NFCacademy online

Course Quick Reference Guide

NFC Academy

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Note: Unless noted courses are two semester courses.

NFC Academy

NFCacademy online

Bible

GRADES 3-8

Bible 300. The wonder of God's universe, life of Jesus, living for God through obedience, praise, and worship, understanding God's word and love for His children.

Bible 400. Christian Discipleship is the focus for exploring God's Word , how I love for God, God cares for us, how I know God exists, the geography of the Old Testament, witnessing for Jesus.

Bible 500. Develop a lifelong relationship with the Father through His Word. The existence of angels, the Bible as a book of prophecy and poetry and God's work shown through service to others.

Bible 600. A rich overview of the Bible beginning with creation and the kingdom of Israel, through the life of Christ, culminating with the lessons on Revelations.

Bible 700. Explore practical Christianity today as it applies to our daily life. Worship, mission of mankind, God's enduring love for his people shown through His love, mercy and grace.

Bible 800 Practical Christianity and Church History. Establishment of church, the nature of God, the concept of salvation. Expanded understanding of prayer and its purpose in life, God's will, the role of parents and children and the book of Proverbs

NFC Academy

Bible

HIGH SCHOOL

New Testament Survey. The Gospels, Acts of the Apostles, the Pauline epistles, the general epistles, the Revelation of Jesus Christ, Biblical literature; Job and suffering, sharing Christ, God's will for your life.

Old Testament Survey. Creation through Abraham, Abraham through Joseph, The exodus and wanderings, Israel in Canaan, The judges and spiritual decline, the kingdom, the divided kingdom, the remaining kingdom, captivity, the restoration.

Bible Doctrine. The faithfulness of God, Romans part I, Romans part II, the doctrine of Jesus Christ, the nation of Israel, history of the canon, friendship, dating and marriage, sin and redemption, apologetics.

Christian Faith and Living. Knowing yourself, Christina ministry, choosing your Christian ministry, Godhead, God's holiness and goodness, epistles of James and John, Biblical literature, comparing religions, David, Solomon, Psalms, and Proverbs, practical Christian living.

Foundations for Living. What is a Biblical Worldview?, presuppositions, the doctrines of the Bible, God's creation, head of the family, the Bible and marriage, dating to matrimony, Christian education, art, music, and politics, putting it all together

NFC Academy

History

GRADES 3-8

History/Geography 300. Communities- mining: iron ore, drilling for petroleum, gold, silver, and copper, farming, fishing, cattle ranching, dairy farming, manufacturing: automobiles, cereal, furniture, chemicals, technology, space

History/Geography 400. Surface of the earth, space exploration, seaport cities: Sydney, Hong Kong, China, life in the desert, deserts of the Southern Hemisphere, modern ways of life, grasslands, tropical rainforests, polar regions, mountain countries, North America

History/Geography 500. History from the Vikings to early settlers to developing into a world power, relations to Canada and South America

History/Geography 600. Development of all continents and history of the world

World Civilizations 700. Religions and politics as well as history of development to the present; relations between countries

History/Geography 800. Colonies and evolution of our country. Includes detailed accounts and WWI and WWII.

NFC Academy

History

HIGH SCHOOL

World History. Importance of history, early hominid development, agriculture communities, Early River Valley civilizations, Portuguese influence, leaders of the Protestant Reformation, Gupta Empire, Byzantine Empire, Bantu migration, Latin American independence movements, French Revolution, Revolutions of 1848, Industrial Revolution, social class, child labor, Chinese & British positions on opium trade, WWII, components of the United Nations governing body, culture and technology, tracing population growth, causes and effects of revolutions, emergence of capitalism, Nation States-globalization and immigration

Government & Economics. Exploring Governments, American Government, Political Parties in America, History of Governments, A Christian and His Government, Free Enterprise, Business and You, The Stock Market, Budget and Financing, Banking, International Issues.

American History. Foundations of the American Republic, Constitutional Government, National Expansion, A Nation Divided, At home and Abroad, Peace and Global Conflict, A Nation at War, Contemporary America.

World Geography. Globes, maps, charts, earth's layers, renewable, and nonrenewable resources, atmosphere, hydrosphere, ecosystems, human migration, settlement, developing nations, counter migration stream, pandemic, cultural mosaics, United States, Northeast and the South, Canada, Greenland, International alliances, NAFTA, NATO, and OAS, aquaculture, conservation, environmental policies, agriculture, Central America, South America, Caribbean, Oceania, Australasia, Antarctica, Western Europe, Eastern Europe and Russia, Sub-Saharan Africa, North Africa, Southwest Asia, Central, South, East, and Southeast Asia

See additional High School History courses under Electives

NFC Academy

English

Grades 3-8

Language Arts 300. Grammar, spelling, book reports, stories, fables, reading, adjectives, punctuation, capitalization.

Language Arts 400. Book reports, writing fables, spelling, use of dictionary, different kinds of writing, short stories and word play

Language Arts 500. Contractions, diphthongs, abused language, parts of speech, opinions, essays, projects

Language Arts 600. Adverbs, pronouns, idioms, business news story, interjections, outlines, organizing, the President's thoughts, metaphors, poems, drama

Language Arts 700. Building blocks, information texts, narratives, biographies, personal and business letters, public speaking, essays, critiques, more mechanics, formatting, autobiographies, character sketch

Language Arts 800. Strategies for writing, punctuation, essays, analyzing, propaganda, persuasive factors, formal essays, summarizing, paraphrasing, persuasive language, listening, cues, following directions, story elements, narrating, editing

NTC Academy

English

HIGH SCHOOL

English I. Word meanings, spelling, speech, prepositions, interjections, conjunctions, common errors, verb tenses, plagiarism, complex projects, persuasion, the world of business, arguments bias, contrast and comparing, SOAP, poetry, short story, Homer, Odysseus, Elizabethtown drama, Shakespeare, novels, Twenty thousand Leagues, Plots and perspective, the novel

