# COURSE DESCRIPTION MANUAL 2024-2025



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To the Students:

This course description manual has been prepared to help you make intelligent choices for next year's courses of study. Read it carefully. Discuss your choices with your parents and if you have questions, ask your counselor. In this way, you will be able to select courses that will be most beneficial to you.

Karin Cyganovich, Principal

<b>GRADUATION REQUIREMENTS</b>		
Subjects	Regents Diploma*	Regents With Advanced Distinction Diploma*
English+	4 units	4 units
Social Studies+ Mathematics+	4 units 3 units and must pass one Regents Exam	4 units 3 units and must pass 3 Regents Exams
Science+	3 units	2 Regents units PLUS 1 additional unit
Art and/or Music	1 unit	1 unit
Health	1⁄2 unit	1⁄2 unit
Physical Education	1⁄2 unit each year	1⁄2 unit each year
Second Language	1 unit	3 units #
Sequence Requirement and/or Electives	4 units	2 units
TOTAL	22.5 units	22.5 units

\*Students must also complete 20 hours of voluntary service starting with Cohort year 2005 and thereafter.

\*Honors Distinction is awarded for a student whose Regents Exam scores average 90 or above.

+ All students will be required to pass (65%). 5 Regents exams, one in each subject area. One Math, One Science, One Social Studies, and One English; as well as one additional exam/pathway.

# Another sequence of three units can be substituted for the second language requirement for those who complete a five-unit sequence in occupational education.

A local diploma option is only available for students who have approved safety net exams as per their IEPs or approved 504 Plans.

# CREDITS REQUIRED FOR PROMOTION

Grade 10:	4 <sup>1</sup> / <sub>2</sub> cumulative credits earned
Grade 11:	10 cumulative credits earned
Grade 12:	15 <sup>1</sup> / <sub>2</sub> cumulative credits earned

Students who fall below these guidelines will be retained in their current grade until they earn enough credits to be promoted to the next grade level.

# ADVANCED COLLEGE PROGRAMS

*Advanced Placement (AP)* - The Advanced Placement program gives interested students opportunities both for college-level learning and for demonstrating their accomplishments through the AP examinations. There is a cost associated with AP examinations. It is expected that all students will take the AP examinations when they are enrolled in the following courses:

- AP Biology
- AP Chemistry
- AP English 12
- AP US History
- AP Government and Politics
- AP World History

Dual Enrollment:

Students enrolled in these high school courses have the opportunity to earn college credit :

- Pre-Calculus
- Calculus
- Medical Terminology
- Medical Ethics
- Anatomy & Physiology (Offered alternate years)
- English 100 (Rhetorical Strategies) & English 101 (Comp for the Humanities)
- Psychology
- Spanish 4 & 5
- French 4 & 5

\*A fee is required to be paid in order to receive college credit. The fee(s) vary based on the college the course is affiliated with.

# <u>ART</u>

Sculpture - ½ credit Ceramics - ½ credit Advanced Ceramics - ½ credit Studio in Drawing & Painting - 1 credit Advanced Studio in Drawing & Painting - 1 credit

#### STUDIO IN ART

40 weeks - 1 credit

This is a full-year introductory art course. Students are introduced to the Elements of Art and Principles of Design. Students will learn about artists, artistic styles, techniques, and media. Both 2-d and 3-d projects are explored. Assignments include studio projects and sketchbook drawings. Completion of this course allows students to take advanced-level electives.

# NOTE: Studio in Art is a foundation course; it is required for an art sequence and is a prerequisite for art electives.

#### CERAMICS

20 weeks - ½ credit

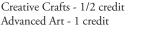
Ceramics will enable the student to experience the creation of hand-built art forms using slabs and coils. Projects include a tile, pinch pots, double pinch pot, slab dish, coil pot spiral coil pot, slab cylinder, and slab box with lid, to name a few students will explore both 2-D and 3-D clay forms. Students will research techniques and conduct critical analysis of their work.

#### ADVANCED CERAMICS

20 weeks - ½ credit

Students will apply learned construction methods in clay of wedging, coiling, pinching, rollingout, building with slabs, sculpting, hollowing-out and reassembling for more sophisticated projects. Additive and subtractive methods of building will be studied.

The nature of the art pieces shape, form, and decoration will be focused upon. Students will be encouraged to seek creative, imaginative, and independent solutions for projects. Students will generate a portfolio of work which will culminate the course.



Creative Drawing - 1/2 credit

Digital Photography - 1/2 credit

Open to Grades 9-12 PREREQUISITE: None

Open to Grades 10-12

Open to Grades 10-12

PREREQUISITE: Ceramics

PREREQUISITE: Studio in Art



## STUDIO IN DRAWING & PAINTING

40 weeks - 1 credit

The main objective of this course is for each student to develop a portfolio of work which reflects a creative mode of expression in the areas of drawing and painting. Students will further explore the design elements and principles of art. Projects in this course may include and are not limited to: theme paintings, use of an array of wet & dry media, figurative studies, unique compositional arrangements, mixed media, study of artistic styles, and nature drawings. Students will build on the skills that they developed in previous art courses and continue growing both technically and conceptually as artists.

ADVANCED STUDIO IN DRAWING & PAINTING Open to Grades 11 & 12 40 weeks - 1 credit PREREQUISITE: Studio in Art and Studio in Drawing & Painting

The main objective of this course is for each student to develop a portfolio of work which reflects a creative mode of expression in the areas of drawing and painting. Students will further explore the design elements and principles of art. Projects in this course may include and are not limited to: theme paintings, use of an array of wet & dry media, figurative studies, unique compositional arrangements, mixed media, study of artistic styles, and nature drawings. Students will build on the skills that they developed in previous art courses and continue growing both technically and conceptually as artists.

### SCULPTURE

20 weeks - 1/2 Credit

Sculpture is a course which concentrates on the various forms of three dimensional works. Course study will include the history of sculpture and significant contributions of artists. Students will participate in art criticism, class critiques, aesthetic inquiry, and art production. Materials and techniques are utilized in order to demonstrate the understanding of the design elements and principles. A wide variety of materials are used in the class such as wood, plaster, plastic, clay, etc...

**CREATIVE DRAWING** 

20 weeks - 1/2 Credit

Drawing skills will be developed through the use of a variety of drawing media. The course will emphasize elements and principles of design, composition and correct observation in the study of still, life, nature and the human figure.

### **CREATIVE CRAFTS**

20 weeks - 1/2 credit

Creative Crafts is a stress free, half-year course for students that want to be creative in unique and different ways. In Creative Crafts, we will explore a variety of materials and processes. We may work with things like paper mache or clay to more specialized painting or printmaking techniques. This class will be largely student-driven and will reflect what the class is interested in doing.

Open to Grades 10-12 PREREQUISITE: Studio in Art

PREREQUISITE: Studio in Art

Open to Grades 10-12



PREREQUISITE: Studio in Art

Open to Grades 10-12 PREREQUISITE: Studio in Art

# CAREER AND TECHNICAL EDUCATION

# ANIMAL SCIENCE

2-Year Program- 3.75 credits each year

Students will be prepared for a wide range of careers related to animal care and veterinary science. Topics of study include: animal health and disease, nutrition, reproduction, parasitology, anatomy and physiology, and animal behavior. Students will perform clinical procedures that are commonly performed at veterinary clinics and learn the technical skills to operate and manage a veterinary practice. Animal care and grooming clinics are implemented to help students learn standard operating procedures by following written protocols, documentation, team work, problem solving, and verbal communication/instruction in a professional work environment.

# AUTO TECHNICIAN TRAINING

2-Year Program- 3.75 credits each year

Students will learn the skills necessary to troubleshoot and repair today's modern vehicles. Topics of study include: engine performance, tire repair/replacement, alignment, fuel systems, wiring and electrical systems, power trains and transmissions, brake repair and replacement, steering and suspension. Students will diagnose, troubleshoot, and perform preventative maintenance on foreign/domestic cars and light trucks by using the latest techniques and computerized diagnostic equipment.

# AVIATION TECHNOLOGY

2-Year Program- 3.75 credits each year

Students will study and apply aerodynamic principles, aircraft control, and instrumentation both in the classroom and during flight opportunities. Topics of study include: flight principles, systems and performance, aerodynamics, weight and balance, navigation, weather reports and interpretation, aviation meteorology, and ground and space based navigation. Students will learn the aeromedical factors for pilots as well as ground operations, plotting skills, and unmanned aerial vehicles, as well as aerospace engineering principles.

