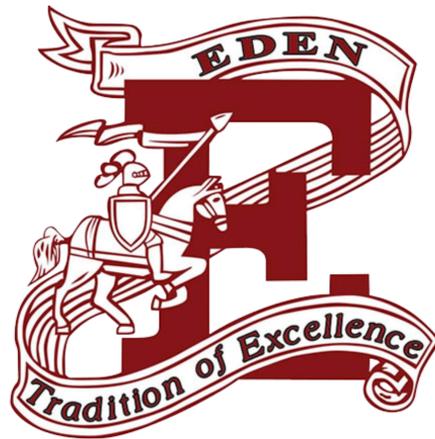


www.edencsd.org

Eden High School

2025-2026



ELECTIVES

GUIDE

(FOR A FULL LIST OF ACADEMIC CLASSES,
COURSE DESCRIPTIONS AND
NYS DIPLOMA REQUIREMENTS,
PLEASE REFER TO THE EDEN HS CURRICULUM GUIDE)

2025-2026 Course Offering Summary for All Grades 9-12

(SEE COURSE CURRICULUM GUIDE FOR FULL DESCRIPTIONS)

Red listings = required courses

ENGLISH (4 credits required)

English 9

English 9HR

English 10

English 10HR

English 11

English 11 HR

HC Eng 102 (this full-year course meets both Essentials of Writing AND Sr. Lit requirements for 12th graders)

Sr. Writing Courses – Select one

Essentials of Writing (1/2) – required for all

non-Vocational Seniors

Sr. Literature Course

Senior Literature (1/2) – required for all

non-Vocational Seniors

Mythology (1/2)

Book & Film (1/2)

Public Speaking (1/2)

Creative Writing (1/2)

Creative Writing II (1/2)

Eden Raider Leadership Academy (1/2)

SOCIAL STUDIES (4 credits required)

Global Studies I

Global Studies I HR

Global Studies II

AP World History

US History & Government

AP US History

AP US Government & Politics

Economics (1/2)

Participation in Government (1/2)

AP Psychology

MATH (3 credits required)

Advanced Algebra I (HRS)

Algebra I

Advanced Geometry (HRS)

Geometry

Non-Regents Geometry

Personal Finance

Intermediate Algebra

Advanced Algebra II (HRS)

Algebra II

Pre-Calculus

General Calculus

AP Calculus

AP Statistics

Personal Finance

JAVA Programming For Beginners

Logic, Puzzles & Problem Solving (1/2)

Trigonometry NR (1/2)

Green listings = college credit course options

SCIENCE (3 credits required)

Earth Science + Lab (count as 1.5 credits on scheduling worksheet)

Living Environment + Lab (1.5)

Living Environment HR + Lab (1.5)

Physics + Lab (1.5)

Physics HR + Lab (1.5)

Chemistry + Lab (1.5)

Chemistry HR + Lab (1.5)

NUSTEP Chemistry 111 (aka Adv. Chem. I)

Advanced Chemistry II

NUSTEP Biology 102

Environmental Science

Anatomy & Physiology

Astronomy

Forensics (1/2)

Zoology

WORLD LANGUAGES (1 credit required, 3 for college-bound students)

French 1B

French 2

French 3

French 4

NUSTEP French 103

German 1B

German 2

German 3

German 4

HC German 103

Spanish 1B

Spanish 2

Spanish 3

Spanish 4

NUSTEP Spanish 103

ART (1 credit art or music required)

Studio in Art (meets NYS Music / Art requirement)

Studio in Painting & Drawing

Advanced Painting & Drawing (1/2)

Studio in Ceramics I (1/2)

Ceramics II (1/2)

Creative Crafts (1/2)

Jewelry (1/2)

MUSIC (1 credit music or art required)

Chorus (1/2) (counts ½ credit toward 1 NYS

Music / Art credit requirement)

Select Chorus (1/2)

Orchestra

High School Band

Blue listings = elective courses (4.5 credits required)

HEALTH &

PHYS. ED (2.5 credits required)

Sr. High Health (1/2)

Phys Ed 9 10 11 12 (1/2 credit each)

Lifeguarding (1/2)

Strength & Conditioning (1/2)

Advanced Health & Wellness (1/2)

BUSINESS/COMPUTER EDUC.

(1 credit required)

Keyboarding Applications (1/2)

Digital Applications

Web Page Design (1/2)

Career & Financial Management (1/2)

Marketing (1/2)

Video Game Design (1/2)

Intro to Law (1/2)

Intro to Accounting (1/2)

ECC Accounting (1/2)

Intro to Business (1/2)

ECC College Law (1/2)

ECC College Success Skills (1/2)

FAMILY & CONSUMER

SCIENCE

Food Prep (1/2)

Gourmet Foods (1/2)

TECHNOLOGY EDUCATION

Woodworking (1/2)

Electricity/Electronics (1/2)

Photography (1/2)

Advanced Photo (1/2)

World of Technology (Chopper Class) Design

& Drawing for Production (meets NYS Music / Art requirement)

Architectural Dwg. / Proj. Pres. Dwg.

Construction Drafting / Manufacturing

Drafting **Advanced Revit / Architecture**

Internship Tech Diesel Repair

Motorsports (1/2)

Vehicle Maintenance / Ownership (1/2)

Tech Science / Hydroponics (1/2)

Applied Design (1/2)

Home Repair & Maintenance (1/2)

VOCATIONAL PROGRAMS

Please see the Eden HS Curriculum Guide for descriptions all of the Career Technical Ed programs available to students when they enter Grade 11.

Art Electives

NOTE: NYS High School students are required to earn at least 1 credit in Art or Music. Students desiring an alternative to art classes must take EITHER 1 credit in specific Music classes (see Music Courses) OR Design & Drawing for Production (see the Technology Department section).