English II. Language in motion, plurals, inflections, demonstrative pronouns, antecedents, infinitives, adverb phrases, punctuation, exposition, technical instruction, analogies, roots and affixes compositions, biographies, regional dialects, getting a job, resumes, cover letters, media, television, public opinion, theme and experience, critical essay, diction and form, Greek drama, Roman drama, Pygmalion

English III. Standard and nonstandard English, lexicography, appositives, subordinate clauses, Greek and Roman roots, measurement in poetry, Annabel lee, nonfiction, journals, Our Town, essay, thesis , bibliography, analyzing words, expository theme, critical analysis, Old Man and the Sea

English IV. Elizabethan poetry, Shakespeare, Hamlet, Bunyan, Pope, Swift, Johnson, Goldsmith, Shelley, Keats, Wordsworth, Milton Puritan literature, sensibility literature, romantic literature, medieval literature, poetry Hamlet, Canterbury Tales, 17th-19th century English literature

Essentials of Communication ***(1 semester).*** Public Speaking proficiency Components of the communication process and their functions, types of communication, functions of language, non-verbal communication, listening styles and barriers, interpersonal relationships, conversation management, etiquette, criticism, understanding groups, group communication, problem solving, leadership, presenting and interpreting public messages, defining the audience, research, supporting materials, speech outlining, speaking notes, rehearsing

See additional English courses under High School Electives

NCAcademy

Math

GRADES 3-8

Mathematics 300. Place values, addition and carrying, money, subtraction, borrowing, fractions, shapes measurement, graphs and rounding

Mathematics 400. Place values, rounding, perimeters, calendars, shapes, roman numerals, multiplication and division, word problems, equations, decimals, angles fractions, short division, protractor, multiplication, division, factoring and data collection

Mathematics 500. Number theory and operations, including whole numbers, decimals, and fractions, measurement and two- and three- dimensional figures. Introduction to algebraic, statistical, and probability concepts

Mathematics 600. Focus on number skills and numerical literacy, with an introduction to the number skills necessary for algebra, factoring, exponents, statistical charts, probabilities, and making predictions. Solid experience with number theory and operations, including decimals and fractions.

Mathematics 700. Integers, fractions, decimals, patterns and equations, ratios and proportions, probability and graphing, data analysis, geometry, measurement and area, surface area and volume

NFC Academy

Math

GRADES 3-8

Pre-algebra. Subsets of the real number system, using variables, The number line, comparing rational numbers, exponents, scientific notation, square roots, order of operations, expressions and equations, solving one-step and two-step equations, relations and functions, analyze graphs, integers, evaluating expressions, prime factorization and GCF, simplifying fractions, LCM and LCD, like and unlike fractions, adding and subtracting decimals, multiplying and dividing fractions, two-step equations, prime factorization, simplifying fractions, one-step and two-step inequalities, proportions, applications, direct variation, solving percent problems, applications, unit conversion, corresponding parts, indirect measure, models and scales, rewriting equations, combine like terms, intercepts, nonlinear functions, geometric/exponential /recursive sequences, angles, perpendicular and parallel lines, circles, polygons, Quadrilateral Family, perimeter and circumference, area of parallelograms, area of circles, composite figures, symmetry, reflections, distance and midpoint, tessellations, dilations, central tendency and dispersion, bar/circle/line graphs, histograms, box-and-whisker plots, scatter plots, misleading graphs, appropriate displays, tree diagrams and counting principle, permutations, combinations, mixed reviews of outcomes, probability and odds, disjointed and overlapping events, independent and dependent.

NFC Academy

Math

HIGH SCHOOL

Algebra I. Variables and expressions, absolute value, distributive property, coordinate plane, linear equality, slope , substitution method, polynomials, Pythagorean theorem, exponents, raising to a power, quadratic, probability, linear equations, compound inequality

Algebra II. Sets, functions, graphs, algebraic expressions, multi-step equations with parenthesis, graphing solution sets for inequalities, motion problems, line graphs, point slope equations of a line, solutions by substitution, factoring trinomials, synthetic division, inverse and direct variation, joint and combined variation, multiplying and dividing with fractions, conjugates, quadratic equations, sum and product of roots, exponential functions, progressions: sequences, series, integers, the discriminate, imaginary numbers, binomial coefficients, logarithms, conditional probability

Geometry. Sets, lines, theorems and postulates, proofs, transversals and special angles, proving triangles congruent, parallelograms, independent triangles, overlapping triangles, 30,60,90 degree triangles, sines, cosines, tangents, area of circles, solids, perpendicular lines, congruence and similarity, inverse and identity transformations, polygons, coordinates and proofs, arcs, cones, prisms, isometry,
graphs of algebraic sentences, circle equation, midpoint formula

Pre-Calculus. Algebraic functions, linear functions, trigonometric functions, graphs of sines and cosines, special angles, reduction formulas, inverse trigonometric functions and polar coordinates, amplitude of circular functions, phase shift of circular functions, double and half angle formulas, parabola, hyperbola, permutation of N, multiplication of probabilities, difference quotient, proofs by induction, angle between curves

Integrated Math 1. Foundations of algebra, language of algebra, geometry, coordinate geometry, linear systems, equations and inequalities, linear systems, probability and statistics.

See additional High School Math courses under Electives.

NFC Academy

Science

GRADES 3-8

Science 300. Oxygen, digestion, root hairs, seeds, animals, insects, fish, amphibians, reptiles, birds, mammals, marsupials, foods, teeth, chemistry, volume, mass, sounds, earth rotations and seasons, igneous, sedimentary, metamorphic, volcanoes, heat, molecules, liquids, gas, electricity, friction, static, sun

Science 400. Plants, parts of plants, animals, insects, mollusks, endangered species, conservation, ecology, decomposers, ecosystem, food chain, diorama, machines-simple and complex, Galileo, pulley, gravity, electricity, current, circuit, conductors, magnetism, Edison, water-ice gas, as solvent, atmosphere, hurricanes, tornadoes, snowstorms, weather instruments, astronomy, Isaac Newton, stars and space, Earth, air, water, land

Science 500. Cells, Hooke, Leeuwenhoek, protozoa, seed plants, spores, mold, yeasts, fungi, invertebrates, vertebrates, carbon cycle, terrarium, food chain, prairie land, heat energy, chemical energy, sources of energy, plate tectonics, under ground forces, reading fossils, identifying rocks, erosion, matter, skeleton, natural cycles-moon, life comets

