

NEBRASKA EDUCATIONAL VIRTUAL ACADEMY

NEVA BIOLOGY: Semester I

NEVA Biology will introduce students to the grand sweep of life on Earth and provide them with a basic understanding of the processes that shape and sustain it. Students will learn about the ecological ties that bind organisms to one another and to their environment and explore the promising, perilous dance of humans and nature. Topics include Concepts and Methods in Biology, Biology the Science of Life, Requirements of Life, Cellular Organization, Tissues, Organs, and Systems, Cellular Energy, Energy Transformations, The Life of a Cell, Mitosis, Meiosis, Mendel Inheritance, Genetic Code and Genetic Engineering. Learning through independent reading, videos, labs and application of attained knowledge are key elements that equal success in this course. It is an interactive, online course that requires dedication, time management, and motivation.

NEVA BIOLOGY: Semester II

NEVA Biology II will introduce students to the grand sweep of life on Earth and provide them with a basic understanding of the processes that shape and sustain it. Students will learn about the ecological ties that bind organisms to one another and to their environment and explore the promising, perilous dance of humans and nature. Topics include Darwin Evolution, Origin of a Species, Taxonomy, Microorganisms, Plants, Animals, Ecosystems, Energy Transfer In Communities, Population Ecology, and Biomes of the world. Learning through independent reading, videos, labs, and application of attained knowledge are key elements that equal success in this course. It is an interactive, online course that requires dedication, time management, and motivation.

NEVA PHYSICAL SCIENCE: Semester I

NEVA Physical Science is an integration of chemistry, Earth Science, and space science and applied mathematics that emphasizes the important connections between these subjects. Through short readings and computer simulations students will learn standards-based concepts in physical science. First semester we will begin with an introduction to science. A few of the topics students will investigate are as follows: matter, states of matter, atoms, the periodic table, chemical reactions, forces and waves. Learning through independent reading, video labs and application of attained knowledge are key elements that equal success in this course. It is an interactive, online course that requires dedication, time management and motivation.

NEVA PHYSICAL SCIENCE: Semester II

NEVA Physical Science II is an integration of chemistry, physics, earth science, space science and applied mathematics that emphasizes the important connections between these subjects. Through short readings and computer simulations students will learn standards-based concepts in physical science. Second semester we will begin with Solutions. A few of the topics students will investigate are as follows: Acids, Bases and Salts, Nuclear Changes, Motion, Forces, Work and Energy, Heat and Temperature, Waves, and Sound and Light. Learning through independent reading, video labs and application of attained knowledge are key elements that equal success in this course. It is an interactive, online course that requires dedication, time management, and motivation.

GEOMETRY

This Geometry course is a comprehensive introduction to geometric concepts including the basic elements of geometry, proofs, angles, parallel and perpendicular lines, the coordinate plane, triangles, quadrilaterals, polygons, circles, congruence and similarity, surface area, volume and transformations. Technology is used throughout the course to demonstrate understanding of a topic as well as present the study of geometry in an interesting and interactive environment.

Algebra 1A

This is the first semester of an Introductory Algebra course. Lessons are computer-based and interactive. Grades are based on completed homework assignments, tests and discussion board participation. Online courses require students to be self-motivated and willing to communicate with the instructor and other students frequently throughout the course in order to be successful.

Topics covered include: real numbers, simplifying expressions, solving equations, inequalities and absolute values, and graphing equations.

Algebra 1B

This is the second semester of an introductory Algebra course. Students must have successfully completed the first semester of an Algebra course before attempting this course. Lessons include the following topics: graphing inequalities, slope, exponents, monomials, polynomials, factoring, systems of equations, and quadratic equations.

Lessons are interactive and grades are determined through homework assignments, tests, and discussion board participation. As with Algebra 1A, this course requires students to be self-motivated and willing to communicate with the instructor and other students frequently throughout the course in order to be successful.