Studio in Art

Credit: 1 Prerequisite: None

Looking to expand your creative and artistic skills while earning a visual arts credit toward graduation? Look no further: in Studio in Art you will explore the freedom of self-expression while learning about master artists, the structure of art, and media. Enjoy learning how to think creatively, develop and reflect on ideas, while executing both two and three-dimensional works of art. **This course satisfies the unit of credit in art or music required for graduation. See Music & Tech offerings that also meet this requirement.**

Studio in Painting & Drawing

Credit: 1 Prerequisite: Studio in Art

Drawing skills are fundamental to all other forms of visual art. This course will teach how to improve drawing skills while tapping into creative self-expression through drawing and painting. A wide variety of techniques and materials will be explored while developing works that use line, shape, space, color, and texture. Vibrant, exciting works in landscape, portrait, and animal subject matter are just a few of the many avenues for exploration. The final exam will consist of a portfolio review.

Advanced Painting & Drawing

Credit: ½ Prerequisite: Studio in Painting & Drawing

Advanced Drawing and Painting will offer experiences to students who have previously studied Drawing and Painting that encourages development of individual style, and refinement of technique. Emphasis will be placed upon development of composition and craftsmanship. The elements and principles of art, cultural and historical influence, as well as criticism and aesthetics continue to be a focus.

Studio in Ceramics I

Credit: ½ Prerequisite: None

Do you want a good outlet for creative energy as well as a time to build things out of clay? Energize your school day with ceramics. Learn basic hand building skills which include pinch, coil, molding, and slab construction. Create several fully glazed and functional projects.

Studio in Ceramics II

Credit: ½ Prerequisite: Studio in Ceramics I

Continue to explore ceramics and hand building techniques as well as wheel throwing. Individual, creative techniques and experimentation with emphasis on more advanced projects in Ceramics.

Jewelry

Credit: ½ Prerequisite: None

Did you ever wish you could create your own jewelry, headbands, accessories, or key chains? Then, you will enjoy beginner jewelry making. Learn about parts and pieces of jewelry such as split rings, crimp tubes, lobster clasps, and color theory while creating stunning works in beads, paper, modeling clay, metal wire, leather, and found objects

Creative Crafts

Credit: ½ Prerequisite: None

Did you know that Folk artists have no formal art training? Throughout craft history, skills and materials are learned and developed while gathering with family and friends. Crafts are a great way to be creative while learning new techniques and avenues for self-expression. Try Pysanky (dyed eggs), Scherenschnitte (paper cutting), Navajo basketry, or knitting! These are only a few projects to enjoy while learning about color, texture, space, shape, and line.

Business & Computer Education Electives

NOTE: ALL EDEN STUDENTS ARE REQUIRED TO TAKE THE 1-CREDIT DIGITAL APPLICATIONS COURSE IN ORDER TO EARN THEIR NYS DIPLOMA. EXCEPTIONS ARE MADE WHEN A STUDENT SUBSTITUTES AN AP OR COLLEGE-LEVEL CLASS IN PLACE OF DIGITAL APPS.

Career and Financial Management **Credit: ½** **Prerequisite: None**

Students will learn the relationship between career planning and lifelong goals. They will recognize the skills needed for success in a chosen career cluster and know how to assess personal abilities and work performance to achieve individual career goals. This class will emphasize the business and economic system including its characteristics, operations, structure, and evolving role within society. Students will begin to realize the significance of their part in the economic system and to begin to become financially literate. Important management and economic concepts are defined in relation to business transactions and to the individual as an entrepreneur, employee, consumer, and citizen.

Marketing **Credit: ½** **Prerequisite: None** **Rec. Gr. Level 10-12**

This course will take you on a step-by-step journey through the world of Sports Marketing. You will learn the basic functions of marketing and how those functions are applied to sports and entertainment. The basic functions of marketing are: marketing information, financing, pricing, promotion, product/service management, and distribution and selling. Guest speakers and field trips may be used to reinforce concepts. Computer simulations and sports fantasy leagues may be included to enhance student experience.

Video Game Design **Credit: ½** **Prerequisite: None**

This course will provide a complete understanding of the technical and creative aspects of video game design in an easy to follow format. Students will learn all aspects of the creative influences and technological components required to launch a new video game.

Web Page Design **Credit: ½** **Prerequisite: None**

This course will provide a complete understanding of the technical and creative aspects of video game design in an easy to follow format. Students will learn all aspects of the creative influences and technological components required to launch a new video game.

Intro to Law **Credit: ½** **Prerequisite: None**

This course is relevant to all students because it informs you of **your** legal rights. Some topics covered in class are Cyber Laws, Criminal & Tort Law, Contract Laws & Rights, and Consumer Laws & Rights. If you are interested in pursuing a career in law enforcement or the legal field, don't miss this opportunity to meet professionals in these careers. A field trip to the Erie County Holding Center and City Court is planned to help expand on topics discussed in class.

Intro to Accounting **Credit: ½** **Prerequisite: None**

This course is relevant to all students because it informs you of **your** legal rights. Some topics covered in class are Cyber Laws, Criminal & Tort Law, Contract Laws & Rights, and Consumer Laws & Rights. If you are interested in pursuing a career in law enforcement or the legal field, don't miss this opportunity to meet professionals in these careers. A field trip to the Erie County Holding Center and City Court is planned to help expand on topics discussed in class.

Insurance. Students apply what they learn in each of these units to create a business plan portfolio demonstrating a practical business idea.

This class allows students the option of receiving 3 college credits from ECC. A student who pays for the class and earns a grade of 75 or better may transfer three credits to any SUNY colleges and many two or four-year colleges and universities. Students are encouraged to contact the college of their choice to ensure that the course will be accepted at those institutions. The cost is approximately \$300.

Please note: there are NO fee waivers or reductions available for ECC college-level courses.

Technology / Agriculture Education Courses

Tech Science / Hydroponics

Credit: ½ Prerequisite: None Rec. Gr. Level: 10-12

“Hydroponics” is a method of growing plants using mineral nutrient solutions, in water, without soil. “Agri Science” is the farming of aquatic organisms such as fish and aquatic plants. The combination of these two fields forms the basis of this new Agri-Science class. The method of teaching in this class can be summarized in one statement: “Doing is Learning.” This hands-on course will focus on the growing and processing of fish and other live organisms. Research will be assigned in order understand the needs and design of a system that establishes and maintains multiple hydroponic growing systems.