Science 600. Photosynthesis, enzymes, digestive system, mouth digestive system, circulatory system, respiratory, excretory, muscles, bones, nervous system, eye, heart, blood, ear, animal behavior, biomes, tropisms, mitosis, meiosis, embryo, DNA mutations, genetics, genes and traits, Mendel, atoms, elements, molecules, compounds, atomic number electron arrangement, diagram of atom, force, work, gasses, mechanical energy, heat energy

General Science I. Earth in space, the planets, astronomy, the weather and climate, the human body, careers in Science, measurements and graphs

General Science II. Atoms and molecules, rocks and fossils, nutrition and health, energy and magnetism, machines and work, balance in nature, oceanography, inner and outer space from a Christian perspective, Science and Technology vocations

NEC Academy

Science

High School

Biology. Taxonomy, binomial nomenclature, molecular basis of life, static electricity, covalent bonding, organic compounds, lipids, carbohydrates, enzymes, microscope, microbiology, protozoa, amoeba, algae, cell design, osmosis, anatomy and morphology of plants, sexual reproduction in animals and plants, anatomy and physiology, systems of the body, chromosomes, diseases, probability, cell division-meiosis, mitosis, asexual and sexual reproduction, food chains, ecology, biomes, quadrants

Chemistry. Metric system, analyzing data, mass, density, colloids, gas, kinetic, propellants, pressure, temperature, mole, Avogadro's number, golden years of chemistry, atomic theory, Periodic table, Bohr Model, fission reactors, nuclear reaction, valence structure, polar covalent molecules, stoichiometry, solution concentrate, molarity, dissolving, titration of acids, bonding of carbon atoms, alkranes, reactions of unsaturated and saturated hydrocarbons, aldehydes acids and ketones, esthers, proteins and amino acids

Physics. Scalars, vectors, oleic acid, rate of length change, Newton's first and second laws, Isaac Newton, Circular motion, kinetic and potential energy, power, nuclear energy, waves, pulses, bending waves, light properties, water, refraction, convergence, Galileo, acceleration, Newton's third law, conservation of momentum, explosion, Kepler's Law of Planetary motion, solar system, heat energy latent heat, thermodynamics, sound waves, Doppler, electric charges, Coulomb's Law, electric potential, sources of EMF, resistance, Ohm's Law, circuits, fields, electromagnetism, electron beams, quantum theory, x-rays, Bohr Model, nuclear theory

Earth Science. Explores the Earth's origin and history, structure, forces and features of the earth and its crust, interacting systems, and place in the universe. Concepts and processes in Astronomy, Geology, Meteorology and Oceanography

See additional High School Science courses under Electives.

NFC Academy

Electives

Elementary and Middle School

Career Explorations 1 ***(1 semester).*** The Career Explorations 1 course is designed to give seventh- and eighth-grade students an opportunity to explore various CTE subjects. Specifically, students will be able to learn about careers involving human-related services.

Each unit introduces one particular field and explains its past, present, and future. The goal is to whet students' appetites for these careers. Students can then explore that career in more detail as a high school student.

Career Explorations 2 ***(1 semester).*** The Career Explorations 2 course is designed to give seventh- and eighth-grade students an opportunity to explore various CTE subjects. Specifically, students will be able to learn about careers involving various technical fields from computers to agriculture.

Each unit introduces one particular field and explains its past, present, and future. The goal is to whet students' appetites for these careers. Students can then explore that career in more detail as a high school student.

Health Quest ***(1 semester).*** Body tissues, skeleton, calcium, systems, emotional health, choices, social health, nutrition, ingredients, food pyramid, safety in the home, natural disasters, ecology, pollutions, recycling, poisoning, disease and prevention, immunizations, infectious diseases

Elementary French ***(1 semester).*** Read and write basic French. Vocabulary, pronunciation, listening and reading comprehension using adventure-themed lessons. Recordings of actual French speakers. Music, games and puzzles to introduce French culture. Elective appropriate for elementary school-age students

NFC Academy

Electives

Elementary and Middle School

Secondary French. Middle and High School elective covering intermediate French. Vocabulary, Pronunciation, parts of speech, sentence patterns, listening comprehension, geography, culture, music, foods French-speaking countries.

Elementary Spanish. ***(1 semester)*** Adventure themed lessons to help students learn to read and write basic Spanish., vocabulary, pronunciation, writing at beginning level, listening and reading comprehension. Recordings of actual Spanish speakers. Music, games and puzzles to introduce Spanish culture. Elective appropriate for elementary school-age students

Secondary Spanish. Middle and High School elective covering intermediate Spanish. Vocabulary, Pronunciation, parts of speech, sentence patterns, listening comprehension, geography, culture, music, foods Spanish-speaking countries.

State History ***(1 semester).*** Study your state or another state's history. A one semester course.

NT Academy

Electives

Science (High School)

General Science III. Structure of matter, radioactivity, Wilson's cloud chamber, nuclear composition, neutrons, beta particles, alpha particles, standard units, metric measures, sub-division of units, formula for gravitational force, buoyancy, Archimedes, densities of common substances, igneous rocks, sedimentary rocks, crust, mantle, earth layering, erosion, entrenched meanders, plate tectonics, rift valley, Neptunists vs. Plutonists, formation of fossils, crustal changes, superposition, intrusion, tree rings, radiometric ages, deep ocean research, wave and tide measurement, acoustic devices, submarines, geophysics, echo sounding, ocean coring, fish imports & exports, leading producers of fish, chemical analysis of seawater, megaliths, reflecting telescopes, space explorations, body health: germs, disease, microbiology, infections, viral infections, body defense mechanisms, medicine, drug control organizations, ecology, biosphere, formula for population growth, astronomy, space exploration, pharmacology

