

## **ART**

### **STUDIO ART**

A yearlong introduction to the arts. Projects covering a variety of art mediums, with a focus on the elements and principles of design. This course deals primarily with art method not the concept behind the artwork. Mediums include: drawing, painting, printmaking, sculpture, and craft.

### **TWO DIMENSIONAL ART**

A yearlong course that focuses on the two dimensional art mediums. The history and development including the aesthetics, creation and criticism will be researched and considered in the creative process. This course begins to develop the concept behind the artwork being created. Mediums include: painting, drawing, printmaking, book arts, digital printmaking and collage.

This course is offered in two independent ½ year sections, it is not required to complete both sections.

### **THREE DIMENSIONAL DESIGN**

A yearlong course that investigates the art of form and shape. The history and development of sculpture will be explored and used as inspiration. This course begins to develop the concept behind the artwork being created. Mediums include: ceramics (clay), paper mache, plaster, book arts, wood and recycled materials.

This course is offered in two independent ½ year sections, it is not required to complete both sections.

### **MEDIA ARTS**

A yearlong introduction to the arts. Projects covering a variety of art mediums, with a focus on the elements and principles of design. This course deals primarily with art method not the concept behind the artwork. Mediums include: drawing, painting, printmaking, sculpture and craft.

## **TECHNOLOGY**

### **DESIGN AND DRAWING FOR PRODUCTION (DDP) – 1/2 UNIT**

This course may be taken as part of an Art or Technology sequence or as an elective. It may be used to fulfill the high school Art/Music requirement.

DDP students may use a problem-solving format to create design solutions. Students learn the fundamentals of technical drawing to accurately communicate plans for objects. Some of the design projects will be produced in the shop using the necessary tools and materials.

### **COMPUTER AIDED DESIGN (CAD) – ½ UNIT**

CAD students use microcomputers to solve a variety of design problems. The emphasis will be on creating technical drawings using Autocad Lt, a software program widely used in the U.S. Prior instruction in technical drawing such as completion of DDP would be helpful but is not required. This course may also be used to partially fulfill the high school Art/Music requirement.

## **CONSTRUCTION SYSTEMS – ½ UNIT**

Construction systems is a high school level Technology Education course offered on a semester basis. It is intended to provide an introduction to light or residential construction. Students completing construction systems will have a good background from which to pursue further related training at a technical center or college. Skills gained in this class could assist students in obtaining either part-time or full-time employment in construction.

The majority of the work of the class will be of a “hands-on” nature. Due to time, space, and financial constraints projects built will be items such as doghouses and ice fishing shacks. An introduction to electrical wiring, plumbing and surveying is also included.

## **BUSINESS EDUCATION**

### **ADVANCED COMPUTER APPLICATIONS (ACA):**

Advanced Computer Applications is a hands-on course that challenges the student to create complex final copy using a variety of computer programs, digital camera, and laser printer. It is suggested that students complete BA/BCA before entering this course (half year).

### **CAREER/FINANCIAL MANAGEMENT (Formerly Int. to Occupations)**

The “Intro” course prepares students enrolled in Grades 9-12 for success as working citizens by dealing with those skills related to the world of work (half or full year). This course is a prerequisite (must) if you are planning to complete one of the vocational/technical programs at Northwest Tech.

### **PERSONAL BUSINESS LAW:**

Law provides the student with basic legal concepts and teaches the student about individual rights and responsibilities. The use of guest speakers is an integral part of this course (full year).

### **MARKETING**

**This is a distance learning class.** Principles of marketing is a one year course that may be used to complete a three-unit or a five-unit business/marketing sequence. It may also be used to allow personal insight into why we buy what we buy. This course will introduce students to the important part that marketing plays in our economic system. Students will have the opportunity to explore past

and current trends and innovations influencing the marketing system and speculate on future trends. Students will study the various subsystems of marketing, such as marketing research, promotion, personal selling, distribution, and retail operations. Careers in marketing will be addressed. Students will gain hands-on experience through the use of a simulation packet.