Vehicle Maintenance / Ownership

Credit: ½ Prerequisite: None Rec. Gr. Level: 10-12

This course will teach students about the specific systems that are common in every modern vehicle. This is a project-based class where students will apply and demonstrate competency using performance-based tasks. Examples include tire inspection and changing, diagnosing issues that prevent cars from starting, oil change and lube as well as brake & exhaust diagnosis and repair.

Tech / Diesel

Credit: 1 Prerequisite: None Rec. Gr. Level: 10-12

Traditionally diesel engines are the power plant of choice in production-oriented agricultural settings. This class will teach students about the specific systems that are common in farm equipment / implements and diesel-powered engines. This is a project-based class where students will apply and demonstrate competency using performance-based tasks. Examples include hydraulic systems control, welding and fabrication in agriculture, diesel engine teardown, inspection repair and assembly.

Motorsports

Credit: ½ Prerequisite: None Rec. Gr. Level: 11-12

With many new students enjoying the use of recreational vehicles, it is important that they have an understanding of the performance and maintenance techniques that go along with the role of ownership. The motorsports covered in this course include: Personal Water Craft, Snowmobiles, All Terrain Vehicles and Dirt Bikes / Motorcycles. The following topics will be addressed: power plant (type), maintenance, troubleshooting, general repair, performance theory, performance modifications and safe operation

Woodworking

Credit: ½ Rec. Gr. Level: 9-12

This course is designed to introduce students to the world of woodworking and construction. Woodworking topics will include: wood species, biology, processing techniques, hand-tool instruction, machine maintenance, joinery and CNC integration. Students will also study the resources, processes and products used in construction. They will experience hands-on activities in planning, blueprint reading, framing, roofing, siding, insulation and interior finishing in the construction of a structure.

Electricity/Electronics

Credit: ½ Rec. Gr. Level: 9-12

This course will incorporate computerized FACET (Fault Assisted Circuitry Electronics Training) equipment. This equipment and curriculum will include AC, DC, and Digital Logic Fundamentals in an advanced, comprehensive, interactive computer-based delivery system. The computer equipment, along with traditionally sound instructional techniques, will help students understand how electricity works and how to

make safe electrical connections. They will work with devices commonly used to measure and control electrical circuits and, through observation and hands-on experimentation, they will become familiar with important electronic concepts. The electricity and electronics curriculum will cover all critical topics associated with electrical and electronic circuits and the devices that control them. Common threads throughout the entire course include safety, laboratory skills, and construction and fabrication skills.

Photography

Credit: ½

Rec. Gr. Level: 10-12

Photography is a half-credit introductory course. How often do you use your cell phone? Everyday: Snapchat, Instagram, Facebook, all that. But are you getting the most out of your photos? Learn to take BETTER photos. Enjoy creating digital photographic art and see it as an art form. Adobe Photoshop will be used extensively in our tech lab. We'll explore good composition, potential careers in photography, the work of the photographic artists, modern camera use and a brief history of photography. Students will have a variety of problem solving activities as well as an opportunity to be creative and expressive. There are no tests. You'll need to work but we have fun!

Advanced Photography

Credits: ½

Prerequisites: Photography

This course will be a continuation of principles and philosophies of design and photography taught in Photo. Students will learn about photographic elements of art and principles of design, composition and lighting. They will explore the history of photography, learning about its scientific and technological developments, important innovators in the field, and relevance within diverse cultural contexts. Students will write and speak about aesthetic, technical and expressive qualities in a photograph, learning to critique their own and other's work. Students learn image techniques and digital manipulation using Adobe Photoshop and Lightroom, teaching them how to archive, organize and optimize their photographs for print or web purposes.

Applied Design

Credit: ½

Prerequisite: None

Rec. Gr. Level: 10-12

The design process is a method of solving problems. How we solve problems in different ways is what sparks unique design. This course focuses on the ideal of designing and creating one-of-a-kind, unique items. Formerly known as "Interest to Pinterest," this class will have students use materials and items to solve a problem that they were not intended to solve. For example: using a shipping pallet to create furniture. Students will study the elements and principles of design and apply them to a multitude of different hands-on projects. Unlike woodworking or World of Technology classes, students will not focus on one specific building material. Instead, they will gain a broader understanding of all the materials and how / when to work with them.

World of Technology

Credit: 1

Rec. Gr. Level: 10,11,12

course is a blend of the traditional foundational skills such as welding and woodworking with current engineering theory and practice. Students will design, build and test model solutions to real-world problems in order to evaluate their effectiveness. Students will address the math, science and technology learning standards while processing materials, energy and information. This course offers students the unique opportunity to explore their own abilities relating to innovation and advanced real-world problem solving. Previous engineering activities include: advanced bridge design, task specific roller coasters, and protective egg drop containers. Possible future activities include: V-twin motorcycle design, innovation and fabrication and fighting robot design and fabrication.

Home Maintenance & Repair

Credit: ½

Prerequisite: None

Rec. Gr. Level: 11-12

Currently 65% of adults in the United States are homeowners. If you're a student and plan on owning a home in the future it is important to understand that the typical home will require both maintenance and repair. This class is designed to teach students about the mechanical and structural systems that are used throughout homes in Western New York. Students will incorporate a hands-on approach to learning about framing, plumbing,

electrical, siding/roofing and finishing systems that are used in modern residential construction. Students could therefore be framing a 2 x 4 interior wall one day and wiring that same wall section for power a week later. These practical experiences will allow students to gain confidence diagnosing and repairing most of the common systems in a home when needed. Additionally, students will practice estimating costs associated with making specific types of home repair. This class will certainly help students avoid paying the costs associated with home ownership/repair, currently \$170.00 per month, as they move into adulthood and homeownership.

TECHNOLOGY DEPT'S TECHNICAL DRAWING SEQUENCE

LEVEL#1 Design and Drawing for Production (DDP)

Credit: 1 Prerequisite – None Suggested Grade Level: 9

This is an introductory course that is designed to help students develop a basic understanding of the graphic language used to illustrate and describe any form of man-made product. Students will also learn and utilize design theory and processes to create real solutions for defined situational problems. Traditional skills, such as sketching, board drawing, and lettering will be introduced and utilized for most activities. In order to complete the remaining activities, C.A.D.(computer aided drawing) fundamentals will also be introduced and students will incorporate the computer based skills they learn to create working design solutions.