Integrated Physics and Chemistry. Branches of Science, Scientific Method, units of measurement, mass, density, four states of matter, measuring heat energy, calories, latent heat of fusion, acids and bases, chemical bonding, atomic structure and bonding, synthesis reaction, decomposition reactions, nuclear energy, radioactivity, properties of solids, elasticity in solids, liquids, gases, distance, displacement, acceleration, relative motion, momentum, force, vector, friction, centripetal force, forms of energy, joule, kinetic energy, potential energy, levers, mechanical advantage, law of conservation of energy, horsepower, watt, electricity, waves, Doppler effect, resonance, harmonics, properties of light, lenses, carbon dioxide and global warming, fossil fuel, atomic spectra, temperature of stars, Kepler and the motion of the stars, water acidity

IHS Academy

Electives

Technology (High School)

Business Computer Information Systems1-A ***(1 semester).*** Communication Skills: email, netiquette, non-verbal communication, workplace habits and attitudes, giving constructive feedback, paraphrasing and summarizing, difference between hardware vs. software, CPU, hard drive, motherboard, emerging technology, keyboarding exercises, writing and editing business documents, how to write business letters, resumes, entering data into a spreadsheet, function, operation, creating a personal budget, database, basics in creating a database, organizing a database, search and queries

Business Computer Information Systems 1-B ***(1 semester).*** Telecommunications in the workplace, using email-ethics and work habits, choosing telecommunications for business needs, Desktop Publishing applications, types-text, graphics, project-creating an instructional manual, presentation technology: application, layout, special effects menu, toolbars, panes, views, networks: application, architecture, computer operating system: Mac, Windows, Linux, interface, programs and files

Fundamentals of Digital Media* ***(1 semester).*** This course gives an overview of the different types of digital media and how they are used in the world today. Students examine the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces a number of different career paths that relate to digital media.

Students will examine some tools used to create digital media and discuss best practices in the creating of digital media. This includes an overview of the process used to create new media pieces as well as the basics concepts of project management.

In the course, students will examine the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students will review ethics and laws that impact digital media use or creation.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NC Academy

Electives

Technology (High School)

Fundamentals of Computer Systems* ***(1 Semester).*** The Computer Fundamentals course will provide students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills will provide students with the ability to configure computers and solve computer problems.

Students will learn details about the different elements of computers and computer systems. They will learn to identify hardware devices and their functions. They will be instructed on the role of operating systems as well as how to install and customize the Windows operating system. Students will learn about networking and the Internet. They will also be introduced to security issues in order to protect themselves and their computers and data.

Students will also learn about some of the software applications typically used on computers today, such as Microsoft Office. In addition, students will learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in the Windows operating system. Lastly, the students will learn the basics of customer service and working as a help desk support technician.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NTC Academy

Electives

Technology (High School)

Fundamentals of Programming and Software Development* ***(1 semester).*** This course will provide students with an understanding of basic software development concepts and practices, issues affecting the software industry, careers within the software industry, and the skills necessary to perform well in these occupations.

Students will learn details about core concepts in programming using Java, including writing and debugging code, proper syntax, flow of control, order of operations, comparison operators, and program logic tools and models. They will learn the function of key program techniques including if statements, looping, and arrays. They will also learn about web development using HTML and drag-and-drop development of user interfaces in an Integrated Development environment.

Students will also learn about the Software Development Life Cycle and the different variations used to create software. They will learn about different programming languages and paradigms. They will learn about the importance of usability and user-centered design processes. Students will also learn about careers in the software industry, the education and skills required to work in the industry, and related career resources. Finally, the capstone project will allow students to explore and state opinions on key issues and trends impacting the software industry, and to learn about the experience of working in the industry.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NEC Academy

Electives

Technology (High School)

Introduction to Information Technology* ***(1 semester).*** In this course, we introduce students to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Lessons are structured so that students learn and then demonstrate not only critical assessment and analytic skills, but also interpersonal skills that are valued so highly among IT employers.

We explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks.

Our lessons help students place the evolution of technology and job opportunities in context so that they will understand their important role in furthering its development. We believe that the most successful IT professionals combine technical know-how with leadership ability. To this end, students learn that their acquired expertise comes with the responsibility to represent themselves and the companies they work for within the highest legal and ethical standards.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NF Academy

Electives

Technology (High School)

Introduction to Information Support and Services* ***(1 semester).*** This course focuses on real-world application including common industry best practices and specific vendors that offer tools for technicians, project managers, and IT leadership. Emphasis should be made that the purpose of the IT department of an enterprise is to support the overall mission of the company, and it is not simply a standalone component of the company's infrastructure. Students will continue to apply their knowledge of hardware and software components associated with IT systems while exploring a variety of careers related to IT support and services. Students will analyze technical support needs to perform customer service, perform configuration management activities, and evaluate application software packages and emerging software. Students will demonstrate and apply knowledge of IT analysis and design by initiating a system project and evaluating applications within the IT system. Information Technology is a dynamic discipline that is continuously evolving

Network System Design* ***(1 semester).*** The Network System Design course will provide students with an understanding of computer networks and how they operate, as well as a basic understanding of how to manage and maintain computer networks. These skills will provide students with the ability to design, configure, and troubleshoot networks of all sizes.

Students will learn the basics of network design, including how to identify network requirements and determine the proper network architecture. They will be instructed on the requirements of network models, as well as be introduced to local area networks. Students will also learn about Internet Protocol and the basics of routing data on a network. Students will be introduced to wide area networks and network security issues. In addition, students will learn about network management, including monitoring and troubleshooting. Last, students will learn about network operating systems and their role in connecting computers and facilitating communications.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NTC Academy

Electives

Technology (High School)

New Applications: Web Development in the 21st Century* ***(1 semester)*****.** New Applications introduces students to the rapidly evolving world of apps, or applications. The introduction of the Apple II in 1977 followed by the IBM PC and scores of compatible computers just four years later created strong consumer demand for software programs, as these applications were referred to at the time. Capable of formatting spreadsheets, composing and proofing hundreds of lines of text, or supporting classroom instruction, computer programs were initially sold by specialty stores, college bookstores, or through the mail.

The explosive growth of the Internet that followed at the beginning of the twenty-first century with the introduction of high-speed networking, the dynamic World Wide Web, and most recently the development of affordable smartphones and web tablets have all contributed to global, cultural, and societal change.