# **BAKING AND PASTRY ARTS**

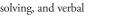
2-Year Program- 3.75 credits each year

Students will learn the fundamentals of baking, measurement and mixture methods, and planting and finishing techniques to create beautiful, edible works of art. Topics of study include: holiday baking, cookies and pastries, cakes, icing and decorating, quick breads and bistrostyle cooking. Students will build a professional portfolio by learning sugar and confectionary techniques, working with a variety of doughs

and ingredients and creating candies and chocolates. Students will earn a ServSafe certification during the two-year program.

Open to Grades 11 and 12





Open to Grades 11 and 12





Open to Grades 11 and 12

### BARBERING

2-Year Program- 3.75 credits each year

Students will learn the technical and communication skills required to be successful in a professional shop environment. Topics of study include: implements, tools and equipment, anatomy and physiology, properties and disorders of the skin and scalp, and New York State Board procedures. Students will perform professional barbering techniques, such as mustache and beard design, a variety of sheer and clipper cutting techniques, hair color lightening, as well as the basics of business, effective client communication, shop management, and safe work practices. Students must accumulate 500 hours of instruction in order to be eligible for the NYS Certification exam.

## **BUILDING TRADES**

2-Year Program- 3.75 credits each year

Students will learn the fundamental practical skills needed in the construction field, such as: proper use of hand and power tools, safety procedures, blueprint reading, and obtaining accurate measurements. Practical knowledge will be applied by working with drywall installation, rough and finish carpentry, framing, painting, roofing, floor installation, door and window installation, siding, restoration work, and more.

# CAREER EXPLORATION

Available as a whole or half year option

Students will experience a variety of programs in pursuit of their career interests. Time is spent shadowing the program and completing various projects designed for the Career Explorer. Full year students will experience up to 8 different programs for 5 weeks each. Half year students will experience up to 4 programs for 5 weeks each.

# **COLLISION REPAIR**

2-Year Program- 3.75 credits each year

Students will train in collision repair, automotive detailing, painting and restoration work. Topics of study include: collision and auto body repair, auto refinishing, welding techniques and replacement of parts and sections of panels. Students learn to use hand, power, and specialized auto body tools and equipment to repair dents and frame work on metal and plastic sections of automobiles. Students have the opportunity to create customized paint graphics, airbrushing, and restoration work on vehicles.

# COSMETOLOGY

2-Year Program- 3.75 credits each year

Students will learn the communication and technical skills required to be successful in a professional salon work environment. Topics of study include: hair coloring, styling, conditioning and shaping, infection control and safety standards, esthetics, and nail care. Product knowledge, proper application and technical procedures are taught to enhance the personal care of hair, nails, and skin. Students develop and practice their skills during clinic events. Students must accumulate 1,000 hours of instruction in order to be eligible to take the NYS Certification exam.

Open to Grades 11 and 12

Open to Grades 10, 11, and 12

Open to Grades 11 and 12

Open to Grades 11 and 12



## **CRIMINAL JUSTICE**

2-Year Program- 3.75 credits each year

Students will learn criminal and civil law, vehicle and traffic law, arrest and court procedures, report writing and professional communication skills. Topics of study include: interviewing skills, self-defense, emergency response, security, fingerprinting, civil rights, courts and corrections, and forensics. Students will participate in community service projects, participate in guest speaker presentations, conduct physical conditioning exercises, learn patrolling skills, collect evidence and crime scene investigation tactics.

## CULINARY ARTS

2-Year Program- 3.75 credits each year

Students will learn the fundamentals of safety and sanitation, equipment operation, and how to prepare short order and large quantity cooking meals in this exciting and fast-paced program. Topics of study include: baking breads and pastries, creating main entrees, side dishes and soups, practicing professional skills through customer service, menu planning, and recipe conversions. Students will work effectively with their team members, learn restaurant management skills through catering services and food orders.

# CYBERSECURITY AND NETWORKING

2-Year Program- 3.75 credits each year

Students will use the latest software to analyze data traffic and troubleshoot PC hardware and operating systems. Topics of study include: digital forensics, computer data and hardware analysis for evidence collection and criminal prosecution, network traffic analysis, vulnerability and network activity identification, and research ethics and morals in relation to cyber-attacks and cyberterrorism. Students will configure hardware firewalls for added network security, setup secure wireless devices for homes and businesses, and use various programs to hide data within pictures, videos, and music files.

# DENTAL LABORATORY TECHNOLOGY

2-Year Program- 3.75 credits each year

Students will combine the art and science of the fabrication of corrective devices and replacements for natural teeth. Topics of study include: dental and oral anatomy, dental terminology, laboratory safety and infection control, and tooth morphology. Students will create orthodontics and restorations, all phases of complete dentures, crown and bridge restorations, ceramic and orthodontic techniques, and digital design, scanning, and milling. Students with an interest in dentistry, dental hygiene, and orthodontics may be interested in this course.

# DIGITAL MEDIA

2-Year Program- 3.75 credits each year

Students will experience real world skills and techniques in the fields of graphic design, animation, illustration, and virtual production. The 2-year program studies topics like digital photography and videography, 2D and 3D animation and compositing, visual effects, combining virtual and physical worlds. They will create dynamic content through cutting edge, modern technology and techniques taught by industry professionals as well as gain real world experience through internships and collaborative opportunities with today's top producers and creative professionals.

Open to Grades 11 and 12

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# EARLY CHILDHOOD EDUCATION

2-Year Program- 3.75 credits each year

Students will examine the physical, social/emotional, and intellectual development of children. Topics of study include: child development, child psychology, nutrition, social/emotional learning, special needs of children, and health and safety of children. Students will design and implement lesson plans, care for children in a preschool environment, enhance professional written and oral communication skills, gain hands-on experience through internships at local preschools, childcare centers, and elementary schools.

# ELECTRICAL SYSTEMS

2-Year Program- 3.75 credits each year

Students will learn the theory and fundamentals of electrical systems and apply it to hands-on projects. Topics of study include: electrical safety, basics of hand and power tools, specialized tools and equipment, wiring methods, calculations and measuring, electrical circuits and troubleshooting methods, industrial motor controls, and residential and blue print reading. Students will explore renewable technologies and energy sources, control systems, and business and industry principles like financial literacy. Students will earn their OSHA 10 Safety Certification.

# ELECTRONICS AND COMPUTER TECHNOLOGY

2-Year Program- 3.75 credits each year

Students will use soldering irons, hand tools, meters, and oscilloscopes to build computers, robots, amplifiers, wireless devices, and other high tech projects. Topics of study include: microcomputer systems, amplification, digital electronics, soldering, de-soldering and PCB repair. Students will understand semiconductor, DC, and AC electronics, analog/digital conversion, telephone and cellular communications, and radio communications.

# ENGINEERING AND ROBOTICS

2-Year Program- 3.75 credits each year

Students will experience hands on learning projects and skill based competitions that will prepare them for their future by learning how to develop their ideas from concept to reality. Topics of study include: engineering essentials, introduction to engineering design, principles of engineering, computer integrated manufacturing, and engineering design and development.

**ESPORTS MANAGEMENT AND GAME DEVELOPMENT** Open to Grades 11 and 12 2-Year Program- 3.75 credits each year

Students will explore the growing world of Esports and learn the business components of this booming industry. Topics of study include: computer literacy, game industry fundamentals, narrative design, principles and elements of design, game audio components, broadcasting and streaming, logo and brand design, game theory and strategy, and marketing strategies.

Open to Grades 11 and 12

Open to Grades 11 and 12

Open to Grades 11 and 12

### EXERCISE SCIENCE

2-Year Program- 3.75 credits each year

Students will explore the effects of exercise including cardio-conditioning, strength and flexibility training on human health, wellness and sports performance. Topics of study include: fitness safety, functional movement

and screening, health fitness trends, human anatomy and physiology, nutrition and weight management, specialty program design, cardiovascular and resistance training program design, sport specific training, and the business of fitness. Students will design, implement, and update personal training programs based on client specific goals. Throughout the two years, students will investigate and focus on various career paths in the health industry.