### **BUSINESS APPLICATIONS utilizing Digital/Graphic Communications and Web Page Design**

**This is a distance learning class:** This course will provide an introduction to advanced business world-related applications utilizing digital/graphic communications software. This course will also cover advanced business and college related applications of web page design and creation utilizing Adobe Dreamweaver and Microsoft Frontpage software. This course will also provide students who plan to pursue a college degree in business and other science and liberal arts areas of study, a useful tool for realizing success. This course will cover the development of advanced web page designs utilizing enhanced graphic communications/digital art principles to achieve optimal effectiveness.

### **ACCOUNTING**

**This is a distance learning class.** This course builds on the basic concepts of the double entry (debit/credit) theory for keeping financial records (full year).

## **SOCIAL STUDIES**

### **GLOBAL STUDIES**

This course is a chronological study of the world, excluding North America, which is covered in the 7<sup>th</sup> & 8<sup>th</sup> grades, and again in the 11<sup>th</sup> grade.

The course is divided into eight units. In the 9<sup>th</sup> grade the units include: Early Civilizations, Empires of the Ancient World, Regional Civilization and Early Modern Times. The second year, in 10<sup>th</sup> grade, the units include: The Enlightenment and Revolution, Industrialism and a New Global Age, World Wars and Revolutions, and the World Today.

### **US HISTORY & GOVERNMENT**

This course has many content standards describing what students should know, understand & be able to do. Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments and turning points throughout the history of the U.S.A. Students will explore the diversity of our cultural values, beliefs & traditions as well as what unites us as a people. They will analyze and weigh the importance, reliability & validity of evidence, understand the concept of multiple causation & the importance of changing interpretations of past historical developments. Students will learn about the important roles & contributions of a variety of individuals and groups.

Initially the class will spend 10 weeks exploring the U.S. Constitution and learning the foundation upon which our society is based. The next 27 weeks will cover content information from the Civil War to the present.

It is expected all students will watch on a regular basis the evening news, 60 Minutes and any documentary about the social, political and economic aspects of American Life. They should read on a regular basis the Newsweek/US News and World Reports magazine provided by the school in addition to completing regularly assigned questions from the text. Students will also be encouraged to attend debates, workshops, seminars, lectures & forums sponsored by the local colleges.

### **ECONOMICS**

This class is a study of the choices people face when trying to satisfy their wants. The role government plays to bring about economic growth & stability in our mixed economy will be analyzed. In addition the impact of the U.S. economy upon the world community will be studied as well as comparative economic systems.

### **PARTICIPATION IN GOVERNMENT**

The primary purpose of this class is to encourage the development of civic-minded individuals capable of making objective & informed choices in the decision-making process.

Students will have the opportunity to demonstrate their knowledge of how public policy is formed, implemented & evaluated at all levels of government by being actively involved in group & individual projects.

The term government must be taken in the broadest sense to include all of the social groups of which the students are “citizens”, i.e. family, neighborhood, local community, peer group, school, voluntary religious and social organizations, and the global community.

### **US HISTORY HONORS**

This senior level elective is comparable to a college level course and very demanding. Students have the opportunity to take year-end exam, which can be used to gain college credit.

## **FAMILY & CONSUMER SCIENCE**

### **CLOTHING & TEXTILES**

Looks at the culture and history of clothing and how art influences clothing. It includes the study of design principles and applies them to the construction and selection of clothing. One garment is constructed from a pattern. Careers are explored.

### **HOUSING AND INTERIOR DESIGN**

Familiarizes students with the factors to consider when making housing decisions. Interior design, exterior design and care of the home are taught. Careers are explored. Projects on interior design are completed.

### **PARENTING**

A semester course includes responsibilities involved with parenting, prenatal development, care and development of the child, parenting skills, and the child in the family.

### **CHILD DEVELOPMENT**

A semester course; students study how a child develops physically, mentally, emotionally and socially through the prenatal period, infancy, toddlerhood, preschool years and school age years.

### **BASIC FOODS (Grades 9-12)**

Basic, up-to-date information about healthy eating food preparation, and food safety and sanitation. Through hands-on involvement, cooking skills will be put into practice as you prepare and eat quick breads, yeast breads, dairy foods, cookies, egg dishes, vegetables, meats, and casseroles. Basic table setting and etiquette will be presented. Students are evaluated on labs, individual assignments/assessments and group work. Cooperative group skills are an important component of this class.