This course begins with a historical tour of the Internet and World Wide Web as well as the programs and applications that made it possible for computer users on every continent to begin to explore and better understand their world. Then, through a step-by-step introduction to WordPress, students gain the tools and insight necessary to create their own web pages and discover their online voice.

In addition to learning how to use WordPress and other applications that promote students' presence on the World Wide Web, this course discusses how the web has become the foremost channel for the distribution of applications that increase the functionality of the web and support a global hub of social networking and communication. Students are introduced to the evolution of networking and data-transfer capabilities beginning with early HTTP protocols continuing through to the recent introduction of smartphones capable of connecting to sites on the World Wide Web without having to rely on a browser for navigation.

Continued description on next page.

NC Academy

Electives

Technology (High School)

New Applications: Web Development in the 21st Century* ***(1 semester)*****.** The course concludes with a survey of the continuing explosion of new apps, or applications, designed to operate on one or more of the proprietary mobile devices (smartphones, tablets, and netbooks). Students are given an opportunity to track fundamental changes in this growing industry as development has moved from the original model of a single experienced programmer developing a single app for distribution at little or no cost to a model in which retailers, non-profit organizations, government agencies, and Fortune 500 companies contract with mid-sized marketing and communications firms to develop sophisticated apps designed to raise global market and public awareness of institutions and issues. Additionally, students have an opportunity to understand that career opportunities in app development have evolved from programming and coding to now include marketing, public relations, creative arts, project and product management and sales, with a growing number of careers in the industry requiring little if any actual programming experience.

New Applications is a survey course that travels from the first software programs developed to facilitate communication on the Internet to the new generation of mobile and native apps that access the Internet without a reliance on a web browser. New Applications is also a practical course in how to develop a presence on the World Wide Web using WordPress and other available web-application tools. The goal of the course is to provide the learner insight into the rapidly evolving universe of programming and application development so that he or she can make informed career decisions in an industry that is changing as quickly as it is growing.

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NEC Academy

Electives

Technology (High School)

Software Development Tools* ***(1 semester).*** This course introduces students to the variety of careers related to programming and software development. Students will gather and analyze customer software needs and requirements, learn core principles of programming, develop software specifications, and use appropriate reference tools to evaluate new and emerging software. Students will produce IT-based strategies and a project plan to solve specific problems, and define and analyze system and software requirements**.**

**This course requires most work by project and research. Students should be motivated in this area and prepared to do much independent research and work.*

NFC Academy

Electives

General Studies (High School)

ACT Test Prep ***(1 semester).*** Have you improved your grades this year? Have you asked for recommendations? Check! Did you participate in extracurricular activities? Have you researched and visited different colleges? Don't worry! After this course, you will have all the information you need to register, study for, and hopefully do well on the ACT.

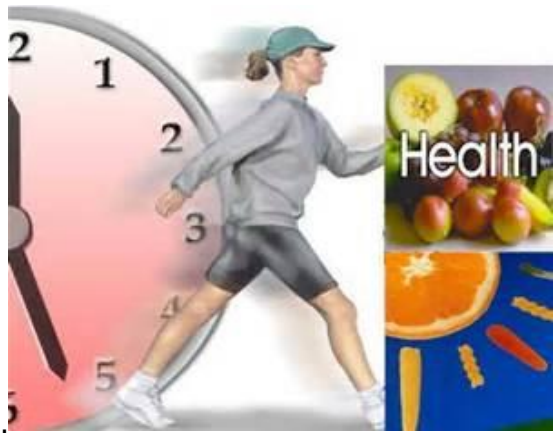
Careers in Allied Health ***(1 semester)***. This one semester course is an elective that explores the role of allied health care professionals in the overall health care environment

Family and Consumer Science. This is a 10-unit elective that uses biblical principles to help high school students develop positive self-esteem and learn to successfully navigate relationships with family, friends, co-workers, and even those in the marketplace. The curriculum introduces students to character and appearance from a biblical perspective. The material also teaches about nutrition, clothing styles, home care and hospitality, personal finance, and child development and care.

Personal and Financial Literacy ***(1 semester).*** Students will evaluate financial information from a variety of sources when making personal financial decisions; understand the role of income, taxes, and research in developing and planning a career path; develop systems for managing money (including saving and investing) tied to personal financial goals; recognize and understand a consumer's rights and responsibilities in a complex world market

College Planner ***(1 semester).*** Find your way through the complex business of choosing post-secondary options, college entrance requirements, financial planning, non-educational career option, critical and independent thinking, preparing for college entrance exams, application processes, scholarships and financial aid

WFC Academy



Electives

Health and Physical Education (High School)

Health Quest ***(1 semester).*** Body tissues, skeleton, calcium, systems, emotional health, choices, social health, nutrition, ingredients, food pyramid, safety in the home, natural disasters, ecology, pollutions, recycling, poisoning, disease and prevention, immunizations, infectious diseases

High School Health ***(1 semester).*** Building blocks, circulatory system and respiratory system, childhood development, adolescence, adulthood, nutrition, carbohydrates, fats and proteins, vitamins and minerals, proper eating habits, meat and bean group, calcium, physical fitness, muscular endurance, mental health, social health, making choices, friends, family, personal hygiene, teeth and mouth, eyes and ears, safety, personal safety, weather safety, water safety, first aid kits, extreme temperature, disease and prevention, infectious disease, health care, alcohol, tobacco, health and the environment, water and soil

Physical Fitness ***(1 semester).*** Knowledge and skills needed to analyze the key components of successful physical activity and ability to use this analysis to determine if a program is reasonable and effective, skill to describe, perform and identify the three main types of physical activity and motivational strategies to continue positive fitness habits, activities in flexibility training, cardiovascular fitness and resistance training

Physical Education ***(1 Semester)*** Semester-length course focusing on performance of individual and team sports, with explanations of proper technique, rules of the game, and preparation. Team sports include soccer, basketball, football, baseball, and volleyball. Students have the opportunity to perform each sport, keeping an activity log. Goal is incorporating activity into daily life and gaining lifelong healthy fitness habits. Students learn to define physical fitness, evaluate their fitness level, and apply fitness, weight management, and nutrition-related skills to their lives.

