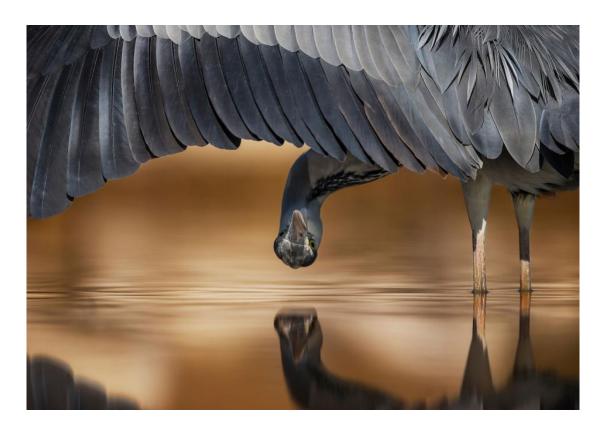


# NORTH COLLINS JR/SR HIGH SCHOOL 2023-2024 GUIDANCE HANDBOOK



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#### **GRADUATION REQUIREMENTS**

The State Education Department has determined that the following graduation requirements will now be in effect. Please note that the year the student entered grade nine are the standards which he/she must adhere to.

NOTE: There are individual requirements for Special Education students. Please contact the guidance office if this applies to your child.

#### **GRADUATION REQUIREMENTS**

Class of 2024 (Entering Freshmen 9/2020)\*, 2025 (Entering Freshmen 9/2021)\*, 2026 (Entering Freshmen 9/2022)\* and Class of 2027 (Entering Freshmen 9/2023)\*

# <u>UNITS OF CREDIT REQUIREMENT – Regent's Diploma</u>

English Math	4.0 units 3.0 units
Social Studies-	0.0
Global Studies	2.0 units
U.S. History/Government	1.0 unit
Economics	0.5 unit
Government	0.5 unit
Science	3.0 units
Fine Arts (Music or Art)	1.0 unit
Health	0.5 unit
Physical Education	2.0 units
Language other than English-	
North Collins Central requirement	3.0 units
Electives	<u>3.0 units</u>
Minimum Total Credits	23.5 units

# **SEQUENCE REQUIREMENT** (see Sequence Options Specifics attached)

Option A (Two 3 unit sequence)

Option B (5 unit sequence)

Option C (5 unit and 3 unit sequence)

### **EXAM REQUIREMENT – Regent's Diploma**

English Language Arts Regents (Common Core)	-Grade of 65 or better
Algebra I (Common Core)	-Grade of 65 or better
Global Studies Regents	-Grade of 65 or better
U.S. History/Government Regents	-Grade of 65 or better
One Science Regents	-Grade of 65 or better

All students are considered for advancement into the honors program. Many factors are examined when making this decision including, but not limited to, teacher recommendation and grades.

#### **EXAM REQUIREMENT – Advanced Regent's Diploma**

English Language Arts Regents (Common Core)	-Grade of 65 or better
Algebra I (Common Core)	-Grade of 65 or better
Geometry Common Core)	-Grade of 65 or better
Algebra II (Common Core)	-Grade of 65 or better
Global Studies Regents	-Grade of 65 or better
U.S. History/Government Regents	-Grade of 65 or better
Two Science Regents	-Grade of 65 or better

<sup>\*</sup>Graduation class is determined when student enters 9th grade, not when they graduate.

# **SEQUENCE REQUIREMENT OPTION**

One three (3) unit sequence in each of the following areas:

- -Math
- -Science
- -Second Language

# CLASSIFICATION OF HIGH SCHOOL STUDENTS FOR PLACEMENT IN APPROPRIATE COURSES

Freshman - Student must have passed two of the four academic core courses in

8<sup>th</sup> grade.

Sophomore - Student must:

1) Have passed either English 9 or Global Studies I

and

2) Have a total of 4.5 credits or passed 3 courses in Summer

School.