# FASHION DESIGN TECHNOLOGY

2-Year Program- 3.75 credits each year

Students will learn to dress, style, and create trends based on design elements and the fashion cycle. Topics of study include: basic sewing skills, fashion trend forecasting, fashion psychology, fiber, yarn, and garment production. Students will analyze fashion collections, study fashion history, explore fashion merchandising, marketing and advertising by creating a working business plan, and produce a professional fashion show.

## HEALTH CAREERS

2-Year Program- 3.75 credits each year

Students will learn the skills to be a supportive caregiver through clinical experiences in a variety of health care environments including long term care facilities and hospitals. Topics of study include: anatomy and physiology, medical terminology, infection control, legal and ethical responsibilities, vital signs and conversions, professional communication, personal health and wellness, and physical, mental, emotional, and social developments. During clinical rotations, students perform personal care procedures, learn to take vital signs, and assist patients with mobility using crutches, canes, walkers, and wheelchairs.

# HVAC

2-Year Program- 3.75 credits each year

Students will gain an understanding of the fundamentals of residential and light commercial heating, ventilation, and air conditioning installation, service, and repair. Topics of study include: potable water systems, forced air heating systems, steam and hydronic heating systems, drainage, waste and vents, and central air conditioning systems. Students will practice soldering, brazing, blue print interpretation and isometric drawing analysis. Students will earn trade related certifications like OSHA 10 and EPA 608.

# SOCIAL MEDIA MARKETING

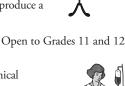
1-year program- 3.75 credits

Students will learn the variety of social media platforms available to businesses, learn how to build a company's brand, increase sales in e-commerce spaces, and drive website traffic. Students will explore ways to engage existing customers, reach new ones, and analyze analytics and demographic information that allow marketers to track the success of their efforts and identify more ways to engage.

Open to Grades 11 and 12



Open to Grades 11 and 12



Open to Grades 11 and 12

# VIDEO PRODUCTION AND RECORDING ARTS

2-Year Program- 3.75 credits each year

Students will learn to create and produce their own original films and music with the guidance of industry professionals. Topics of study include: Video production basics, video language and project development, video program creation, microphone design and application, digital audio technology, digital audio workstation, the process and concept of sound mixing, digital console and DAW mixer technology and automation.

**WEB TECHNOLOGIES AND GAME PROGRAMMING** Open to Grades 11 and 12 2-Year Program- 3.75 credits each year

Students will bring ideas to life by writing software, designing and coding games, and developing web pages and sites. Topics of study include: web design, web development applications, programming, game development applications, and databases.

# WELDING

2-Year Program- 3.75 credits each year

Students will learn to manipulate metal using a variety of welding techniques and the many different job skills that will set students up for lucrative careers in manufacturing, field work, or entrepreneurship. Topics of study include: welding safety, equipment maintenance and care, metal working safety, oxy-fuel cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, plasma arc cutting, and light manufacturing. Students will practice these methods on a variety of materials and create unique designs by using the CNC (Computer Numerical Control) Plasma Machine or by developing metal sculpture projects.

# OCCUPATIONAL EDUCATION

Occupational Education offers supportive career development programs for students with learning or management needs who require small classes and individually modified curricula. Students will be provided opportunities for hands-on job training in preparation for competitive employment. Students will be able to explore multiple pathways while in the program.

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Open to Grades 11 and 12



# Students are eligible to earn 17 transferable SUNY college credits with successful completion of

# **CONNECTIONS: HEALTH RELATED CAREERS**

1-year Program

the program.

1-year Program

Connections Health Related Careers is a 1-year, senior level, highly academic program that allows students to explore the field of healthcare and medicine while earning high school credits and exclusive access to local hospitals and medical experiences. Students will learn anatomy and physiology, medical terminology, pathophysiology and disease as it affects individual health, as well as observe normal anatomy and physiology and disease process and treatment through clinical observation. Health care internships will provide opportunity for students to observe diverse medical professionals while participating in a clinical setting and apply theory to what is observed in the internship facility. Connections Health Related Careers students experience behind-the-scenes looks into healthcare and medicine through our esteemed partners at Buffalo General Medical Center, Millard Fillmore Suburban Hospital and Oishei Children's Hospital.

# LEGAL ACADEMY

1-year Program

The Legal Academy is a 1-year, senior level, highly academic program that allows students to explore career pathways related to the legal system while earning high school and college credits. Students will learn the foundations of law and the legal system, develop a network of professional connections through field experiences, and complete internships in political offices, courts, law offices, and more. Topics of study include: criminal, family, and consumer law, lawmaking, torts, policing, freedoms and individual rights, and contemporary issues in law. The Legal Academy is held on the Canisius University campus. Students are eligible to earn articulated college credits with the successful completion of the program.

EDUCATION PATHWAYS ACADEMY

Education Pathways Academy is a 1-year, senior level, highly academic program that allows students to explore the field of education while earning high school and college credits. Students learn the fundamentals of education through both theory-based and experimental learning. The program functions to show educator candidates everything that education has to offer, and ultimately allows students to select and consider the areas they find most relevant and appealing. Topics of study include: classroom and behavior management, child and adolescent development, lesson planning and execution, data-driven instruction and assessment, social emotional learning, best teacher practices, and working with students with disabilities. Education Pathways Academy is held on the Buffalo State University Campus.

NEW VISIONS PROGRAMS

Open to Grade 12

Open to Grade 12

Open to Grade 12

# ZOO WILDLIFE AND CONSERVATION CAREERS

1-year Program

Zoo Wildlife and Conservation Careers is a 1-year, senior level, highly academic program that allows students to explore the many careers related to zoo wildlife and conservation while earning high school and college credits. Students will learn about zoological care and animal sciences, experience the zoo's day-to-day operations, ways to incorporate and educate about conservation, and correlate concepts of ELA, government, and economics as they relate to animal and conservation topics. Topics of study include: conservation, animal husbandry, the evolution of zoos, animal ethics and welfare, basic animal behavior, veterinary care, exhibit design, horticulture, and zoo operations. Zoo Wildlife and Conservation Careers is held on the grounds of the Buffalo Zoo. Students are able to study the animals, work directly with zoo staff and animal care experts, and get behind-the-scenes access to zoo operations.

## Diesel Technology

1-year Program

Diesel Technology is a 1-year, senior level program that allows students to explore the field of the diesel industry while earning high school and college credits. Students will work on trucks and diesel engines and engage with professionals at the Conway Beam Truck Group site. Topics of study include: engine repair, lamps, accessories and wiring, welding, bearings and seals, engine removal, disassembly and installation, circuit fundamentals, wheel alignment, principles of hydraulics, and the parts and tools needed to build an engine. Diesel Technology is held at the cutting-edge Conway Beam Truck Group. Conway Beam Truck Group allows our students to interact with professionals in the diesel industry and learn first-hand what it takes to work in a state-of-the-art shop.

### PLANT SCIENCE

1-year Program

Plant Science is a 1-year, senior level, highly academic program that allows students to explore the field of horticulture and plant sciences while earning high school credit and exclusive, realworld experience. Students will learn greenhouse management, plant and soil science, and landscape design. Topics of study include: the foundations of horticulture, plant cells and tissues, roots and soils, greenhouse management, watering and hydroponics, and native and invasive species. Students will engage in propagation techniques, integrated pest management (IPM), plant identification, and complete a variety of seasonal projects while on the grounds of the Buffalo and Erie County Botanical Gardens. The Plant Science program is held on the grounds of the Buffalo and Erie County Botanical Gardens. Students are able to study the plants, work directly with staff and plant care experts, and get behind-the-scenes access to Botanical Gardens operations.

Open to Grade 12

Open to Grade 12

Open to Grade 12

# **ENGLISH**

Honors Programs are offered to students through teachers' recommendations. Enrichment in content is accelerated as student's progress from year to year.

# **ENGLISH 9**

This course stresses the development of listening, writing, and reading skills as the first of three years' preparation for the English Language Arts Examination. Emphasis is placed on developing inferential reading skills and on writing essays and research papers. Students will engage in some group work using cooperative learning techniques. All students will complete at least one typed paper, approximately 1,000 words in length, involving the use of research skills and techniques.