This course fulfills the New York State art/music credit requirement.

LEVEL#2 Architectural Drawing / Project Presentation

Credit: 1 Prerequisite: Level 1 Suggested Grade Level: 10

This class is divided into two distinct ten-week courses. The fundamental focus of study for one half of the semester will be architectural principles and design relating to residential structures. Students will first be exposed to and utilizing the fundamental skills and theories which relate to standardized building materials, local building codes, floor plan development, door and window selection, and foundation/basement development. The remaining ten weeks of the semester will be used to help students develop an enhanced understanding of the use and development of pictorial drawings. Students will begin drawing three-dimensionally using AutoCad. They will also continue to develop their sketching and board drawing skills. In addition, shading/rendering skills, which are fundamental to creating realistic illustrations of objects, will be covered in detail using both AutoCad and traditional drawing tools.

LEVEL#3 Construction Drafting / Manufacturing Drafting

Credit: 1 Prerequisite: Level 2

Building on fundamental concepts covered in Architectural Drawing, each student will create a finished set of blue prints for a theoretical residence. Therefore, theory and development relating to elevation, section, detail, plumbing and electrical drawings will be discussed and applied. All architectural drawings will be created and revised using AutoCad. Many higher order AutoCad skills, such as block development, template creation and revision, and properties manipulation will be introduced and used throughout the semester. Also, assembly, gear, cam, and geometric dimensioning/tolerance drawings are the most frequently used in manufacturing industries and therefore will be the emphasized throughout this class.

LEVEL#4 Advanced Revit + Internship

Credit: 1 Prerequisite: Level 3

This is the final class of a four-unit sequence. Additional AutoCad skills such as exporting/importing various file formats, creating theoretical design locations using PhotoShop and presentation techniques will be introduced and used at the beginning of the semester. Students will then (pending availability) complete a fifteen-week internship with a local architectural firm. During this internship, each student will be working on creating design solutions for authentic architectural problems, not theoretical situations.

Family & Consumer Science Electives

Food Preparation & Nutrition

Credit: ½ **Prerequisite:** None

Rec. Gr. Level: 9-12

Students will learn basic nutrition and food preparation skills. This class includes food safety and sanitation, meal management, food purchasing and food preparation techniques. Using hands-n food labs, students will learn to prepare quick breads, yeast breads, fruits, vegetables, dairy products, eggs, meat, poultry as well as seasonal specialties. Additional topics will address food-related illnesses and exploration of careers in the culinary industry.

Gourmet Foods 1

Credit: ½ **Prerequisite:** Food Prep & Nutrition

Rec. Gr. Level: 11,12

This is an in-depth course in food preparation. Students will learn about advanced preparation techniques, the importance of food appearance and presentation, and the use of specialized equipment. The course will include the instruction of knife skills, preparation of stocks, soups and sauces. Also, students will learn how to bake cakes, pies and specialty desserts. Herbs and spices will be discussed and utilized while students prepare meat, fish and poultry dishes.

Music Electives

NOTE: NYS High School students are required to earn at least 1 credit in Art or Music. Students desiring an alternative to Music classes must take EITHER 1 credit in Studio in Art or DDP (see Tech electives)

Chorus

Credit: ½ **Prerequisite:** None

A mixed-voice chorus open to all students in grades 9 through 12. Basic and intermediate vocal technique and sight singing are studied. Choral lessons take place outside of the normal class time and are mandatory. Attendance at evening performances and daily advisement rehearsals (every other day) is also mandatory.

Select Chorus

Credit: ½ **Prerequisite:** Teacher Recommendation

An advanced mixed-voice chorus. Intermediate and advanced vocal technique and sight singing are studied. Choral lessons take place outside of the normal class time and are mandatory. Attendance at evening performances and daily advisement rehearsals (every other day) is also mandatory.

Orchestra

Credit: 1 **Prerequisite:** Music Background/Audition

Orchestra will emphasize string music education, instruction and ensemble experience and the performance of works in the orchestral literature, meets daily. Lessons are required on a rotational basis. Attendance at evening performances and daily advisement rehearsals is mandatory.

High School Band

Credit: 1 **Prerequisite:** Music Background / Audition

This group provides an opportunity for music students studying wind and percussion instruments to perform literature of the band repertoire. Meets daily, lessons are required on a rotational basis. Attendance at evening performances is mandatory.

World Language Electives

Students interested in taking an **additional world language** must complete Level 3 in their first choice World Language. A student taking an additional world language will be placed in Level 1B or Level 2.

French 1B

Credit: 1 Prerequisite: Pass Level 3 German or Spanish

This course will review and expand vocabulary and linguistic topics at Level 1B. Students will develop the interpretive, interpersonal and communicative skill areas, as well as culture in French within a variety of contexts. Classroom activities include role-playing situations, projects, oral presentations and use of authentic resources.

French 2

Credit: 1 Prerequisite: French 1B

This course includes a practical overview of grammar and further development of interpretive, interpersonal and communicative skill areas. Emphasis is placed on developing accuracy in French through language use in a variety of contexts. Preparatory to the Regents examination, stress is placed on oral/aural communication, extensive and intensive reading comprehension and writing. Meaningful conversation is incorporated through written and oral dialogues and cooperative projects.

German 1B

Credit: 1 Prerequisite: Pass Level 3 French or Spanish

This course will focus on vocabulary and linguistic topics at Level 1B. Students will develop the skill areas of interpretive, interpersonal and communicative skill areas, in German within a variety of contexts. Greater emphasis is placed on reading and writing. Classroom activities include role-playing situations, projects, oral presentations and use of multimedia and authentic resources.

German 2

Credit: 1 Prerequisite: German 1B

This course includes a practical overview of grammar and will further develop the interpretive, interpersonal and communicative skill areas, Emphasis is placed on developing accuracy in German through language use in a variety of contexts. Preparatory to the Regents examination, stress is placed on oral/aural communication, extensive and intensive reading comprehension and writing. Meaningful conversation is incorporated through written and oral dialogues and cooperative projects.