Junior - Student must:

1) Have passed either English 10 or Global Studies II

and

2) Have a total of 9.5 credits or passed 3 courses in Summer

School.

Senior - Student must be enrolled in enough courses to graduate by June of

that year.

Final determination is made by the Superintendent.

#### **DROPPING OR CHANGING COURSES**

A student may drop a 40-week/full year course **only up to the 5-week mark of the first quarter of the school year** with no penalty on his/her transcript. Should a student want to drop after the 5 week mark, he/she must first appeal to the high school principal/superintendent, and if necessary the school board. Should a drop be granted by the high school principal/superintendent or the school board, a DR (Drop Pass) or a DF (Drop Fail) will be added to the student's transcript.

A student may drop a 20-week/half year course **only up to the 3-week mark of the first quarter or third quarter of the school year** with no penalty on his/her transcript. Should a student want to drop after the 3-week mark has passed, he/she must first appeal to the high school principal/superintendent, and if necessary to the school board. Should a drop be granted by the high school principal/superintendent or the school board, a DP (Drop Pass) or a DF (Drop Fail) will be added to the student's transcript.

Adding a DP or DF will hold the students accountable for their actions and such marks will be visible on their transcripts for prospective employers and colleges to review.

Should a drop be granted, the guidance counselors and high school administration, in cooperation with the parents and student, will make every effort to fill the time slot with another course, not simply another study hall (should scheduling, course availability, and class size permit). Students need to carry a certain number of credits per year toward graduation and every effort must be made to ensure that the students are carrying the minimum number of credits required.

In light of the Standards, we believe these changes are necessary in order to ensure the success of our students, and we feel that this is a fair procedure/policy.

#### NUMBER OF SUBJECTS FOR STUDENTS

- 1. Normal load for most students in grades 9-12 should be <u>5</u> (foreign language, English, social studies, math and science) subjects per semester. In addition to these 5 subjects, each student must be enrolled in physical education. Band or chorus may be scheduled in addition to the 5 subjects and physical education.
- No student should be permitted to carry less than <u>5</u> subjects (excluding physical education) in any one semester unless the approval of the high school principal has been obtained.
- 3. An independent study project, when requested, may be in addition to any number of subjects previously approved.
- 4. It is the principal's prerogative to waive any of the preceding regulations when, in his judgment, it is feasible to do so.

In instances where regents examinations are given, regents credit will only be obtained by passing the regents examination as well as having a passing final school grade.



# **HIGH SCHOOL ART**

#### STUDIO IN ART (Grades 9-12) Full Year -Offered every year.

Studio in art is a full year (40 weeks) foundation course. Most students take this course in 9th or 10th grade, as it is a prerequisite for the more advanced courses. Because this is a basic course, it includes many activities in drawing and painting which are important in all phases of art. Students also do some work in crafts and sculpture and make a general study of art history.

Students who select this course should be those sincerely interested in improving their art ability. (This course will meet the art/music requirement for graduation.)

# **DRAWING AND PAINTING (Grades 10-12)** Full Year – Offered Every Year.

Studio in Art is a pre-requisite for this course. Drawing and Painting is a full year course, involving the use of different styles and a variety of media to achieve personal expression. Acrylics, watercolor, pencil, pen and experimental media will be used. (Serious artists only).

#### ADVANCED DRAWING AND PAINTING (Grades 11-12) Full Year - Offered Every Year.

Acceptance into this course is by INSTRUCTOR PERMISSION ONLY.

Studio Art & Drawing & Painting are pre-requisites for this course.

Serious artists who are interested in completing the AP Portfolio in their senior year must take this course.

This advanced drawing course is designed to help the students find their personal voice. We explore a variety of approaches and aspects in drawing that reveal the subjective in the objective and personal expression. Students will dedicate time in class and at home to begin building a drawing portfolio that meets the requirements for the College Board AP guidelines.