Whirlgig

Longer readings may include:

The Miracle Worker

House on Mango Street

The Tragedy of Romeo and Juliet	Ghost	<u>Animal Farm</u>	Lord of the Flies
<u>Clap When You Land</u>			
<b>ENGLISH 10</b> 40 weeks - 1 credit			HONORS
This course of study concentrates of critical thinking, and research deve	elopment - all in prepa	ration for the New	v York State English
Language Arts Examination. Writi and research papers. Emphasis on			

Great Expectations

usage, punctuation, and spelling will be emphasized at all times.

Longer works may include:

A Tale of Two Cities	Fallen Angels	Antigone	<u>Speak</u>
<u>Julius Caesar</u>	The Contender	Keesha's House	Othello
The Kite Runner	<u>Fahrenheit 451</u>	Life of Pi	<u>Twelve Angry Men</u>
<u>Long Way Down</u>			

activities as class discussions, oral readings, oral reports, and speeches. Appropriate grammar,

**ENGLISH 11** 

40 Weeks - 1 credit

This course is an in-depth study of the English language and American Literature. It is chronological in nature, and provides the historical information needed to give the students an awareness of how literature reflects the times. It includes lectures, discussions, readings, writing activities, listening skills, vocabulary enhancement, spelling and grammar development. Additional emphasis will be placed on creative activities (written, dramatic, or oratorical) and group activities involving cooperative learning.

# S

HONORS 40 weeks - 1 credit

# HONORS

Maus Hidden Girl The Odyssey The Pact Animal Farm Lord of the Elies

# The New York State English Language Arts Regents, taken by 11th grade students in June, is a graduation requirement for a NYS diploma.

Reading can include:

<u>The Crucible</u> <u>The Things They Carried</u> <u>The Scarlet Letter</u> <u>To Kill a Mockingbird</u> <u>Of Mice and Men</u> <u>The Great Gatsby</u> <u>Death of a Salesman</u> <u>Warriors Don't Cry</u> <u>One Flew Over the Cuckoo's Nest</u> <u>A Raisin in the Sun</u>

# ADVANCED PLACEMENT ENGLISH

40 weeks - 1 credit

Grade 12 Only Teacher Recommendation

Students who take this Advanced Placement course are expected to take the College Board's Advanced Placement Examination given in May.

Many colleges and universities offer full credit for freshman composition courses to students who do well on this examination. Emphasis in AP English is on critical reading and writing and training in preparation for college. The syllabus covers period pieces from Shakespeare to Komunyakaa as students survey literature from the 1600's to the modern day. Longer literacy pieces may include: The Awakening, Frankenstein, Ethan Frome, The Invisible Man, 1984, Much Ado About Nothing, and The Road.

CULTURAL PERSPECTIVES/DIVERSITY LITERATUREOpen to Grades 10-1240 weeks - 1 creditPREREQUISITE: English 9

Cultural Perspectives is a course designed to encourage honest discussion and thinking about cultural issues in America. This course will focus on literature that springs from the more marginalized voices of our society. Using fiction, non-fiction, poetry, drama, film, the media, and other forms of communication we will discuss the different ideas about what it means to be alive in America in a new millennium. Students will have the opportunity to debate and discuss current issues, as well as explore these issues through creative writing, drama and song.

40 weeks - 1 credit PREREQUISITE: None

This full year elective focuses on developing, producing and broadcasting stories for Cheektowaga Central High School. The course is writing and production based, with a heavy emphasis on creating content for the media arm of Cheektowaga Central High School. Students will attend school sporting and other school events to capture and broadcast these events. Students will also create content for the morning announcements, yearbook, and other special projects as they arise. Students will learn to record video using professional video and sound recording devices such as DSLRs, micro 4/3rds cameras, and drones and will use professional video editing software to produce short media segments as well as full length stories. Additionally, students will explore principles, ethics and various essential questions surrounding 21st century journalism.

# DIGITAL WRITING WORKSHOP II: ADVANCED VIDEO PRODUCTION

40 weeks - 1 credit Digital Writing Workshop I (or Instructor Approval) Open to Grades 10, 11 & 12 PREREQUISITE: English 9

This full year elective focuses on writing, developing and producing digital stories. The course itself is writing, discussion and production based, focusing on narrative, rhetoric, analysis and how these skills apply to 21st century digital storytelling. Over the course of the year, students will develop a portfolio containing various digital genres - photo essays, podcasts, and short documentary and narrative films - based on student research and inquiry. Students will explore larger thematic questions through these projects an through a study of literature and seminal notification texts. This class is partnered with PBS Newshour's Student Reporting Labs and students will have the opportunity to interact with experts in print and film journalism. Exemplar student projects have the opportunity to be broadcast on PBS Newshour, a news program with a daily audience of over two million viewers. Additionally, students will explore principles, ethics and various essential questions surrounding 21st century journalism.

## SURVEY OF LITERARY NON-FICTION 1 & 2

20 weeks - 1/2 credit

Open to Grades 11 & 12

This course is an in-depth examination of true or at least supposedly true stories. Students will survey classic, popular, and current non-fiction works across a variety of genres including memoir, journalism, the personal essay, the analytical essay, documentary film, and podcasts.

Throughout the course, students will wrestle with the following central question: How do the cultural trends addressed by these texts reflect and critique the human condition and the preoccupations of American culture? Through reading, discussion, writing and critical analysis, students will explore how these texts function as literary works and will investigate the evolving role of the non-fiction author/journalist. Students will be required to write and workshop their own memoirs, essays, podcasts, impromptu, demonstration, and persuasive speeches that will be given in class.

Longer works may include:

<u>Blink</u>

Friday Night Lights

# **RHETORICAL STRATEGIES (EN 100)**

20 Weeks - 1/2 credit Open to Seniors (and Juniors with approval of instructor)

This half-year course is designed to provide writing skills appropriate for all college programs, the course will emphasize the use of rhetorical strategies in development of ideas, careerappropriate writing, writing about literature, and analyzing and utilizing diverse cultural perspectives. EN 100 is a skills course, designed for college freshmen, with the objective of refining the writing and research skills necessary for college work. Writing is a major component of the course. Students may earn 3 credits through Erie Community College Advanced Studies Program. There is a fee for the college credits.

### **COMPOSITION FOR THE HUMANITIES (EN 101)**

20 weeks - 1/2 credit

Open to Seniors (and Juniors with approval of instructor)

This half-year course is a continuation of composition studies focusing on reading, analyzing, and writing about the humanities. Students will have direct instruction in writing, research, oral discourse, and communication ethics in an academic setting with an emphasis on responding critically and analytically to various humanities disciplines. Writing is a major component of the course. Students may earn 3 credits through the Erie Community College Advanced Studies Program. There is a fee for the college credits.

## YEARBOOK

Open to all grades

20 weeks - 1/2 credit

This is a hands-on course that provides students with the opportunity to create the school's yearbook. Students will learn about various aspects of yearbook production, including design, layout, writing, photography, and publishing. Throughout the course, students will work in teams to plan, organize, and execute the production of the yearbook, from brainstorming and designing the cover, to selecting and arranging the content. Students will be responsible for taking and editing photos, writing captions and articles, and using software to lay out the pages of the yearbook. The yearbook class is open to all high school students who are interested in learning about yearbook production and contributing to the creation of a lasting record of the school year. Students who successfully complete the course will have the satisfaction of seeing their hard work and creativity come to life in the finished yearbook.

# SPORTS IN AMERICA: SPORTS LITERATURE AND JOURNALISM

20 weeks - 1/2 credit

Open to all grades

Everyone loves games. Everyone loves competition. We root for the underdog and find ourselves drawn to the pursuit of physically and mentally demanding challenges. In these ways, sports are an inherent part of human nature and culture. This course will explore the relationship between athletics and society, both as an influence on and reflection of American culture. Students will survey a variety of sports literature, journalism, and documentary works. Students will also be required to become sports journalists by reporting on the CCHS Warriors and Lady Warriors. Along the way, we will explore our personal relationships with sports and athletics as they relate to personal growth, character development, and community.



# FAMILY & CONSUMER SCIENCE

FOOD AND NUTRITION

20 weeks - ½ credit

This course will help the student develop an understanding of sound nutritional concepts through many hands on experiences related to food and nutrition. You will explore nutritional requirements for people of various ages and needs, learn about the dietary guidelines, which promote long-term wellness and plan, purchase, prepare, serve and evaluate a wide variety of foods. Careers related to food and nutrition will also be studied.