### **LIFE ON YOU OWN**

Students will gain skills in consumer decision-making topics such as buying a car, renting and furnishing an apartment, shopping and caring for clothes (including simple repairs and stain removal), shopping for and demonstrating small appliances, being credit wise and money smart, basic cooking skills, and eating on a budget. Learn about your rights and responsibilities as a consumer and the importance of making educated buying decisions. Evaluation will be based on quality and completion of projects, daily assignments and a variety of assessments.

## **MATHEMATICS**

### **MATH 9:**

For the student that experience extreme difficulties in math. Slow paced course covers: solving linear equations, word problems, graphing of linear equations, polynomials, factoring, percents, statistics, and other optional topics as time permits. All material covered in this course is directly related to requirements in Algebra I.

### **FUNDAMENTALS OF ALGEBRA:**

For students that need a stronger foundation in math. Course covers linear, quadratic, & exponential functions plus some supporting topics.

### **ALGEBRA:**

NYS curriculum covers algebra, geometry, probability and statistics. Includes integrated use of graphing calculators. Regents in June required for graduation.

### **GEOMETRY:**

NYS curriculum covers geometry topics including proofs. Regents exam in June. Prerequisite: Algebra Regents

### **PRE-CALCULUS:**

Extensive use of graphing calculator. Basic continuation of topics from Math III. Prerequisite: Math B Regents.

## **AP CALCULUS:**

**Offered as a distance-learning course.** This course is concerned with developing students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically, and verbally. The course covers concepts, techniques and applications of limits, derivatives and integrals. Prerequisite: 85 or better in Math B or Pre-calculus

## **PROJECT BASED MATH (Grades 11-12)**

This course is an applied math course. Every skill and concept taught will be applied to a project. The projects will emphasize cooperative learning, group sharing, verbalizing, concepts and ideas, efficient researching, and writing clearly in mathematics and across other subject areas. Each project will help students build skills in problem solving, critical thinking, and decision making. Prerequisite: At least 2 years of HS math.

## **ALGEBRA 2/TRIGONOMETRY:**

NYS curriculum includes advanced algebra, trigonometry, probability, and statistics. Integrated use of graphing calculators. Regents exam given in June. Prerequisite: Geometry or Math III BI

## **GENERAL SCIENCE**

### **ANIMAL SCIENCE/PLANT SCIENCE**

Animal science is a one credit, full year science class. It provides an introduction to the understanding and care of commercially important species of farm and domestic animals including: cattle, horses, sheep, swine, fowl, dogs, cats and rabbits. Nutrition, management and health care of each species will be explored. Students who have a particular interest in one or two species will be given opportunity to study them in more detail through project work.

### **EARTH SCIENCE:**

- \*Fundamental chemical structure and functional metrics.
- \*Methods of measuring and observing the Environment (density, atomic pressure, Relative humidity).
- \*Introduction to graphing – direct, inverse and cyclic changes in the environment.
- \*Early and modern theories of the earth's shape to include Aristotle and Eratosthenes.
- \*Plotting positions on the earth (latitude and longitude).
- \*Planetary motion.
- \*Energy and energy transfer.
- \*Solar radiation – heating and cooling of the earth
- \*Weather – warm, cold and occluded fronts to include some common weather relationships.
- \*Water budgets relative to water storage and cycles in the earth.
- \*Methods of deposition of eroded materials and the formation of rocks from deposited material.

Mandatory laboratory session, which meets 2X/cycle. Approximately 30 written lab reports.

### **LIVING ENVIRONMENT:**

- \*Start with a review of Fundamental Chemistry and functional metrics.
- \*Introduction to Biochemistry.
- \*The use of compounds by the cell in production of energy.
- \*Cell structure and function.
- \*Cell division through replication of DNA.
- \*Evolutional theories.
- \*Genetics, Mendelian Theory of Heredity.
- \*Physiological systems
- \*Ecology

### **CHEMISTRY:**

This course studies the science of matter and the physical and chemical changes that matter undergoes. Some topics covered in this class are Atomic Structure, The Periodic Table, Chemical Bonding, Chemical Equations, Electrochemical cells, Solutions, Acids and Bases, Nuclear Chemistry and Organic Chemistry. This is a lab science in which we reproduce in lab some of the processes we discuss. Students taking this course should have already successfully completed Living Environment and Earth Science as well as Algebra and Geometry.