# <u>CERAMICS (grades 10-12)</u> 2<sup>nd</sup> Semester - Studio in Art is a pre-requisite for this course. Ceramics is a half year course.

This class is designed for students who have an interest in working with clay, and gives students experiences in making functional as well as sculptural pieces, using a variety of techniques.

A limited number (12) of interested students will be selected for this half year elective. (Serious Artists only)

#### BASIC PHOTOGRAPHY (Grades 10-12) Half year course 1st Semester

Basic photography covers composition of photographs, picture taking skills, camera use and maintenance, and the creative use of a digital camera and photo editing software. Students must have access to a digital camera or a good cell phone camera.



#### **BUSINESS EDUCATION**

#### **COMPUTER 8** (10 weeks)

This ten-week course is designed to teach computer fundamentals. Students will explore operating systems, input and output devices, and file management. Emphasis is placed on digital citizenship and the Google interface for word processing, presentation and spreadsheet applications.

#### PERSONAL FINANCIAL LITERACY (20 weeks - ½ credit)

Everyone is going to have to manage their finances to meet short and long term goals. This course is designed to introduce students to the concept of money management and financial independence. Topics discussed include budgeting, ways to save money, credit, debt, decision making, risk management and financial services including banks, credit unions, and insurance. **This class will be mandatory for all 9th graders.** 

#### **DESIGN AND LAYOUT (full year – 1 credit)**

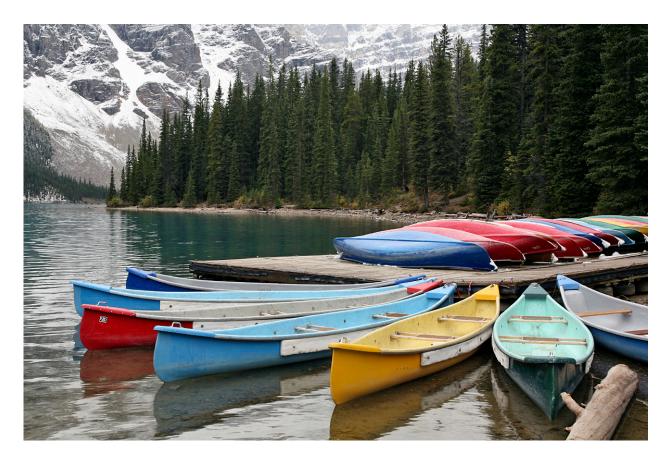
This is a full year **elective** course offered to **juniors and seniors**. Students will learn to use Josten's Yearbook Avenue and PhotoShop to create templates, edit pictures and create graphics. Students will learn about page layout design while creating page templates from scratch. Students will learn how to use a digital camera, meet deadlines, proofread, write captions, maintain files, conduct polls, create ads and scan high resolution images. The student's culminating task is to design and create the school **yearbook**. The students enrolled in this class are at the discretion of the instructor. Work ethic, participation and attitude will be taken into considerate when choosing students for this class. The class size should be no more than 12 students.

# ACCOUNTING (full year – 1 credit) BU120 Introduction to Accounting Earn College Credit! (3)

Introduction to financial accounting acclimates the student to accounting principles starting with the journal and ending with the balance sheet and income statement. It deals with the in-depth mathematical calculations involved in financial accounting. For the second portion of this course students will learn basic elements of accounting with the completion of a practice set of books for a representative business concern including cost receipts and payments, payroll, petty cash, purchases and sales records, accounts receivable, operational assets, accounts payable and the preparation of a financial statement. Upon completion of this course students will be able to demonstrate knowledge of the long-form accounting equation, explain debits and credits and the journalizing/posting process, prepare all financial statements required of the completed accounting cycle, compute ending inventory and demonstrate knowledge of multiple types of business organizations.