### FOOD WARS

20 Weeks - 1/2 Credit

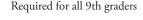
Through individual effort and teamwork, students will develop culinary skills, culinary knowledge, research strategies, experimentation skills, and presentation skills. Students will learn research, prepare, and present on a weekly basis with a different food theme each week.

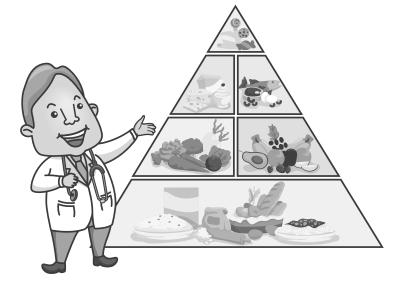
### CENTRAL ACADEMY

20 Weeks - 1/2 Credit

This course is made up of 4 five week modules which include: Healthy Living, Social Emotional Learning, Career Exploration, and Computational Skills & Coding.

Open to Grades 9-12 PREREQUISITE: None







<u>HEALTH</u>

# HEALTH

20 weeks - 1/2 credit

This course is presented for twenty weeks and is recommended for students entering grade 10. The topics covered attempt to address the issues and situations that confront teenagers and their families now and in the near future.

Current events and topics are introduced and discussed. The following topics are covered during the course: Family and Society, Nutrition, Fitness, Mental Health, Relationship Skills, Growth and Development, Abstinence and decision making, Reproductive issues, Sexually transmitted diseases, AIDS, Environmental issues, Disease and disorders, Personal safety, Organ donation, and various current issues.



# LIBRARY PRACTICE

# LIBRARY PRACTICE - 8100

40 weeks - 1/2 credit

A Library Practice student may elect to work in the library for credit or non-credit. Students signing up for credit must be able to work 1 period per day. They are graded on their accomplishments. Their duties include working at the sign-in table, checking in/putting out periodicals, shelving books, delivering resources to teachers, stamping new books, putting up displays, etc. Two students per period are assigned by the Librarian to do this work. Library Practice is open to grades 9 through 12, although most practice students are juniors and seniors.

# <u>MATHEMATICS</u>

### STUDENTS NEED A MINIMUM OF THREE CREDITS OF MATHEMATICS TO GRADUATE.

\*All students must pass ONE Regents Exam in mathematics to earn a high school Regents diploma.

\*\* In order to earn a Regents Diploma with Advanced Designation, a student must pass all three of the Algebra CC, Geometry CC, and Algebra 2 CC Regents exams.

\*\*\* To earn a Regents Diploma with HONORS, students must have a 90 average for their Regents exams.

#### COURSES OFFERED FOR MATH CREDIT

*Algebra CC	Pre-Algebra	Life Math
*Geometry CC	Fundamentals of Geometry	Sports Statistics
*Algebra 2 CC	Pre-Calculus - Dual College Credit	Measurement 101
-	Calculus - Dual College Credit	Math and Foods
	Probability & Stat - Dual College Credit	General Geometry

### **COURSE DESCRIPTIONS**

### \*ALGEBRA CC: (NYS Regents Exam)

One-year course designed to immerse students in algebra and algebra applications. This course culminates with the Algebra Regents Exam and is REQUIRED FOR GRADUATION.

### PRE-ALGEBRA: (Local Exam)

Year one course designed to prepare students for Algebra CC exam the following year. Students who struggled in 8th grade would benefit from taking this course to better prepare for the Algebra CC exam.

GEOMETRY CC: (NYS Regents Exam)

(Prerequisite: Algebra CC or Math 9/10)

A one-year course designed to study geometry proof and other various topics in geometry. This course culminates with the Geometry Regents Exam.

ALGEBRA 2 CC (NYS Regents Exam)

This course builds skills in functions, probability, and statistics, including some concepts involving pre-calculus. This course culminates with the Algebra 2 CC Regents Exam. Passing the Regents exam for this course is required for a Regents Diploma with Advanced Designation.

### PRE-CALCULUS (Local Exam)

Dual College Credit

This course is designed to prepare students with the background to successfully complete a typical college Freshman Calculus course. It is designed for students wishing to pursue a mathematics, science, or other STEM related area in college; or for a student who wishes to complete a full math high school sequence.

(Prerequisites: Geometry CC)

(Prerequisite: ALGEBRA 2 CC)

# CALCULUS

Dual College Credit

This course is offered to those students who have been accelerated and/or are SEEKING COLLEGE CREDIT. The course involves study of the following topics: Limits and Continuity, Differentiation, Integration, Logarithmic/Exponential functions, and Trigonometry.

# PROBABILITY & STATS

(PREREQUISITE: Algebra 2)

(Prerequisite: Pre-Calculus)

Dual College Credit

Descriptive statistics; probability and random variables; binomial, normal, and t distributions; estimation and tests of hypotheses concerning means, proportions, and differences between means and proportions.

# <u>ELECTIVES</u>

# LIFE MATH

A one-unit course designed to help students improve proficiency with basic math skills and to apply mathematical concepts to business situations. Students will build skills in working with percentages, payroll, taxes, and business retail transactions.

# SPORTS STATISTICS

20 Weeks - 1/2 credit

This half-unit course focuses on analyzing, gathering, and interpreting data related to sports. Students will undergo an in-depth study of probability, odds, and statistics and how they are used in real-world sports settings.

# **MEASUREMENT 101**

20 Weeks - 1/2 Credit

This course focuses on real world skills of measuring and calculating for areas such as manufacturing, medical, culinary, and a variety of other businesses. These skills can be practical experience for future jobs.

# MATH AND FOODS

20 Weeks - 1/2 credit

This course covers recipe and measurement conversations using ratios and proportions, food intake analysis, food labels, and facts, calorie consumption, grocery cost, unit pricing, recipe cost, and math related to creating a menu that includes calories, cost, and projected sale price for maximum profit. Students will create a business plan for a food truck from design, financing and marketing after researching various food trucks in the area. This course combines food, math, creativity, and business skills.



# <u>MUSIC</u>

There is a ONE unit graduation requirement in Music/Art/or Technology. Students who are not pursuing a 3 or 5 unit sequence in Music or are not members of the performing groups listed below, may fulfill the one unit of credit requirement by completing:

# **MUSIC SEQUENCES**

A THREE UNIT SEQUENCE in Music consists of: Two units of performance (Senior Band, Senior Chorus, or Chorale) and Theory I.

A FIVE UNIT SEQUENCE in Music consists of: Three units of performance (Senior Band, Senior Chorus, or Chorale), Theory I and Theory II.

# MUSIC COURSES

## MIXED CHORUS

40 weeks - 1 credit

Grades 9-12 Prerequisite a willingness to have fun and sing

Mixed chorus is for all students who wish to sing regardless of previous chorus experience. Members of the mixed chorus learn basic elements of singing technique, ear training, and the reading of choral parts. They perform a variety of choral works in school concerts. Members of Mixed Chorus are eligible to audition for honors ensemble opportunities such as all-county chorus, area all-state chorus, or other off-campus choral ensembles. Mixed Chorus does perform off-campus at times for community events, and/or fieldtrips and competitions. So come out and have fun singing, and learning more about your voice.

# CHORALE

40 weeks - 1 credit

Grades 9-12 Prerequisite audition and a willingness to have fun and sing

Chorale is open to students with some choral experience. An audition for the instructor is required. A balanced voicing is determined and maintained by the instructor. The members of the chorale continue their development of singing technique, ear training, and the reading of choral parts. This course is for singers who are interested in exploring challenging choral music, usually performed a Capella. Performances occur in conjunction with the regular school concerts, and some take place at community venues. Members of Chorale are eligible to audition for honors ensemble opportunities such as all-county chorus, area all-state chorus, or other off-campus choral ensembles. Chorale does perform off-campus at times for community events, and/or fieldtrips and competitions. Join us and have fun making music!



#### MUSIC IN OUR LIVES

40 weeks - 1 credit

Grades 9-12 Prerequisite none

Like music, but aren't in band or chorus. This is the class for you. MUSIC IN OUR LIVES fulfills the Arts requirement for graduation. The class is a listening based approach to music. Elements of basic musicianship like rhythm, melody, form, dynamics, tempo, etc. are discussed and learned and then applied to how we listen to everyday music. A brief overview of music history including, classical, jazz, roots music, soul, hip-hop rap, and everything in between is also covered in a listening based approach. Every unit has a hands-on component such as hand drumming, and bucket drumming, and learning to play the piano and guitar at a basic level. We utilize modern music technology in learning to compose as well as the process of music production, which is helpful for all of you interested podcasters, DJs, singer songwriters, filmmakers, and game and robot designers. Through a project-based sequence, learn how to use industry standard digital music interfaces to compose, write your scores, record, make beats, create film soundtracks, compose music special effects, popular music genre mixes, and expressive backgrounds for storytelling.