Spanish 1B

Credit: 1 Prerequisite: Pass Level 3 German or French

This course will focus on vocabulary and linguistic topics at Level 1B. Students will further develop the interpretive, interpersonal and communicative skill areas and culture in Spanish within a variety of contexts. Greater emphasis is placed on reading and writing. Classroom activities include role-playing situations, projects, oral presentations and use of multimedia resources.

Spanish 2

Credit: 1 Prerequisite: Spanish 1B

This course includes a practical overview of grammar and further development of interpretive, interpersonal and communicative skill areas. Emphasis is placed on developing accuracy in Spanish through language use in a variety of contexts. Preparatory to the Regents examination, stress is placed on oral/aural communication, extensive and intensive reading comprehension and writing. Meaningful conversation is incorporated through written and oral dialogues and cooperative projects.

Science Electives

NUSTEP Biology 102

Credit: 1 Prerequisite: Living Environment

This course is equivalent to the college course taught at Niagara University. NUSTEP Biology will familiarize students with the principles of college-level Biology. The scientific method, evolution, cells and metabolism, macromolecules, and genetics are the main topics covered. Students will be expected to read and comprehend science textbook passages and use the information to solve problem sets. Students will also perform math calculations necessary to interpret data and solve experimental problems. An overall passing grade of C or better will allow students to earn 3 semester hours of credit from Niagara University provided that the student has paid the tuition fee. **Students may opt to pay the discounted Niagara University tuition cost of \$225 and be eligible to earn 3 college credits from Niagara (transfer of credits between colleges is subject to the discretion and approval of individual colleges and universities).**

NUSTEP CHE 111 / 113L College Chemistry

Credit: 1 Prerequisite: Chemistry, Strong Math Background

An introduction to physical and chemical principles that is appropriate for declared and potential college science majors. This course is introductory college chemistry with topics including matter, atomic structure, bonding, stoichiometry, reactions, molecular structure, gases, thermo-chemistry, solutions, and the Periodic Table. Lab is included in the class. Regents Chemistry is a prerequisite and a strong background in mathematics is required. Students may also choose to enroll at Niagara University to receive college credit upon successful completion of the course. **The reduced tuition charge for NUSTEP enrollees is \$330 for this 4-CREDIT college course...transfer of credits between colleges is subject to the discretion and approval of individual colleges and universities...Enrollment in this course prepares student for Advanced Chemistry II regardless of whether college credit option is exercised.**

Advanced Chemistry II

Credit: 1 Prerequisite: NUSTEP Chemistry

This course is a continuation of Advanced Chemistry I and is designed to expand the student's knowledge of chemistry, as well as prepare the student for college, in general. This section of advanced chemistry has a much greater focus on the laboratory setting. Topics to be studied include reaction rates, equilibrium, acids, bases and salts, and electrochemistry. Students will have a very solid foundation in chemistry upon completion of Advanced Chemistry I & II.

Physics + Lab

Credit: 1 Prerequisite: Strong Geometry skills

This class takes up 1.5 periods in your schedule due to the mandatory lab requirement.

The objectives of Physics extend beyond a minimal comprehension of basic facts and principles. The development of critical thinking skills is the most important outcomes in the study of Physics. The scope of the course material consists of mechanics, heat, transfer of energy by wave motion, electricity, alternating current and electronics, and nuclear energy. The prerequisites for the course are Integrated Algebra, Geometry and concurrent registration in an advanced Algebra class or Pre-Calculus.

The NYS Regents exam is taken in June.

Chemistry + Lab

Credit: 1 Prerequisite: Strong Geometry skills

This class takes up 1.5 periods in your schedule due to the mandatory lab requirement.

This course is a study of the theoretical aspects of Chemistry and their mathematical applications. The course is divided into eleven main units and lab. The main topics are: Matter and Energy, Atomic Structure, Bonding, Periodic Table, Mathematics of Chemistry, Kinetics and Equilibrium, Acids and Bases, Redox and Electrochemistry, Organic Chemistry, Applications of Chemical Principles and Nuclear Chemistry. The course of study is geared primarily to the academic student.

The NYS Regents exam is taken in June.

Environmental Science

Credit: 1 Prerequisite: Living Environment

Environmental Science will teach students about the delicate balance of nature and present people's role in their environment. Water, air, soil, food, mineral, and energy resources are studied as essential elements in the students' lives. Practical ways to conserve these resources are also presented. The course is writing intensive and project based.

Forensics

Credit: ½ Prerequisite: Living Environment

This course will introduce students to the disciplines and techniques of Forensics. Forensic science is the application of science to criminal and civil laws. Forensic scientists collect, preserve, and analyze scientific evidence during the course of an investigation. While some forensic scientists travel to the scene to collect the evidence themselves, others occupy a purely analytical role, performing lab measurements and analysis on objects brought to them by other individuals. Students in this class will learn from hands-on activities the various ways that Forensic Science has become a part of our day to day lives.

Anatomy & Physiology

Credit: 1 Prerequisite: 85% Avg in Liv Env.

This course is designed to offer higher-level students a chance to learn more about how the human body works. Anatomy refers to the structure of body parts, while Physiology concerns the functioning of those parts. Students will take an in depth look at the following body systems: skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary, and immune. The course is recommended for students interested in careers such as doctor, nurse, physical/occupational therapy, athletic training, gym/health teacher, dietitian, biologist, forensic scientist, archaeologist, etc.

Astronomy

Credit: 1 Prerequisite: Earth Science

The major topics in this course include celestial motions, the solar system, the origin of the universe, the history of astronomy, and the exploration of assorted space phenomena. The course will be project and presentation based and will include regular quizzes, a mid-term and a final exam. Students will be expected to engage in a variety of activities which will enable them to develop a better understanding of astronomy in addition to improving their critical thinking skills.

Mathematics Electives

AP Calculus

Credits: 1 Prerequisite: Pre-Calculus + Teacher Rec.

Advanced Placement Calculus is a course for students of exceptional ability in mathematics who have successfully completed Pre-Calculus. Integral and differential calculus will be addressed. All topics will be taught to the specifications of the AP curriculum. The TI-83/84 plus graphing calculator is used as a tool in developing concepts in calculus. **Students will be required to pay for and take the Advanced Placement examination that is given the second week in May.** Some colleges may award credit for completion of AP-level courses (or waive minimum requirements) depending on a student's final grade as well as their AP exam score.