English 9A

Students will explore components of fiction, non-fiction, and poetry through short readings. Along with literary terms and interpretation of text, students will become familiar with new vocabulary and will master formal paragraph in preparation for formal essay structure. The written work will include but is not limited to descriptive, classification, compare/contrast, persuasive, biographical narrative, sonnet, haiku, and free verse. Integrated with the literature and writing will be information and practice for grammatical rules in written and spoken communication. Students will use selected readings, videos, and Internet-based resources during this course.

English 9B

Pre-requisite: Completion of first semester English 9.

Students will focus on the characteristics of a non-fiction novel and the characteristics of drama. Along with literary terms and interpretation of text, students will become familiar with new vocabulary and will apply knowledge of paragraph structure to develop structured five-paragraph essays including but not limited to persuasive, compare/contrast, expository, and cause/effect. Integrated with the literature and writing will be information and practice for grammatical rules in written and spoken communication. Students will use selected readings, videos, and Internet-based resources during this course.

English 10A COURSE DESCRIPTION

Pre-requisite: Completion of English 9

Students will focus on the characteristics of a fiction, non-fiction, and poetry through short readings. Along with literary terms and interpretation of text, students will become familiar with new vocabulary and will write structured essays with formats including but not limited to cause/effect, classification, persuasion, and compare/contrast. Integrated with the literature and writing will be information and practice for grammatical rules in written and spoken communication. Students will use selected readings, videos, and Internet-based resources during this course.

English 10B COURSE DESCRIPTION

Pre-requisite: completion of English 9

Students will focus on the characteristics of a non-fiction novel and the characteristics of drama. Along with literary terms and interpretation of text, students will become familiar with new vocabulary, will write structured essays, and will complete a research-based writing assignment. Integrated with the literature and writing will be information and practice for grammatical rules in written and spoken communication. Students will use selected readings, videos, and Internet-based resources during this course.

English Elective: Contemporary Literature

Grade Level 11-12

This upper-level one-semester course will require students to be reflective readers who can make evaluative judgments about texts within and across genres. Students will analyze how literature affects cultures, society, and individuals; and they will demonstrate how literature can be taken beyond its literal level through analysis, interpretation, synthesis, and generalization. This course will use three novels (*The Kite Runner* by Khaled Hosseini, *The Five People You Meet in Heaven* by Mitch Albom, and *Into the Wild* by Jon Krakauer) and other accompanying short stories, poetry, and informational text to create diverse perspective about the literature.

US History: Semester I

This class will cover the following broad topics: Gilded Age, Urban Nation, Reform, and Imperialism. Students will take a virtual journey back in time to learn about a variety of topics including the influence of political machines, the effect of immigration on various parts of the country, and the role of women and minorities in the early 1900's. Students will use selected readings, videos, and Internet-based resources during this course. A variety of Web 2.0 tools will be used to engage students and help them share their learning experiences while developing 21st century skills.

To be successful in this class, students need to be organized, disciplined, and motivated. Students must also possess the skills to work and learn independently while being part of a learning community. Students are expected to be active participants in our learning community by posting to discussion forums, communicating on a weekly basis with their instructor, and collaborating with other students when necessary.

US History: Semester II

This class will cover the following broad topics: US Imperialism, World War I and the Roaring 20's, The Great Depression, and World War II. Students will take a virtual journey back in time to learn about events like the Spanish-American War,

the Red Scare, Prohibition, the New Deal, Japanese internment, and the aftermath of World War II. Students will use selected readings, videos, and Internet-based resources during this course.

To be successful in this class, students need to be organized, disciplined, and motivated. Students must also possess the skills to work and learn independently while being part of a learning community. Students are expected to be active participants in our learning community by posting to discussion forums, communicating on a weekly basis with their instructor, and collaborating with other students when necessary.

World History: Semester I

This class will cover the following broad topics: Muslims, Byzantines, Russians, Turks, and European Middle Ages. During this semester students will learn about the origins of Muslim culture and religion as well as feudalism in Europe, and the age of knights. Students will use selected readings, videos, and Internet-based resources during this course. A variety of Web 2.0 tools will be used to engage students and help them share their learning experiences while developing 21st century skills.