# PERFORMANCE COURSES

#### HIGH SCHOOL CONCERT BAND

40 weeks - 1 credit

of Junior Band or by audition

PREREQUISITE: Successful completion

Concert Band rehearses daily. Emphasis is placed on the proper performance of various band literature and how these works relate to history and culture. The ensemble performs four major evening concerts per year. They also are required to perform at numerous assemblies, out of school performances, class day and for an open rehearsal in which parents and relatives may watch the band prepare for a concert. Band students are required to participate in instrumental lessons. Lessons are given one period per six day cycle, in small classes, and are on a rotating "pull out" basis. Students are expected to make up class work missed because of lessons. Periodically, the High School Band takes an overnight trip to a major city, in which they perform and take a clinic from a world renowned conductor of composer. Recent trips have been to Chicago and New York City. Members of High School Band are eligible and highly encouraged to audition for numerous all-county and all-state performing ensembles, and to participate in solo and ensemble competitions.



#### MIXED CHORUS

40 weeks - 1 credit

Grades 9-12 PREREQUISITE: A willingness to sing and ability to match pitch

This ensemble meets daily for the full school year. Mixed Chorus performs four major concerts each year, with occasional special performances with area orchestras. All members of Mixed Chorus are expected to be able to match pitch and be willing to develop their vocal ability. Members are also required to sign and return a performance contract within two weeks from joining the ensemble. Proper vocal techniques are stressed and a wide variety of music is performed in alignment with New York State Standards for music performance. Vocal labs/lessons are scheduled on a "pull-out" basis and students are expected to make-up class work missed due to the vocal labs/lessons. These labs/lessons are required for this class and, if missed, must be made-up. Each quarter during these vocal labs/lessons, part testing will be completed with each member singing by themselves for the director to insure that parts are being learned, as well as to assess vocal techniques and development. Students are required to develop basic music reading and notation skills, as well as basic piano ability. Assignments will include completion of music reading workbook, music history and style assignments and performance critiques. A final written exam is given during the last week of classes in addition to the final part testing. Members of Mixed Chorus may be eligible to audition for numerous all-county and all-state groups, and to participate in solo and ensemble competitions.

### CHORALE

Grades 9-12

PREREQUISITE: Membership by audition only

40 weeks - 1 credit

Selection to Chorale is by audition only. Chorale performs four major concerts each year, with occasional special performances with area orchestras. All members of Chorale are expected to be able to match pitch and be willing to develop their vocal ability. Members are required to sign and return a performance contract within two weeks from joining the ensemble. Proper vocal techniques are stressed and a wide variety of music is performed in alignment with New York State Standards for music performance. Vocal Labs/Lessons are scheduled on a "pull-out" basis and students are expected to make-up class work missed due to the Vocal Lab. These Vocal Labs are required for this class and, if missed, must be made-up. Each quarter during these Vocal Labs, part testing will be completed with each member singing by themselves for the director to insure that parts are being learned, as well as to assess vocal techniques and development. Because of the caliber of music performed, membership is limited to those individuals who successfully meet the following requirements: vocal audition, sight reading audition, and an ability to blend well vocally. Members of Chorale are eligible to audition for numerous all-county and all-state groups, and to participate in solo and ensemble competitions.



# PHYSICAL EDUCATION

# PHYSICAL EDUCATION

*State Requirement* - Co-ed 40 weeks - ½ credit each year

Physical Education is an integral part of the total education program that contributes to the development of the individual through the medium of physical activity. Each student will

have the opportunity to participate in sport, components of overall fitness, and life long activities that can be enjoyed now and in the future.

All students attending Cheektowaga Central Schools are required to participate in Physical Education and receive a passing grade. Physical

Education is a State Required course of study. Each student will receive ½ credit for each year of successful completion of Physical Education for a four year total of two credits. This credit must be earned to complete requirements for graduation.

# UNIFIED PHYSICAL EDUCATION

.5 credit

"This course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sport. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students." This course can be taken as a Physical Education credit or as a Physical Education Elective. This is an invitation only course. If you are interested in taking this course, please see Mrs. Abrams. Limited enrollment.



Grades 9, 10, 11 & 12

# <u>SCIENCE</u>

# LIVING ENVIRONMENT

40 weeks- 1 credit

Regents Biology is intended to prepare students to understand and apply scientific concept principles and theories pertaining to the living environment and recognize the historical development of ideas in science. To attain this, the core addresses seven key ideas: similarity and differences among living and non-living things; inheritance of genetic information; changes of species and organisms over time; the continuity of life; dynamic equilibrium that sustains life; interdependence of plants and animals and their environment. Completion of the minimum of 30 Lab exercises is a course requirement. Culminating activity is a Regents Examination.

# PHYSICAL SCIENCE/ EARTH SCIENCE

40 weeks- 1 credit

Regents Earth Science is intended to introduce students to the Earth and the intricate workings of our Earth's systems. Weather, oceanography, volcanoes, earthquakes, rocks and minerals, environmental issues, and astronomy are all covered as part of this class. Completion of the minimum of 30 Lab exercises is a course requirement. Culminating activity is a Regents Examination.

PHYSICAL SCIENCE/ CHEMISTRY (Regents and Honors Classes available) 40 weeks - 1 credit Prerequisite: Algebra

Regents chemistry presents a modern view of chemistry suitable for students with a wide range of skills and abilities. The course discusses the basic principles of chemistry together with their related facts. Specific areas of study include matter, energy, mathematics of chemistry, the gas laws, chemical kinetics and thermodynamics, acid-base reactions, oxidation/reduction reactions, organic chemistry and nuclear chemistry. Completion of the minimum of 30 Lab exercises is a course requirement. Culminating activity is a Regents Examination.

PHYSICAL SCIENCE/ PHYSICS (Regents and Honors Classes available) 40 weeks - 1 credit Prerequisite: Algebra

Regents Physics is intended to introduce students to the nature and properties of matter and energy. The areas studied include Mechanics, Energy, Electricity and Magnetism, Wave Phenomena and Modern Physics. The course will emphasize problem solving, critical thinking, and laboratory skills. Completion of the minimum of 30 Lab exercises is a course requirement. Culminating activity is a Regents Examination.

# SCIENCE COURSES FOR COLLEGE CREDIT

# ADVANCED PLACEMENT CHEMISTRY

40 weeks - 1 credit

Prerequisite: Biology and Chemistry

AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first college year. The student should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. This course will provide a laboratory experience similar to that of a typical college course. Topics include: Structure of Matter, States of Matter, Reactions, and Descriptive Chemistry.

A fee is required in order to receive college credit.

# ADVANCED PLACEMENT BIOLOGY

40 weeks - 1 credit

Prerequisite: Biology and Chemistry

AP Biology is designed to be the equivalent of the general biology course usually taken during the first college year. Class activities will be divided into units by topics. For each unit there will be a set of formal lectures with outlines, handouts and required reading assignments. Most of the units will require one or more lab activities. Students are required to write lab reports on certain lab activities and these labs are also tested with lab practicals. The major evaluative activities in the course are the tests: a multiple choice test and essay items. The topics covered are outlined on the College Board Website.

A fee is required in order to receive college credit.

# ANATOMY AND PHYSIOLOGY (LAB BASED)

40 weeks - 1 credit hours

Prerequisite: Biology & one additional science

This course is designed for juniors and seniors planning on going into the medical/biomedical field. This course is done in partnership with Trocaire College and there is a fee to receive the college credits (3 class and 1 lab). There is a lab offered with this class where students will do dissections, scientific investigations and other lab activities to deepen their understanding of the human body. This course is a deep dive into the human body, what makes it up (Anatomy) and how it works (Physiology). The course will cover the body systems and how they work together. Throughout this course, students will work on case studies, research projects and body system models to deepen their understanding. This is a fast paced course that allows students to feel a more "college-like" atmosphere. By the end of the course students will have a deeper understanding of the human body and its processes.