Electives

History (High School)

Civics ***(1 semester).*** Personal rights and responsibilities of citizenship, role of religion in government, Implications of American politics and foreign policy internationally, a new nation, the constitution, branches of government, government by the people, relationship to the world

Civil War ***(1 semester).*** Cultural Differences between North and South, slavery, political compromises, Kansas-Nebraska Act of 1854, violence in Kansas, John Brown, Abolitionist Movement, South seceding from the Union, confederacy, sovereignty, Anaconda Plan, Bull Run, Battle of Shiloh, Peninsular Campaign, Antietam, Battle of Fredericksburg, Chancellorsville, Jefferson Davis, Abraham Lincoln, Battle of Gettysburg, George Meade, Rose O'Neal Greenhow, Ginnie and Lottie Moon, Nancy Hart, Dr. Mary Walker, Harriet Tubman, The Black Brigade of Cincinnati, William Harvey Carney, Vicksburg, Chickasaw Bluffs, Robert E. Lee, Ulysses S. Grant, Battle of Chickamauga, Battle of Chattanooga, Wilderness Campaign, Petersburg, Atlanta Campaign, Sherman's March to the Sea, Union and Confederate Prisons, Battle of Britain

Twentieth Century American History ***(1 semester).*** Industrial Revolution, American Workforce, poor working conditions, Socialism, Labor Unions, farmers and populists, Gilded Age, urbanization, women in society, discrimination, segregation, origins of progressivism, social reform, American Imperialism, Panama Canal, Main causes of World War I, Woodrow Wilson's Fourteen Points, Red Scare, Flappers, Harlem Renaissance, Depression, Franklin Delano Roosevelt-"A New Deal for the American People", Isolationism, Nationalism, Holocaust, Origins of the Cold War Suez Crisis, Space Race, Harry Truman, ,Brown v. Board of Education of Topeka, Thurgood Marshall, Little Rock Nine, Civil Rights Movement, Martin Luther King, Jr. , Freedom Rides, Malcolm X, Asian, Chicano, and American Indian Movement, Watergate, Richard Nixon, Conservative Movement, Ronald Reagan, Iran-Contra Affair, Immigration, Migration, Women's Movement

WFC Academy

Electives

History (High School)

Vietnam Era ***(1 semester).*** Defined by the Vietnam War Origins of U.S. Involvement in Vietnam, Vietnam's geography, early history, French Indochina, colonization of Indochina, nationalist movement, freeing Vietnam from France, Vietnam during World War II, French Indochina War. Cold War, Marshall Plan, spread of communism, Dien Bien Phu, The Geneva Accords, United States military involvement, Geneva Accords, Ngo Dinh Diem as leader, Lyndon B. Johnson, Gulf of Tonkin, air and ground war, North Vietnam and South Vietnam armies, Vietcong tunnels, women and the Vietnam War, Antiwar movement, governmental debates.1968 election, Richard Nixon, Vietnamization, Invasion of Cambodia, morale and discipline, secret diplomacy and the Paris Peace Accords, Nixon and Watergate, fall of Saigon, prisoners of war, Vietnam Veterans Memorial, Vietnamese relations, Vietnam today

The Story of the Constitution ***(1 semester).*** History and values of the constitution from a biblical perspective, writing and ratification, preamble, articles and amendments, the colonies, formation of the new nation, principles and nature of constitution

State Histories ***(1 semester).*** Five Unit courses include lessons, quizzes, projects and tests examining the history, culture, government, economy, and citizenship of the state. One Unit courses use a project format to cover the same topics.

NC Academy

Electives

Math (High School)

Consumer Math. Number skills, division, prime numbers, fractions: adding, subtracting, multiplying and dividing, real life applications: using fractions in the kitchen, linear measurement, volume, weight, money, finding a job, payroll, payroll deductions, self-employment piecework, retirement planning, measures of central tendency, mean, median, and mode, statistics, sets and probability, cash budget, home based budget, home based application, standard normal distribution, balance sheet, taxes, insurance, banking services, checking, savings, ATM's, simple and compound interest, financial planning, stocks and bonds, mutual funds, wills and estates, markups, selling price, cost per unit, comparison techniques, cost per unit, using tables for variables, buy, lease, and rent, depreciation trends, leisure, travel and retirement planning, pricing of job related services, calculating perimeter and area, trapezoids, Pythagorean Theorem, cylinders, cones, spheres, geometry, indirect measure,

Trigonometry ***(1 semester).*** Trigonometric functions, Pythagorean Theorem, inverse functions, positive angle, negative angle, cosecant, cotangent, secant, unit circle, trigonometric values, radian measure, cosine addition formula, double-angle formulas, converting between products and sums, vectors, law of sines, area of a triangle, law of cosines, navigation application, polar coordinate, polar curves, polar forms of conics, multiply and divide complex numbers, powers and NH Roots

Integrated Math I ***(1 semester).*** Practical introduction to algebra, geometry, and statistics; variables and expressions, radicals, exponents, functions, linear and quadratic equations, graphing, probability, and statistics.

NHCA Academy

Electives

Math (High School)

Essentials: Math ***(1 semester).*** Rational numbers, absolute value and integers, fractions, decimals, percents, fractions and factoring, exponents in scientific notation, whole number exponents, powers and roots, central tendency measures, statistics, outcomes, probabilities, independent and dependent variables, operations, exponents and roots, polynomials, inverse operations, two step equations, inequalities, measurement systems. Scale drawings, surface area, volume, geometric shapes scale factors, Pythagorean Theorem, congruent figures, analyzing problems, estimations, graphs, data, linear functions, multi-step word problems, linear inequalities

NFC Academy

Electives

English

American Literature ***(1 semester).*** Five distinct eras of literature; Early American, The Romantic Period, War and Reconciliation, The Modern Age, From Modern to Post Modern. Different genres; essays, novels, drama, prose, and poetry,, The spiritualists, naturalists, realists, regionalists, authors such as, Thomas Paine, John Winthrop, Henry Wadsworth, Edgar Allen Poe, Herman Melville, Longfellow, Walt Whitman, Emily Dickinson, Mark Twain, Ernest Hemingway, F. Scott Fitzgerald. Poetry of Emily Dickinson, John Greenleaf Whittier, E.E. Cummings, Robert Frost, W. H. Auden, Carl Sandburg.