The fee for the AP exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)

AP Statistics

Credits: 1 Prerequisite: Algebra II

This Advanced Placement course will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad themes: exploring data, planning a study, anticipating patterns and statistical inference. A graphing calculator will be used extensively throughout this course. The AP Statistics course is an excellent option for any secondary students who possess sufficient mathematical reasoning and quantitative reasoning ability. This course will provide an excellent foundation for college-bound students who plan to major in medicine, psychology, economics, mathematics,

education and forensics. **Students will be required to pay for and take the Advanced Placement examination that is given in May.**

The fee for the AP exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)

JAVA Programming for Beginners Credit 1 Prerequisite: 2 math credits

Java provides an excellent environment for the beginning programmer. Students will be able to build useful programs while learning the basics of structured and object-oriented programming techniques. Java is popular among professional programmers as it can be used to build visually interesting graphical user interface (GUI), Web-based and phone applications. This course will serve them well in advanced Java courses or in studying other object-oriented languages such as C++, C#, and Visual Basic. This course is open to Seniors, Juniors as well as Sophomores who are in the HRS Math program.

Pre-Calculus Credit: 1 Prerequisite: Alg. II + Teacher Rec.

This Pre-calculus course provides the bridge between the Algebra 2 & Trigonometry curriculum and college calculus. The TI-83/84 plus calculator will be used to help develop topics including analytic geometry, function analysis, complex numbers, college algebra, trig functions, equations and identities, matrices and an introduction to calculus concepts. Any student intending to take calculus should take this course.

General Calculus Credit: 1 Prerequisite: Pre-Calculus

This course is intended for the senior who would like to gain exposure to calculus without the rigor of the AP program. Students who opt for this course will not be eligible to sit for the AP Calculus exam offered in May. It will include many of the same topics as Calculus; however, the level of depth into some of the topics will not be as intense.

Personal Finance Credit: 1 Prerequisite: Algebra 1

This program is designed for seniors and will provide students with essential mathematical knowledge and the practical application of this knowledge. The course is designed to prepare students to deal with mathematical situations that they will face after graduation in the areas of housing, employment, recreation, buying and selling, banking, credit, transportation, taxes, personal finance, and investments.

Logic, Puzzles and Problem Solving Credits: ½ Prerequisite: Algebra 2

This course is intended for the 11th or 12th grade student who loves to solve puzzles and wants to develop the logical portion of the brain. It will explore alternative problem solving techniques using patterns and other strategies to develop solutions to unique problems, riddles and conundrums.

Trigonometry (Non-Regents) Credits: ½ Prerequisite: Intermediate Alg. OR Alg. 2

This course is designed for the student who has completed Algebra 2 or Intermediate Algebra and wants to learn more trigonometry without needing to take Pre-Calculus. This class will review the unit circle concepts and then extend into inverse functions, trig equations, trig identities and applications of trig. A local exam will be given at the end of this half-year course.

Social Studies Electives

Psychology AP

Credit: 1

Rec. Gr. Level: 11,12

This is a rigorous course intended for college-bound Juniors and Seniors who want to deeply explore the discipline of Psychology. **Topics will be aligned with the Advanced Placement curriculum and students are required to pay for and take the AP Psychology exam in May. The fee for the Advanced Placement exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)**

AP World History

Credits: 1

Prerequisite: Teacher Rec. and /or 85% in Global 9 HRS

The purpose of the Advanced Placement (AP) World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different societies. The course is taught as a college-level class would be and highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies.

In simpler terms, the course presents a broad survey of the history of the world between 8000 B.C.E. to the present in order to understand whence we've come and to better predict where we are going. Students will be required to take the Advanced Placement Examination that is given the second week in May as well as the Regents exam in June. **The fee for the AP exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)**

AP United States History

Credits: 1

Prerequisite: Global 2 OR World History AP, 85% min. avg. + Teacher Rec.

The Advanced Placement course in United States History is designed to provide qualified students with the analytical skills and factual knowledge necessary to deal critically with the problems and events in American history. The course is designed to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year college introductory courses. Students will be required to take the Advanced Placement Examination that is given the second week in May as well as the Regents exam in June. **The fee for the AP exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)**

AP US Gov't. & Politics

Credit: 1

Prerequisite: Teacher Rec. & 85% min. avg. in US History

The Advanced Placement course in U.S. Government & Politics is designed to provide an analytical perspective on government and politics in the U.S. The course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires a familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. political reality. It is intended for qualified students who wish to complete studies in secondary school equivalent to a one-semester college introductory course in U.S. Government and Politics. Students will be required to take the AP Exam that is given in May. United States History and Government 11th grade is a prerequisite for this course.

This course is designed for Seniors and satisfies the NY State Participation in Government course requirement for graduation.

The fee for the AP exam is approximately \$100 (see your counselor for the \$65 reduced fee application if you are eligible for free or reduced lunch!)

Because this class is the advanced equivalent of Participation in Gov't, participants must pass this course in order to meet NYS High School Diploma Requirements.

English Electives

HC ENG 102 Introduction to Literature Credit: 1

Prerequisite: Minimum 88% avg. in Eng 11HR and/or Teacher Rec.

Students will be encouraged to become lifelong readers through examining the basic structural, stylistic, and thematic elements that govern various genres and modes in literature. In reading, discussing, and then presenting written analysis, in expository and argumentative papers, students will continue to develop their abilities in critical analysis and presentation of self-interpretive and researched conclusions.

Students may opt to pay the discounted Hilbert College tuition (about \$200) and be eligible to earn 3 college credits from Hilbert College (transfer of credits between colleges is subject to the discretion and approval of individual colleges and universities).

Mythology

Credit: ½ Prerequisite: English 10

Stories of action, adventure, magic and divine interventions are the subject matter for this literature course. Students will read the myths and legends that have endured throughout history, with special emphasis on Greek and Roman mythology. This course is invaluable to students who plan to further their studies in the arts and literature, and fans of the fantasy genre. Psychology and philosophy will be explored in classes that are discussion-based, and films, filmstrips and lecture complement the assigned reading. This course culminates with a project.