A fee is required in order to receive college credit.

This course will be offered on alternate years

# **SCIENCE ELECTIVES**

# GENERAL ANATOMY AND PHYSIOLOGY

40 weeks - 1 credit hours

Prerequisite: Biology & one additional science

This course is designed to introduce students to body systems (Anatomy) and their functions (Physiology). There is no lab period, however occasional lab activities will be done throughout the year including some dissections. This course is project and research heavy and will prepare students that are thinking about a career in the biomedical/medical field. By the end of the course students will have a better, deeper understanding of the human body and the systems that make it work as well as what happens when the body doesn't work properly.

This course will be offered on alternate years.

## ENVIRONMENTAL SCIENCE

40 weeks - 1 credit

This is a one year, full credit life science elective. The course will heavily emphasize ecology and human impact on the environment. Topics covered may include: land, air and water pollution, global warming, acid rain, food chains, food webs, bio and geochemical cycles and wet land, fresh water and oceanography. In addition, alternative energy and water systems will be examined. The course will explore biodiversity including endangered species, new species, medicine and plants.

### FORENSICS

40 Weeks - 1 credit

Open to grades 11 & 12

This is an upper level science elective. We will study the avenues of criminalistics, ballistics, trace evidence, DNA, and blood analysis, toxicology, crime scene analysis, and autopsy. We will also study the history of forensics and psychology of the criminal mind.

### GENERAL PHYSICS

40 Weeks - 1 credit

This course has been designed to present the basic principles of Physics in an activity oriented setting in which the emphasis on mathematical rigor has been diminished. It can be used to satisfy the second unit of science requirement and has no state examination. This course is designed to explore the basic principles of physics. Topics covered may include: Motion, Sound and light, Electricity and magnetism.

# GENERAL CHEMISTRY

40 weeks - 1 credit

General chemistry deals with the major concepts and understandings related to the study of matter, atomic structure, the Periodic Table of the Elements, chemical reactions, and the pH scale. After engaging with these basic chemistry concepts during the first semester, students will learn how chemistry is connected to the world around us, as we dive into lessons related to environmental chemistry. Students with an interest in environmental issues such as air pollution, climate change, and water quality may find this course particularly interesting. General Chemistry is a non-regents course, which means that students will take a local final exam at the end of the year.

# ELECTIVES OFFERED BY THE SCIENCE DEPARTMENT

# MEDICAL ETHICS

20 weeks- 1/2 credit (Not science credit)

Grades 11 & 12

This course is affiliated with Trocaire College

This is an introductory course in the ethics of health care. We will lay out the standard ethical theories and apply them to various issues that arise in the health care context, such as requests for futile care, euthanasia, abortion, informed consent, confidentiality, genetic testing and interventions, AIDS, distributive justice and professional gate keeping.

A fee is required to earn college credit.

# MEDICAL TERMINOLOGY

20 weeks - 1/2 credit (Not Science credit)

Grades 11 & 12

This course is affiliated with Trocaire College

This is an introductory course in the study of the language of medicine with emphasis on body systems, prefixes, suffixes, root terms, pronunciation and spelling.

A fee is required to earn college credit.



SOCIAL STUDIES

The content for each level is basically the same except that it varies in relation to difficulty factors, depth of study and enrichment.

## GLOBAL HISTORY I & II

Open to Grade 9 Open to Grade 10 40 weeks - 1 credit per year

These courses provide students with the opportunity to study other nations and their cultures. The courses are designed to develop a global outlook. The aims are to cultivate the knowledge, skills and attitudes needed to function effectively in a world characterized by ethnic diversity, cultural pluralism, international and domestic violence, and increasing interdependence. At the end of the course, students should be able to compare and contrast ideas, peoples, and events across time and political boundaries. At the end of Grade 10, students are required to take the New York State Regents Global Studies Examination. Passing this exam (65%) is mandated as a graduation requirement.

### PRE-ADVANCED PLACEMENT WORLD HISTORY

(GLOBAL 9H) (Prerequisite: Teacher recommendation from Middle School)

The Pre-AP World History course examines continuity and change over time, from 8000 B.C.E. to 1450, and explores cultural and political impacts of change throughout multiple regions globally. Students will critically evaluate the growth and development of political, economic, and social institutions globally by interpreting historical materials and assessing impacts from one culture and time period to another. This course is the first part of a two year sequence that will set the foundations for students to take the World History Advanced Placement Exam at the end of tenth grade.

# ADVANCED PLACEMENT WORLD HISTORY 10TH GRADE

(GLOBAL 10H) (Prerequisite: Successful completion of Pre-AP World History with an overall average of 85 or better; Teacher recommendation)

Advanced Placement World History is the College Board college-level survey course that introduces students to world civilizations and cultures. The tenth grade AP World History course begins with the early modern period and ends in the present day. The class is broken down into manageable periods and the class will also focus on mastery of skills critical to the May AP World History exam. Students will address the higher level thinking skills or Habits of the Mind, and themes common to Advanced Placement Social Studies classes. At the end of 10th grade, students are required to pass the New York State Regents Global History and Geography Examination as a graduation requirement.

# UNITED STATES HISTORY AND GOVERNMENT

Open to Grade 11 40 weeks - 1 credit per year(Prerequisite: Successful completion of AP World History with an overall average of 85 or better; Teacher recommendation)

The United States History and Government Course is divided into six major historical units. The first is devoted to the origins and development of the U.S. Constitution and our democratic values. Unit II features a study of the changing nature of American society from 1865 to 1920 and its impact on our people culturally, politically, and economically. The prosperity of the 1920's, the Great Depression, and the onslaught of World War II are the themes of Unit III. Unit IV focuses on the United States in an age of global crisis and the reasons for our shift from isolation to international leadership during the Cold War. The world in uncertain times is the title of Unit V and stresses the growing interdependent nature of the world and the role of the U.S. in global affairs as well as our internal social, economic, and political changes.

In the final unit, "Looking Backward," an assessment of our evolving population trends, social institutions, and cultural values will be made and possible future trends projected. As mandated by the state, a student must pass United States History and Government Regents Exam (65%).

# ECONOMICS

Open to Grade 12 20 weeks - ½ credit

*Economics* is a one-semester course required of all seniors. The course may be divided into two sub-topics: macroeconomics and microeconomics. Each is approximately ten weeks in duration. Microeconomics introduces the student to new economic terms, the use of methods of measurement and comparison, and how economics may be used by individuals and societies to make decisions and solve problems. It includes such topics as economic systems, a brief history of the science of economics, demand, supply, and price determination, the stock market, and the role of competition in the marketplace. Macroeconomics concerns itself with the study of the economy as a whole rather than the individual parts of a system. It includes items of measurement such as gross national product, price indexes, business cycles, economic indicators, inflation, deflation, the nation's money supply, the banking system, and economic growth.

# PARTICIPATION IN GOVERNMENT

Open to Grade 12 20 weeks - ½ credit

*Participation in Government* is a semester-required course for seniors. The course is designed to improve student understanding of government, particularly United States Government. The basic purpose is to describe, analyze and explain the American system of government. Preparation as responsible and effective citizens in our country's participatory democracy is stressed. An additional objective of the course is to analyze the different aspects of influence by and on individuals and groups on the local, state and national levels. A focus is made on mastering the critical thinking skills necessary in becoming competent citizens.

These skills include acquiring and using information, assessing involvement, making decisions, communicating, cooperating, and promoting interests.

# UNITED STATES HISTORY AP

Open to Grades 11 & 12 40 weeks - 1 credit (Prerequisite: Successful completion of AP World History with an overall average of 85 or better; Teacher recommendation)

United States History AP is an in-depth course of our nation's past geared to the eleventh and twelfth grade student. A chronological approach to United States history is presented in this course.

The numerous units span the discovery and settlement of the New World during the Age of Exploration to the United States in current times. United States History AP can be substituted for the state-mandated course of United States History and Government as a graduation requirement. A student who successfully completes this course can earn credit in hundreds of colleges and universities.

# AP GOVERNMENT AND POLITICS: UNITED STATES

20 Weeks - 1/2 credit

Advanced Placement Government is a one semester course for seniors. The AP Government and Politics: United States course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis on specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. A student who successfully completes this course can earn credit in hundreds of colleges and universities. Students who take this course are expected to take the Advanced Placement Examination, in May.