Additional text required: Our Town by Thornton Wilder

British Literature ***(1 semester).*** Key periods of British Literature, including the Middle Ages, the Early Renaissance, the Reformation, the Romantic Era, Restoration and Neoclassical Period, and the Twentieth Century. Works by authors such as William Shakespeare, John Bunyan, Francis Bacon, Samuel Taylor Coleridge, Charles Lamb, William Wordsworth, Lord Byron, Percy Bysshe Shelley, John Keats, Robert Browning, C. S. Lewis, T. S. Eliot, George Bernard Shaw, G.K. Chesterton, Early Works such as Beowulf, Chaucer's tales, the Morality Plays.

NFC Academy

Electives

Foreign Languages *(World Languages)*

French I. Entry level high school foreign language course which explores the French language through communication, culture, connections, comparisons and communities. Student material will achieve the following goals: Use of French in everyday situations in both oral and written communication, vocabulary necessary to function as a tourist in francophone countries, obtain basic knowledge of France as a country, the ability to read and listen with understanding of French passages related to various themes, and to compare cultural aspects of French speaking countries and the United States. Assignments will included material such as; alphabet, accents, masculine or feminine phrases, school expressions, educational system in France, telling time, date, numbers 60-100, colors, structures in France, family, French holidays, possessive adjectives, adjectives, irregular adjectives, adjectives that precede the noun, leisure activities in France, hobbies, verbs and adverbs, sports in France, weather, seasons, stages of life, transportation

French II. French II course builds on French I and reviews skills and concepts taught in French I with further exposure to communication, cultures, connections, comparisons, and communities. Assignments will consist of grammar review, French products, markets in the Francophone World, cost of goods, health care professions, professions in the arts, trades, helping professions, character traits, Cannes Film Festival, French lifestyle and royal weddings, nutrition around the Francophone world, physical activity, daily habits, a teen's typical routine, cultural celebrations and fashion , fashion at the beginning of the Twentieth Century, African fashion, the fine arts, movements and art history, The Louvre Museum sites and things to do while on vacation, modes of transportation

NTC Academy

Electives

Foreign Languages *(World Languages)*

Spanish I. Entry level high school foreign language course which explores the Spanish language through communication, culture, connections, comparisons and communities. Students material will achieve the following goals: : Use of Spanish in everyday situations in both oral and written communication, vocabulary necessary to function as a tourist in Spanish speaking countries, and the Spanish speaking world. The ability to read, listen and understand basic passages in Spanish related to various themes, and to compare cultural aspects of Hispanic countries and the United States. Assignments will include material such as; alphabet, Spanish greetings, verbs, pronouns, nouns, definite articles, colors, opportunities to use Spanish, numbers, days of the week, time, parts of the sentence, how to begin a conversation, cultures in Mexico, Mexican hat dance, Sweet Fifteen Party, Mayan World, Long live Mexico and its independence, exploration through various Hispanic countries of lifestyles, activities, sites, weather, and transportation

Spanish II. Spanish II course builds on Spanish I and reviews skills and concepts taught in Spanish I with further exposure to communication, cultures, connections, comparisons, and communities. Assignments will consist of introduction to the Spanish speaking world, Spanish in the US, why do we speak Spanish, geography lesson, educational field trip, literature class, Chilean personalities, the outdoors on Margarita Island, music and dance, Peru, Machu Picchu is a wonder, culture shock, Amazon Rainforest and Puerto Maldonado, Spanish influence in Colombia

NC Academy

Electives

Foreign Languages *(World Languages)*

Elementary French ***(1 semester).*** Read and write basic French. Vocabulary, pronunciation, listening and reading comprehension using adventure-themed lessons. Recordings of actual French speakers. Music, games and puzzles to introduce French culture. Elective appropriate for elementary school-age students

Secondary French. Middle and High School elective covering intermediate French. Vocabulary, Pronunciation, parts of speech, sentence patterns, listening comprehension, geography, culture, music, foods French-speaking countries.

Elementary Spanish ***(1 semester).*** Adventure themed lessons to help students learn to read and write basic Spanish., vocabulary, pronunciation, writing at beginning level, listening and reading comprehension. Recordings of actual Spanish speakers. Music, games and puzzles to introduce Spanish culture. Elective appropriate for elementary school-age students

Secondary Spanish. Middle and High School elective covering intermediate Spanish. Vocabulary, Pronunciation, parts of speech, sentence patterns, listening comprehension, geography, culture, music, foods Spanish-speaking countries.

NFC Academy

Electives

The Arts and Media

Music Theory ***(1 semester).*** Students learning experience will include the basic concepts of rhythm and meter, notation and pitch, scales and key signatures, harmony with hands on activities of performance and composition

Music Appreciation ***(1 semester).*** Students learn basic musical elements, trace the development and growth of classical music, receive a strong foundation for greater appreciation of music and learn how they experience music. Lessons include engaged listening to learn techniques to effectively listen and respond to music, identify common instruments by sight or sound, identify musical terms, compare and contrast music from different periods as well as analyze the effects of classical and popular music of the 20th century.

Digital Arts ***(1 semester).*** Students receive an introduction to visualization-graphics programming on computers in this one semester course. Helps students expand knowledge and skills to identify differences between digital arts and other types of art or photographs; write about the role digital art plays in mass media, define different types of digital photography, the ethics of photo manipulation; and identify strengths and weaknesses of digital and analog audio.

