world. In this unit, students will learn about the form, function, content, and context of artworks from various parts of Africa and how they tell the story of the cultures from which they were created.

Unit 5: Middle Ages Europe

Medieval European art is home to massive cathedrals, colorful stained-glass windows, and elaborate tapestries that tell the story of a lost age. Learn about the art of Middle Ages Europe from the Romanesque to the Gothic period. In this unit, students will identify, analyze, and interpret artworks from these periods.

Unit 6: Renaissance & Baroque

Learn about the Mona Lisa, the Sistine Chapel, and Michelangelo's David in this unit that covers European art from the 1400s to the 1700s. Students will identify, analyze, and interpret artworks from these periods while learning about why they are some of the most recognized works in Western art history.

Unit 7: 19th Century & Modernism

Learn about artists like Monet, Van Gogh, and Picasso in this unit that covers the art of Europe and the Americas in the 19th and 20th centuries. Students will identify, analyze, and interpret artworks from these movements and learn about their impact on the art world today.

Unit 8: Global Contemporary

Contemporary art is the art of today. In this unit, students will begin in the 1980s with Pop Art, Conceptualism, and Street Art, and continue to the present day with Performance Art, Installation, and Land art. Students will learn to identify, analyze, and interpret specific artworks from these movements.

Unit 1: Research Methods & Biopsychology

Do you ever wonder why people do the things they do? Would you like to understand yourself and others better? This introductory course will help you gain a greater understanding of people's behavior and mental processes. Discover what psychology is and how it can apply to your life. Learn how psychologists study behavior and mental processes so it's not just a guessing game! Explore how our bodies and brains are a big part of who you are and what you do.

Unit 2: Human Development, Learning & Memory

Explore how people grow and change over their lifetime. Track how people develop physically, socially, and cognitively through childhood, adolescence and adulthood. In addition, you will learn...well...how humans learn! Find out the answer to questions like "How can I be a better student?" and "Why are our memories sometimes not very reliable?"

Unit 3: Motivation, Emotion, Stress & Health

Find out what motivates people to act in certain ways and how emotions affect our behavior. Discover what the role of stress is on your mental health and how to keep a healthy mindset. You will explore different personality theories and get to apply those theories to understand your own personality a little better.

Unit 4: Psychological Disorders, Therapy & Social Psychology

Learn about social behaviors such as conformity, prejudice, aggression and altruism. Identify how psychological disorders are classified and diagnosed. Identify the major symptoms of psychological disorders and which treatments are most effective.

THE ARTS

Pages: 49 - 51

Unit 1: Identity

Creativity takes courage. In this unit, students will be introduced to the elements of art, learn how to analyze an artwork, and create original artworks while exploring the theme of identity. Students will explore this theme through the use of media such as collage, drawing, and photography.

Unit 2: Ecology

It has been said that art is simply an imitation of nature. In this unit, students will continue learning about the elements of art, practice analyzing an artwork, and create original artworks while exploring the theme of nature. Artworks will be created using media such as drawing, photography, and sculpture.

Unit 3: Belief

Art is often the expression of our deepest beliefs. In this unit, students will be introduced to the principles of art, practice analyzing an artwork, and create original artworks while exploring the theme of belief. Artworks will be created using media such as painting, photography, and drawing.

Unit 4: Community

Identifying our differences often allows us to see what we have in common. In this unit, students will learn about the principles of art, practice analyzing an artwork, and create original artworks while exploring the theme of diversity. Artworks will be created using media such as drawing, photography, and collage.

Unit 1: Ancient Mediterranean

Take a trip to Ancient Greece and Ancient Rome. In this unit, students will learn how to identify, analyze, and interpret the sculptures, paintings, and architecture from the ancient empires of the Mediterranean, as well as understand their impact on the rest of the Western art world.

Unit 2: Indigenous Americas

Learn about the art of the Maya, Aztec, and Inca empires, as well as the native tribes of North America. In this unit, students will identify, analyze, and interpret artworks from these early cultures and discover the important role they play in the art world, then and now.

Unit 3: The Pacific Islands

From feathered Hawaiian capes to the massive moai sculptures of Rapa Nui, the islands in the Pacific are home to some of the most fascinating and the least recognized art in the world. In this unit, students will learn about the form, function, content and context of various artworks from Melanesia, Micronesia, and Polynesia.

Unit 4: Africa

African art is some of the oldest and most influential in the art world. In this unit, students will learn about the form, function, content, and context of artworks from various parts of Africa and how they tell the story of the cultures from which they were created.

Unit 5: Middle Ages Europe

Medieval European art is home to massive cathedrals, colorful stained-glass windows, and elaborate tapestries that tell the story of a lost age. Learn about the art of Middle Ages Europe from the Romanesque to the Gothic period. In this unit, students will identify, analyze, and interpret artworks from these periods.

Unit 6: Renaissance & Baroque

Learn about the Mona Lisa, the Sistine Chapel, and Michelangelo's David in this unit that covers European art from the 1400s to the 1700s. Students will identify, analyze, and interpret artworks from these periods while learning about why they are some of the most recognized works in Western art history.

Unit 7: 19th Century & Modernism

Learn about artists like Monet, Van Gogh, and Picasso in this unit that covers the art of Europe and the Americas in the 19th and 20th centuries. Students will identify, analyze, and interpret artworks from these movements and learn about their impact on the art world today.

Unit 8: Global Contemporary

Contemporary art is the art of today. In this unit, students will begin in the 1980s with Pop Art, Conceptualism, and Street Art, and continue to the present day with Performance Art, Installation, and Land art. Students will learn to identify, analyze, and interpret specific artworks from these movements.

COURSE: INTRODUCTION TO ACTING

TEACHER: Megan Hennessy

EMAIL: mhennessy@alpinedistrict.org

Unit 1: The Basics of Acting

Students will gain an introduction into the basics of acting. Students will learn about theater terminology needed in stage performing. Students will learn about improv, pantomime, voice, and characterization. Students will view and analyze scenes. Students will create and complete a final acting project.

COURSE: THEATRE

TEACHER: Megan Hennessy

EMAIL: mhennessy@alpinedistrict.org

Unit 1: Theatre History

Students will study and analyze history and culture in both Western and Eastern Theater. Students will be viewing and analyzing a scene from both a Western and Eastern historical play. Students will be researching and creating a presentation on a different theater culture in theater's history.

Unit 2: Play Analysis

Students will develop an appreciation of theatre and an ability to reflect on performances by reading the background material, attending 2 LIVE theatre performances and writing a 2-page critique for each performance viewed.

Unit 3: Scene Writing

Students will have an opportunity to create their own scene. Using knowledge from scene parts and stage directions, students will analyze a scene to know how to create one. With step-by-step modeling and instructions, students will create and use their newfound knowledge in scene writing.

Unit 4: Children's Story

Students will learn about the wonderful world of children's storytelling. They will delve into where children's stories came from and famous authors. Students will have an opportunity to view different examples of children's stories. Students will create their own children's story and perform their children's story using Adobe Spark.