### **PHYSICS:**

A study of our physical environment, which is broken into four major areas – mechanics, wave phenomena, electricity, and atomic and nuclear science. A strong math background is required.

## **HONORS BIOLOGY**

The Honors Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry as well.

Primary emphasis in Honors Placement Biology will be to develop an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns.

Students need to make a commitment to lab time outside the regular school day.

## **HEALTH (REQUIRED) – ½ UNIT**

Purpose of this course is to arouse in each student an appreciation of good health for zestful living as well as provide the knowledge and information to achieve total wellness in achieving this goal.

The course involves studying current, critical health areas including nutrition and obesity, smoking, alcohol, drug abuse, mental health and illness, medical care, disease and disease prevention, human sexuality, human ecology, world health, consumer health, accident prevention and first aid.

## **LIFE SCIENCE I & II**

This class includes learning basic scientific calculations and lab skills needed in any science course. Topics covered include environmental topics such as biodegradable and non-biodegradable wastes, ecosystems, water and air quality, and energy resources. Other topics covered include the understanding of some chemistry concepts such as properties of matter, solutions, acids/bases as well as kinetics. Biological concepts are a big part of this class as we explore how real life problems affect different organisms.

## **ANATOMY & PHYSIOLOGY**

This course is designed for students who wish to learn more about the human body and how it functions. Each unit covers a different body system in depth and associated diseases. Students interested in continuing their education in a health related field should take this course as they will become familiar with the medical jargon as they learn about the body. This is a great course for students who are undecided in their career choice, but want to explore this area of interest. Students completing this course will have a better understanding of their own body and various health issues that affect people. Prerequisite: Successful completion of Living Environment and Chemistry

## **FRENCH**

### **FRENCH I (Grades 8 and 9)**

This course is an introductory course in French. Students will expand their Speaking, Reading, Writing, and Listening skills in French. Students will also be immersed with the culture of French speaking countries including nearby Canada, France, and French Africa. Students will actively participate in a variety of learning formats including online activities, projects, skits, and interactive games. Students will take the New York State Proficiency exam at the end of the course. If successful, students will earn their first high school credit of language study.

### **FRENCH Cultural Exploration (Grades 9-12 possible)**

This course is designed for students who have attempted the proficiency exam and completed French I but whom are still lacking the necessary credit for their diploma. This course will explore basic French vocabulary and cultural at the student's level. Students will actively participate in a variety of learning formats including online activities, projects, skits, and interactive games. Students who complete this course will receive their language credit with a passing grade in the course.

### **FRENCH II (Grades 9-12 possible)**

This course is designed for students who have successfully completed French I. Students will begin working towards the New York State Regent's Exam taken at the end of French III. Students will continue their study of French at a more advanced level. Speaking, reading, writing, and listening skills will be strengthened. Students will actively participate in a variety of learning formats including online activities, projects, skits, and interactive games. Students will

have the opportunity to explore the culture further through guest speakers and hands-on experiences with the culture.

### **FRENCH III (Grades 9-12 possible)**

This course is designed for students who have successfully completed French II. Students will continue to prepare for the New York State Regent's Exam. Students will continue their study of French at a more advanced level. Speaking, reading, writing, and listening skills will be strengthened. Students will actively participate in a variety of learning formats including online activities, projects, skits, and interactive games. Students will have the opportunity to explore the culture further through guest speakers and hands-on experiences with the culture.

### **FRENCH IV/V (Grades 11-12)**

This is an elective course designed for students who wish to continue studying French after the Regent's Exam. Most colleges will omit further language study with successful completion of at least French IV. Students at this level will be able to explore the culture and language on selected topics further. Students will receive one half of the material each year with topics changing throughout the program. This program will permit a variety of topics including French cooking, music, art, literature, sports, films, elementary teaching, French history, and more. Students enrolled in French IV/V may also have opportunities to tutor other students.

## **SPANISH**

### **CONVERSATIONAL SPANISH**

This introductory level course in Spanish will acquaint students with basic vocabulary, grammar and culture. Verbal participation is necessary.