To be successful in this class, students need to be organized, disciplined, and motivated. Students must also possess the skills to work and learn independently while being part of a learning community. Students are expected to be active participants in our learning community by posting to discussion forums, communicating on a weekly basis with their instructor, and collaborating with other students when necessary.

World History: Semester II

This class will cover five broad topics of World History: The Formation of Western Europe, European Renaissance and Reformation, The Age of Exploration and Isolation, and The Enlightenment and Revolution, and Societies and Empires in Africa. Through selected readings, multimedia presentations, and Internet-based inquiry students will learn about the Crusades, Bubonic Plague, feudalism, European exploration, and the scientific revolution.

To be successful in this class, students need to be organized, disciplined, and motivated. Students must also possess the skills to work and learn independently while being part of a learning community. Students are expected to be active participants in our learning community by posting to discussion forums, communicating on a weekly basis with their instructor, and collaborating with other students when necessary.

Microeconomics

This class will cover basic concepts related to the student's role as consumer, producer and citizen. Topics to be covered include personal economic decision making concepts, supply and demand, production and cost analysis, the use and limitations of resources, the economic cycle and the role of government as it relates to the individual.

Macroeconomics

This class will focus on the economy in the aggregate. Topics to be covered include money and banking, Gross Domestic Product, economic growth and the importance of international trade. Comparison of different market economies and discussions of historical schools of thought will be included.

Geography

This class is all about the important theme of geography. Who lives in certain locations? Why do people live in certain locations: why do we care who lives where and why: These are all questions (plus many, many more) that geographers answer. From locating items on a map to developing into the cultures and everyday lives of distant, and not-so-distant, countries, this class will take you on a whirlwind trip around the globe. Be prepared to be amazed and inspired by the people and cultures that you will meet on the journey!

Stellar Astronomy

A star is a fight to the death between gravity and pressure. This standards based course revolves, (pun intended). Around the formation, life cycle and study of stars. This includes: classification, multiple star systems, nebulae, supernovae, black holes, and constellations. Join me in a fascinating, semester long journey that explores these incandescent bodies. We are, after all, really just stardust.

Science of the Valley: Agate Fossil Beds

What do Beardogs (Daphoenodon), devil's corkscrews (Daemonelix), ""terrible pigs" (Dinohyus), and "Sloth Foot" (Moropus) have in common? You can find them all at Agate.

Language Arts: The Basics!

This class will cover the basics of writing, reading, listening, and speaking. Over the semester, students will use all four of these basics to write effective essays, analyze a variety of text, and advance their skills in the art of communicating their thoughts, while at the same time expanding their vocabulary and their knowledge of communicating through language.

The Outsiders Novel Study

This class focuses on analyzing the novel *The Outsiders* by S.E. Hinton. The study includes character analysis, learning story elements, figurative language, vocabulary, and grammar as it pertains to the novel, as well as narrative writing. This class meets the Nebraska standards for 9-10th grade.

Personal Finance/Consumer Math

This course will teach students how to become more aware of their personal finances and aid them with making good decisions with their money. There are 6 modules being used:

1. Money Management
2. Borrowing
3. Earning Power
4. Investing
5. Financial Services
6. Insurance

This class will also include daily math activities to enhance the skills needed in the real world.

Developmental Math

During this course, students will be working through many different topics. Topics include a review of arithmetic, introductory algebra, rudiments of analytic geometry, elementary trigonometry, introductory statistics, and basic finance. Module warm-up questions will help student's identify learning deficits, which can then be addressed through the modules. This course also contextualizes math for trades, including electro mechanical, engineering graphics, machine and welding. Topics covered include:

1. Module One: Numbers, Conversions and Measurements
2. Module Two: Algebra Essentials
3. Module Three: Geometry
4. Module Four: Trigonometry, Vectors and Logarithms
5. Module Five: Concepts in Finance, Statistics and Graphing