## **CIVICS IN ACTION 1 & 2**

20 Weeks - 1/2 credit

This course is student driven on civic issues that they are interested in exploring. The class will explore the issues that our society faces and what can be done to change these issues. This class will explore topics such as civil protest or internal rebellion, citizens' rights and the violation of them, government power and its abuse of power, voter rights, environmental issues, and leadership. There will be opportunities for students to create an take civil action in the community.

### HISTORY OF WESTERN NEW YORK

20 Weeks - 1/2 credit

This course is for Junior and Senior Students who have an interest in History. Throughout the 20 weeks we will discuss how geography impacted the development of Buffalo, the Niagara Frontier and surrounding areas. The focus will be how the Great Lakes and Niagara River played a role in the War of 1812, building of the Erie Canal, use of railroads, steel mills and grain elevators, creation of the Niagara Falls Power Authority and influence on the Underground Railroad. We will also go on 2-3 field trips to various historical sites across Western New York.

# AFRICAN AMERICAN HISTORY

40 Weeks - 1 credit

African American History is a course in which we explore the plight of African Americans. The course moves in chronological order, beginning with the Middle Passage and ending with the Hip Hop Generation. Students will utilize critical thinking skills to analyze primary sources, literature (fiction and non-fiction), documentaries and movies that focus on the contributions of African Americans to the American Quilt. Students will be introduced to those who have crossed the color barriers in sports, entertainment, and government.

Open to Grades 11 & 12

Open to Grades 11 and 12

Open to Grade 12

#### INTRO TO LAW

20 Weeks - 1/2 Credit

Open to 11th and 12th grade students who show an interest in a career in law enforcement Prerequisite: Pass Global 9 & 10

Introduction to Law Enforcement is a foundational course that provides students with an extensive understanding of the Criminal Justice system and the prerequisites for a career in law enforcement. This program not only explores the fundamental principles of the Criminal Justice system but also exposes students to various professions within the law enforcement field. Through a partnership with the Cheektowaga Police Department, students gain practical experience, interact with professionals, and discover the ethical and legal responsibilities that come with a career in law enforcement. This course equips individuals with the knowledge and insights required to make informed decisions about their future in the field, ultimately serving as the gateway to a fulfilling and impactful career dedicated to public safety and upholding the principles of justice.

### PSYCHOLOGY

20 weeks - 1/2 credit

Open to Grades 11 & 12 PREREQUISITE: Ability to do College level work at grade level English

This is a half year course that provides students with a basis for the understanding of human behavior. College level work is expected. Our study will include the history of psychology, which was based on superstitions, philosophy, and religion to the scientific knowledge of psychology which is now being applied in many areas of living. Topics of study will include: goals of psychology, research, physiology of the brain, principles of learning and remembering, intelligence, emotions, and the importance of socialization.

This course is affiliated with Villa Maria College. A fee is required in order to receive college credit.

# <u>TECHNOLOGY & COMPUTER SCIENCE</u>

# DESIGN ENGINEERING AND CONSTRUCTION

40 weeks - 1 credit

This is a combination of tech and science as it blends the two of them together in a hands-on class that focuses on problem-solving as each unit students are tasked with design challenges they will have to solve. Throughout the year, students will learn to identify a problem, design and construct working prototypes, test and analyze their builds and draw conclusions from the overall process.

# CODING

20 weeks - 1/2 credit

Coding is an introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun. Topics covered: Problem Solving and Computing, Web Development, Interactive Animations and Games, The Design Process, Data and Society, Physical Computing, and Al and Machine Learning.

# **COMPUTER SCIENCE PRINCIPLES**

40 weeks - 1 credit

CSP is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing.

# **ROCKET DRONES**

Prerequisite: Engineering Design & Construction

This course is designed to provide students with an introduction to drones, how they work and the type of jobs associated within the industry. Throughout this course students will learn about the different types of drones, parts of a drone, how drones fly and their applications. The course will also cover safety considerations and regulations related to operating drones. Through student exercises, vocabulary exercises, FAA certification, and hands-on activities, students will develop a better understanding of drones and their impact on society.

Prerequisite: Algebra

Open to grades 10-12

Prerequisite: Coding

Open to Grades 11 & 12

# WORLD LANGUAGES

## FRENCH I

40 weeks - 1 credit

Prerequisite: None This is an introductory course for high school students. You will be introduced to the French language and the culture and gradually build skills in reading/writing/listening/speaking.

# FRENCH II

40 weeks - 1 credit

PREQUISITE: French IA and IB or Accelerated French I

This is the next course after successful completion of French IA and IB. In this course, students will build their skills in reading, writing, listening, and speaking. Students will learn more advanced vocabulary and grammar.

# **FRENCH III**

40 weeks - 1 credit

PREREQUISITE: French II

This is a continuation of French II, with a specific focus on passing the regionally developed Comprehensive examination. This will result in the three credits necessary for obtaining the Regents Diploma with Distinction. The students will be able to sustain longer conversations, read and listen to more complex texts, and write longer, more organized pieces.

FRENCH IV - Villa Maria Advanced Placement (FRE 101)

40 weeks - 1 high school credit and 3 college credits PREOUISITE: French III and Teacher Recommendation This course is affiliated with Villa Maria College. A fee is required in order to receive college credit.

In this course we will emphasize advanced reading and writing skills with increased fluency in French. A variety of cultural topics are studied in depth. Tuition is paid to Villa Maria College and students earn 3 college credits which may be transferred to other institutions. A minimum average of 80% in French and teacher recommendations are necessary.

FRENCH V - Villa Maria Advanced Placement (FRE 102) 40 weeks-1 high school credit and 3 college credits

Teacher Recommendation This course is affiliated with Villa Maria College. A fee is required in order to receive college credit.

The next course offered through Villa Maria College for college credit. Advanced reading, writing, listening, and speaking skills are emphasized, along with in-depth cultural topics. A minimum average of 80% is recommended for transfer credit.

# SPANISH I

40 weeks - 1 credit

Prerequisite: None

PREOUISITE: French IV and

This is an introductory course for high school students. You will be introduced to the Spanish language and the culture and gradually build skills in reading/writing/listening/speaking.

#### SPANISH II

40 weeks - 1 credit

# PREREQUISITE: Spanish IA and IB

PREREQUISITE: Spanish II

This is the next course after successful completion of Spanish IA and IB. In this course, students will build their skills in reading, writing, listening, and speaking. Students will learn more advanced vocabulary and grammar.

## SPANISH III

40 weeks - 1 credit

This is a continuation of Spanish II, with a specific focus on passing the regionally developed Comprehensive examination. This will result in the three credits necessary for obtaining the Regents Diploma with Distinction. The students will be able to sustain longer conversations,

 SPANISH IV - Villa Maria Advanced Placement (SPA 101)

 40 weeks - 1 high school credit and 3 college credits

 PREQUISITE: Spanish III and Teacher Recommendation

 This course is affiliated with Villa Maria College. A fee is required in order to receive college credit.

read and listen to more complex texts, and write longer, more organized pieces.

In this course we will emphasize advanced reading and writing skills with increased fluency in Spanish. A variety of cultural topics are studied in depth. Tuition is paid to Villa Maria College and students earn 3 college credits which may be transferred to other institutions. A minimum average of 80% in Spanish and teacher recommendations are necessary.

 SPANISH V - Villa Maria Advanced Placement (SPA 102)

 40 weeks- 1 high school credit and 3 college credits
 PREQUISITE: Spanish IV and Teacher Recommendation

 This course is affiliated with Villa Maria College. A fee is required in order to receive college credit.

The next course offered through Villa Maria College for college credit. Advanced reading, writing, listening, and speaking skills are emphasized, along with in-depth cultural topics. A minimum average of 80% is recommended for transfer credit.

<u>NOTES:</u>

# HIGH SCHOOL STUDENT SERVICES

The High School Counseling Center will help students select courses to meet high school graduation requirements and prepare them for their future career goals. The telephone number of the High School Counseling Center is 686-3634. Your child's counselor can be reached during school hours.

# The High School Student Services Staff:

Mrs. Kimberly Nichols Counselor 686-3647

Mr. DeMario Rhodes Counselor 686-3637

Mrs. Lauren Smith Counselor 686-3635

Mrs. Courtney Wall Counselor 686-3636