Book and Film

Credit: ½ Prerequisite: English 9

The book was better than the movie. Ever heard someone say this and questioned on what basis such a judgment is being made? Through a marriage of novel reading and film viewing we will be able to critique aspects of a screenplay as they apply to the novel. Since films will be viewed in class, attendance in class will have an effect upon one's ability to complete assigned tasks. In other words, this class will be difficult to pass if you are not here. Note: Most of the films that will be studied cannot be found at the local video store since they are not new to the film rental market.

Public Speaking & Debate

Credit: ½ Prerequisite: English 10

This course is designed for the beginning speaker. It is not for the talented few but for all who earnestly wish to be able to speak in front of a group with confidence and poise. The main objectives are to develop communication skills, clear and definite thinking, and to instill the importance of organization and preparation. Students will build self-confidence as they gain the ability to express themselves through conversation, discussion, argument, and oral reading and listening. They will also develop the ability to gather, interpret and organize research material.

Creative Writing

Credit: ½ Prerequisite: English 9

The emphasis in this course is on descriptive and narrative writing. The first ten weeks are devoted primarily to improving the students' powers of observation and working with sensory details. This progresses to self-description, characterizations of other people, place descriptions for settings, and a poetry unit. The second ten-week period involves working with exercises in narration, dialogue, stream of consciousness, and other techniques and devices that are utilized in the final assignment, a short story.

Creative Writing II

Credit: ½ Prerequisite: Creative Writing

This course is designed for those students who have successfully completed Creative Writing. It is designed to further develop creative writing skills in both poetry and prose. Students will hone in on various literary writing techniques and continue to work in a writer's workshop format on their own pieces of writing as well as others.

Eden Raider Leadership Academy

Credit: ½ Prerequisite: None

This half-year course will educate and prepare 9th graders by allowing them to transition successfully into High School with a growth mindset. The class utilizes project-based learning, focuses on Raider Pride, and provides an environment that promotes responsibility and fosters the skills required for success in High School and beyond. The Eden Leadership Academy experience will include: tech-based learning, discussion of current events, managing personal bank accounts, journaling, group activities, guest speakers, and public speaking. The class will culminate with a collaborative video project.

NOTE: VOCATIONAL STUDENTS ARE ENCOURAGED TO TAKE ESSENTIALS OF WRITING AND SENIOR LITERATURE AS ELECTIVES IN ORDER TO SUPPLEMENT THE REQUIRED CTE ENGLISH THAT IS EMBEDDED IN THEIR VOCATIONAL PROGRAM (ESSENTIALS IN WRITING SHOULD BE CONSIDERED A REQUIRED CLASS FOR ANY VOCATIONAL STUDENT WHO PLANS TO ATTEND COMMUNITY COLLEGE AFTER HIGH SCHOOL).

Essentials of Writing

Credit: ½ Prerequisite: English 11

This class is strongly recommended for all Vocational Seniors who plan to enroll in a 2-year college after graduation (it is required for all non-vocational Seniors). Working from a step-by-step approach to fundamentals, good writing examples, and carefully designed exercises, students will review the one and five paragraph persuasive essays introduced at earlier grade levels. The basics of organization, support, unity, and coherence will also be reinforced as students then study types of persuasive writing: comparison and contrast, classification, and cause and effect. As they work with types of persuasion, students will continue to use the elements of thesis statements and blueprints, central paragraphs, introduction and conclusion. The final several weeks of this course will be devoted to the process of writing a term paper: research techniques, library use, note taking, outlining and writing a rough and final copy, as well as correctly creating a bibliography and documenting sources of information. The final copy of this term paper will serve as the final exam for the course. Finally, students will complete short grammar, punctuation, and usage writing during the semester to improve their written expression.

Senior Literature

Credit: ½ Prerequisite: English 11

(This course is required for Seniors if they are not taking a CTE program. It may be taken as an elective by any Vocational Senior.) The class will focus on analyzing, dissecting and discussing all manner of literature. Titles and themes discussed will vary by teacher and the curriculum for this reading course will prepare students for a lifetime of appreciating every style of literature.

ELECTIVE COURSES FOR INCOMING 9th GRADERS:

ENGLISH

Eden Raider Leadership
Academy (1/2)

ART

Studio in Art
Ceramics 1 (1/2)
Jewelry (1/2)
Creative Crafts (1/2)

MUSIC

Chorus (1/2)
Select Chorus (1/2)
Orchestra
High School Band

**BUSINESS &
COMPUTER
EDUCATION**

Keyboarding (1/2)
Digital Applications
Video Game Design
(1/2)
Web Page Design (1/2)
Intro Business
Intro to Law (1/2)
Marketing (1/2)
Career & Financial
Management (1/2)

**FAMILY &
CONSUMER
SCIENCES**

Food Prep & Nutrition
(1/2)

**TECHNOLOGY
EDUCATION**

Design & Drawing for
Production
Woodworking (1/2)
Electricity / Electronics
(1/2)
Photography (1/2)
Electricity / Electronics
(1/2)
Applied Design (1/2)

ELECTIVE COURSES FOR INCOMING 10TH GRADERS

ENGLISH

Book and Film (1/2)
Creative Writing (1/2)
Public Speaking (1/2)

MATH

JAVA Programming for beginners

WORLD LANGUAGES

Students taking a HS level World Language class may take an additional language for elective credit:
French 1B or French 2
German 1B or German 2
Spanish 1B or Spanish 2

ART

Studio in Art
Studio in Painting & Drawing
Studio in Ceramics I (1/2)
Studio in Ceramics II (1/2)
Creative Crafts (1/2)
Jewelry (1/2)

MUSIC

Chorus (1/2)
Select Chorus (1/2)
Orchestra
High School Band

HEALTH &

PHYS ED

Lifeguarding (1/2)

BUSINESS &COMPUTER EDUCATION

Career and Financial Management (1/2)
Video Game Design (1/2)
Intro to Law (1/2)
Intro to Accounting (1/2)
Marketing (1/2)
Web Page Design (1/2)
Intro to Business (1/2)

FAMILY & CONSUMER SCIENCE

Food Prep (1/2)