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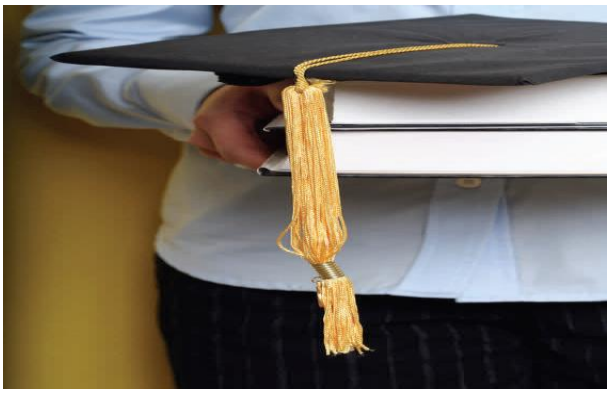

Advance Level

Calculus

Prerequisites/Course Information: This course is designed to prepare you for the AP Calculus AB course and its exam and subsequent college-level math courses. The course will focus on a balance of skills, conceptual understanding, and the use of technology. Prior to taking this course, you should have successfully completed four years of high-school math: two years of algebra, one year of geometry, and one year of pre-calculus that includes trigonometry.

Calculus Course Content:
Graphs and Limits, Derivatives, Related Rates, Derivative Tests, Integrals, Natural Logs and Functions, Area and Volume, Inverse Trig Functions and Review and Semester Exams

Textbook: The textbook for the course is the seventh edition of *Calculus of a Single Variable* by Ron Larson, Robert Hostetler, and Bruce Edwards (Boston: Houghton Mifflin, 2001; ISBN 0-618-14916-3).

Required Technology: You will need access to the following technologies for this course: a graphing calculator (TI-89 strongly recommended)

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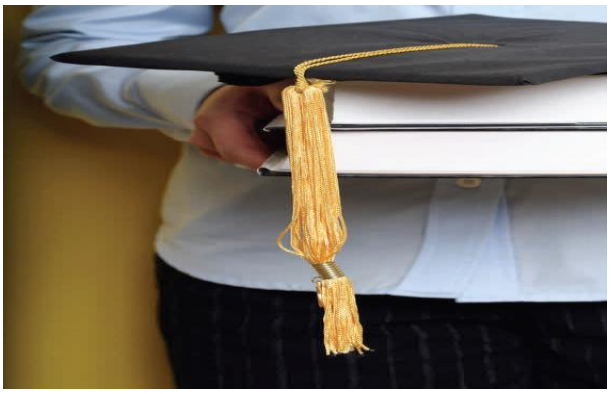

Advance Level

US History

Prerequisites/Course Information: In this course students will develop a strong understanding of what kind of a people Americans are, where we came from, how we got here, and where we are going. Few courses in the high school curriculum are as rich in cultural value. The traditional political, economic, and social topics that you'll be studying in this course are supplemented by the textbook's coverage of religion, music, Literature, and art. The lessons in this course pay focus specifically on movements, developments, and events that have helped shape the United States from 1492 to 1877. Emphasis will therefore be placed upon such broad themes as wars and treaties, territorial expansion, immigration, the rise and fall of slavery, civil rights and the struggles of minorities, women's rights, and the development of political parties, presidential politics, economic history, intellectual movements, religious movements, reform movements, social movements, labor history, and constitutional controversies.

Textbook: The textbook for the course is *The American Pageant: A History of the Republic*, Volume 1 by David Kennedy, et. al. (Houghton Mifflin, 2006 ISBN: 0618479287).

***These courses are considered advanced at or beyond the honor's level and honor credit is given for successful completion of the course.**

NFC Academy

Business Apps

Office Applications I: Microsoft® Word®, PowerPoint®, and Publisher® ***(1 semester).*** Introduction to design, development, creation, editing, document sharing, publication and presentation using these applications. Explore mail merge, tab stops, backstage view tools; insert, edit, view, review and share publications. Create presentations, enter and modify content, modify and deliver presentations, collaborate and share PowerPoint shows.

Office Applications I: Microsoft® Excel® and Access® ***(1 semester).*** Use Excel® and Access® to design, develop, create, edit, and share business spreadsheet and database documents. Explore data entry, formatting, formulas, functions, charts, graphics in backstage view. Gain skills including relational database terminology, creating and modifying tables, forms, queries, and reports.

Keyboarding and Applications ***(1 semester).*** Throughout this semester-long, online elective, students practice proper keyboarding techniques and learn how to create a variety of business documents during daily lessons. Students also develop marketable job skills, including technical skills, effective communication skills, and productive work habits. Additional topics of study include computer hardware, operating systems, and file management.

NFO Academy

Business Apps

Small Business Entrepreneurship ***(1 semester).*** Introduction to running a business from start to finish. Skills include effective organization, develop, create, and manage a small business, while dealing with challenges, problems, and issues faced by entrepreneurs. Understand the traits required to become an entrepreneur. Explore legal rules and regulations, ethics affecting small businesses, how to apply economic concepts to decision-making, analyze markets, identify target markets, develop business and management plans.

Technology and Business ***(1 semester).*** Technical skills, effective communication skills and productive work habits to make a successful transition to the work place or postsecondary education. Explore emerging technologies, operating systems, and computer networks while creating a variety of complex word-processing documents, spreadsheets with charts and graphs, database files, and electronic presentations. Learn to select appropriate technology to address business needs, compare operating systems, demonstrate communication skills, identify components of the telecommunications industry, and describe the components needed to establish a network, use project management tools to successfully manage a business project.

Essentials of Business ***(1 semester).*** A semester-length course introducing goals, processes, and operations of business enterprises. Focus is on the functions of companies, from multinational corporations to the corner grocery store, such as accounting, finance, human resource management, marketing, operations management, and strategic planning. Students learn how to apply business concepts to their own lives, compare and contrast market vs. controlled economies, legal forms of business ownership, components of success business communication, and analyze ways technology is changing business operations.

NFC Academy

Virtual Partners

Math
All math lessons aligned with daily instructional video presentations of the daily assignment. Primary partner is Kahn Academy.

101,120,530 lessons delivered
KHANACADEMY

Science
Science labs from 6th grade and up are all done virtually online with our two lab partners – Smart Science Labs and Late Nite Labs.

SmartScience®

NFC Academy

Virtual Partners

Pearson Testing (Stanford Achievement Test Online)
Students take the Stanford Achievement Test each spring online.

NFC Academy