### **SPANISH 2 (Grades 9, 10, 11, 12)**

This course is designed to use the Spanish language studies during levels 1A and 1B or level 1. The emphasis is placed on using the language for communication. Reading, writing, and listening skills are also enhanced. Students will heighten sense of Spanish vocabulary.

### **SPANISH 3 (Grades 10, 11, 12)**

This course is designed to develop intermediate communication, reading, writing, and speaking skills through a variety of methods. This course will also foster a greater understanding and appreciation of cultures and peoples of the world. Opportunities may include skits, cooking, guest speakers, role-playing, educational games and technology. The comprehensive Regents exam is given at the end of the course.

### **SPANISH 4 (Grades 11, 12)**

This course is designed for students that have completed the Regents sequence in second language and have the desire to further develop their speaking, reading, writing and listening abilities in the second language. Students will further their cultural aspects of the Spanish world.

## **MUSIC**

### **VOCAL MUSIC:**

Senior Chorus is open to all students in Grades 9-12 who are interested in and enjoy singing. There are 2 concerts per year. Senior Chorus members may participate in Area All-State, the NYSSMA Solo Festival and the Valley League Music Festival.

### **INSTRUMENTAL MUSIC:**

Instrumental Music lessons for beginning students commence at the end of Grade 4 (during the summer between 4<sup>th</sup> and 5<sup>th</sup> grade) and continue through Middle and High school. Lessons are offered on all band instruments (brass, woodwind, percussion).

Each student is scheduled (on a rotating schedule) for one 42-minute lesson per cycle during the school year.

Students also have the opportunity to participate in Junior Band (Elementary and Middle School); Senior Band (Middle & Senior High); Stage Band (Middle and Senior High); and marching band (Middle and Senior High).

Junior Band meets 3X/cycle for 42 minutes; Senior Band meets 3X/cycle for 42 minutes. Stage band meets once each week for one hour on Wednesday evenings. Marching Band begins the middle of May and runs through the summer to the middle of August.

Instrumental music students may participate during the year in 1) Area All-State Organizations; 2) St. Lawrence County Junior High Music Festival; 3) NYSSMA Solo Festival; 4) St. Lawrence County Valley

League Music Association Spring Festival; 5) NYSSMA major organization festival.

### **SUMMER MUSIC PROGRAM:**

Marching Band – May 15<sup>th</sup> through August 15<sup>th</sup>. Rehearsals are twice a week (Tuesday and Thursday evenings).

Parades – 12 per season; Concerts – 3 per season

Summer lessons – program runs for four to five weeks. At this time beginners are started. All students are able to make arrangements to continue lessons through the 4-5 week program.

### **MUSIC THEORY (Full year)**

This course is intended to both acquaint the beginning music student with the building blocks of musical understanding and provide the advanced student with opportunities to expand their knowledge and creative abilities. Elements of the class include: basic musicianship, aural training, interval recognition, melodic and rhythmic dictation, beginning composition, voice leading, sight-singing and performance practices.

Recommended for any band or chorus student.

## **ENGLISH**

### **9<sup>TH</sup> GRADE**

This course includes an investigation into various types of literature including short stories, poems and full-length plays. Some major works are studied. An introduction to library research and further development of grammar and writing skills are included.

### **10<sup>TH</sup> GRADE**

This program will emphasize the gaining of information and development of literacy analysis through class and outside reading and drama, novels, short stories, and poetry; functional grammar and usage; the improvement of written expression through the development of essay composition and creative writing.

### **11<sup>th</sup> GRADE**

Basis of instruction includes: a study of literature by type (novel, drama, short story, poetry, essay); development of literary analysis; functional grammar and usage; composition and essay writing techniques emphasized; preparation for comprehensive New York State Regent's Exam.

### **12<sup>TH</sup> GRADE**

Purpose of the course is to better prepare students for college and/or future vocations with a refinement of such skills as reading comprehension and appreciation, completion of a major research project, independent programmed grammar instruction, a unit in Journalism and Media and principles of Public Speaking.

Students will be guided in exploration and clarification of values, goal setting and career planning. Creativity and critical thinking will be encouraged through group discussion, study of literary genres and in written expression.