TECHNOLOGY & AG EDUCATION

Photography (1/2)
Advanced Photo (1/2)
Woodworking (1/2)
Electricity / Electronics (1/2)
World of Tech (aka “the Chopper class,” counts as a math OR science credit)
Design & Drawing for Production
Architectural Drawing
Tech Diesel
Motorsports (1/2)
Vehicle Maintenance / Ownership (1/2)
Tech Science
Hydroponics (1/2)
Applied Design (1/2)

**Green Listings =
College Credit
Option**

ELECTIVE COURSES FOR INCOMING 11TH GRADERS

ENGLISH

Mythology (1/2)
Book and Film (1/2)
Creative Writing (1/2)
Creative Writing II (1/2)
Public Speaking (1/2)

SOCIAL STUDIES

AP Psychology
AP World History

MATH

Statistics AP
JAVA Programming For
Beginners
Logic, Puzzles & Prob.
Solving (1/2)
Trigonometry NR (1/2)

SCIENCE

Environmental Science
Anatomy & Physiology
Astronomy
Forensics (1/2)
NUSTEP BIO 102

WORLD LANGUAGES

Students taking an upper
level World Language class
may take an additional
language for elective credit:
French 1B or French 2
German 1B or German 2
Spanish 1B or Spanish 2

ART

Studio in Art
Studio in Painting & Drawing
Advanced Ptg & Drg (1/2)
Studio in Ceramics I (1/2)
Studio in Ceramics II (1/2)
Creative Crafts (1/2)
Jewelry (1/2)

MUSIC

Chorus (1/2)
Select Chorus (1/2)
Orchestra
High School Band

HEALTH & PHYS.

EDUCATION

Lifeguarding (1/2)

BUSINESS & COMPUTER

EDUCATION

Digital Applications
Career and Financial
Management (1/2)
Video Game Design (1/2)
Web Page Design (1/2)
Intro to Law (1/2)
Intro to Accounting (1/2)
Marketing (1/2)
ECC Intro to Business (1/2)
ECC Accounting (1/2)
ECC Law (1/2)
**ECC College Success Skills
(1/2)**

FAMILY & CONSUMER SCIENCE

Food Prep (1/2)
Gourmet Foods (1/2)

**Green Listings =
College Credit
Option**

TECHNOLOGY & AG EDUCATION

Woodworking (1/2)
Electricity/Electronics (1/2)
Photography (1/2)
Advanced Photo (1/2)
World of Tech (aka “the
Chopper class,” counts as a
math OR science credit)
Design & Drawing for
Production
Architectural Drawing
Construction Drafting
Tech/Diesel
Motorsports (1/2)
Vehicle
Maintenance/Ownership
(1/2)
Tech / Science (1/2)
Applied Design (1/2)
Home Maintenance & Repair
(1/2)

CTE PROGRAMS

O=ORMSBY

C=CARRIER

Automotive Body Repair 1 (4) O
Automotive Technology 1 (4) C
CADD 1 (4) O
Conservation & Nat Res Mgt 1 (4) O
Construction Technology 1 (4) C
Cosmetology 1 (4) C
Criminal Justice 1 (4) O
Culinary Arts 1 (4) C
Health Careers 1 (4) O
Heating, Air Cond./Refrig 1 (4) C
Info Tech./Computer Sys.1 (4) C
Large Animal Science 1 (4) O
Power Equipment Technology (4) O
Small Animal Science 1 (4) C
Sports & Exercise Sci 1 (4) O
Welding 1 (4) O

**Note: Juniors attending Career
Technical programs at the East
Aurora/Ormsby program do not
return to Eden High School until
2:45pm and are transported home
at that time.**

**CTE programs are not recognized
by the NCAA as counting toward
athletic eligibility.**

**See a counselor for more info.
about how a CTE program can
affect your schedule.**

ELECTIVE COURSES FOR INCOMING 12TH GRADERS

ENGLISH

HC English 102

Book and Film (1/2)
Mythology (1/2)
Public Speaking (1/2)
Creative Writing (1/2)
Creative Writing II (1/2)
For CTE students only:
Senior Literature (1/2)
Essentials of Writing (1/2)

SOCIAL STUDIES

AP Psychology
AP US History
AP World History

MATH

AP Calculus
AP Statistics
Algebra 2
Pre-Calculus
General Calculus
Java Programming for beginners
Personal Finance
Logic, Puzzles & Prob. Solving (1/2)
Trigonometry NR (1/2)

SCIENCE

NUSTEP CHE 111
NUSTEP BIO 12
Advanced Chemistry II
Physics & Lab
Chemistry & Lab
Environmental Science
Astronomy
Anatomy & Physiology
Forensics (1/2)

WORLD LANGUAGES

Students taking an upper level World Language class may take an additional language for elective credit:
French 1B or French 2
German 1B or German 2
Spanish 1B or Spanish 2

ART

Studio in Art
Studio in Painting & Drawing
Advanced Ptg & Drg (1/2)
Studio in Ceramics I (1/2)
Studio in Ceramics II (1/2)
Creative Crafts (1/2)
Jewelry (1/2)

MUSIC

Chorus (1/2)
Select Chorus (1/2)
Orchestra
Concert Band

PHYS. ED

Lifeguarding (1/2)

**Green listings
= college credit
option**

BUSINESS & COMPUTER EDUCATION

ECC Accounting (1/2)
ECC Intro to Business (1/2)
ECC Law (1/2)
ECC College Success (1/2)
Digital Applications
Career and Financial Management (1/2)
Video Game Design (1/2)
Web Page Design (1/2)
Intro to Law (1/2)
Intro to Accounting (1/2)
Marketing (1/2)

FAMILY & CONSUMER SCIENCES

Food Prep (1/2)
Gourmet Foods (1/2)

TECHNOLOGY & AG EDUCATION

Woodworking (1/2)
Electricity/Electronics (1/2)
Photography (1/2)
Advanced Photo (1/2)
World of Tech (aka “the Chopper class,” counts as a math OR science credit)
Design & Drawing for Production
Architectural Drawing
Construction Drafting
Tech/Diesel
Motorsports (1/2)
Vehicle
Maintenance/Ownership (1/2)
Tech / Science (1/2)
Applied Design (1/2)
Home Maintenance & Repair (1/2)