#### INTRODUCTION TO BUSINESS-BU140 (full year- 1 credit) Earn college credit! (3)

The course is a survey course which introduces the student to the contemporary business world. Topics include economic factors, forms of business ownership, managing people in organizations, principles of marketing, managing information, and various financial issues. Upon completion of the course the students will be able to use a "business vocabulary" which will serve as a foundation for further study, discuss the role of business in our economic system, identify ethical and socially responsible behavior in business, explain the features and characteristics of the various forms of business ownership, describe important business activities such as: production, marketing, finance, management, and human resources, and discuss the importance of global trade.



**HIGH SCHOOL HEALTH (Grade 9 or 10)** 

High School Health is a semester course that is required for graduation and usually taken in the freshman year. The lectures are typically taught via google slides and are posted in a google classroom format so the curriculum is easy to follow. This is a class that should be applied to students' lives now and in the future to become healthier members of the school community. Every Monday of the school year will be dedicated to mindfulness and mental health strategies to empower students to have the best mental health they can have.

#### **MAJOR TOPICS & LESSONS:**

#### Introduction to Health

- Health Triangle: mental, physical and social
- Dimensions of Wellness
- Life Skills: Decision making model
- Health influencers: heredity, environmental, life choices/ self control
- Choices through consequences, values and ethics
- Health & Psychology
- Personality Theory
- Perspective views
- Character development

#### Mental/Emotional Health

- Self-esteem: Ways to improve your self-esteem
- Personality: Types and disorders
- Stress: Signs, what it can lead to, ways to minimize stress, power of music
- Depression and suicide: Recognizing the signs and where to receive help
- · Becoming mentally stronger
- Conflict resolution
- What is mental health & mental illness
- How manage emotions
- Wellness inventory of mental health
- Anger Management
- Grit development
- Mindfulness Mondays- journal lesson every Monday

#### Drugs, Alcohol, and Tobacco

- · Dangers and risks involved with drug use
- Avoiding the risks of drugs
- Addictions and the human brain
- Where to receive help and treatment
- Today's designer drugs and their dangers
- · Vaping and the unknown effects
- Marijuana use and debate
- Accidental injuries in teens with drug use
- How every drug can be a gateway drug and a look at the most popular gateway drugs
- Opioid epidemic
- External & Internal pressures
- Drug Exposure Theory
- Anti-Drug Advertisements
- Brain-Body Neurotransmitter connection

#### **Human Sexuality**

- Promoting safe and healthy relationships
- Preventing HIV/AIDS and other STI's
- Recognizing and avoiding risky sexual behaviors
- Abstinence based education VS Knowledge based learning
- Sex, lies and the media
- Transmission & protection against bacterial and viral infections
- Gender personality
- Dating
- Dating violence
- Communication
- · Relationship boundaries
- Sexual harassment & Rape

## Nutrition & Exercise

- Obesity: BMI, dangers associated with obesity
- Eating disorders
- Nutrients
- Reading food labels
- Tracking your foods with myfitnesspal APP
- Developing a safe plan to lose weight.
- Diabetes and unhealthy factors
- Cardiovascular disease
- Preventable illness related to an unhealthy body weight
- Physical fitness & exercise options
- Fitness fads & diets
- Gene and hereditary factors
- Yoga
- Weight lifting
- Running
- Anaerobic vs aerobic zones

#### Minor topics & smaller units include the following:

- Body systems
- Sleep curriculum
- Disease Prevention

#### **Health Elective:**

# ADULT & PEDIATRIC FIRST AID/CPR/AED (20 weeks, ½ credit) Grades 10-12

This course incorporates the latest science and teaches students to recognize and care for a variety of first aid emergencies such as burns, cuts, scrapes, sudden illnesses, head, neck, back injuries, heat and cold emergencies and how to respond to breathing and cardiac emergencies to help victims of any age – adults (about 12 years and older) and pediatric (infants and children up to 12 year of age). Students who successfully complete this course will receive a certificate for Adult and Pediatric First Aid/CPR/AED valid for two years.

This course is a half year Health elective for students grades 10 through 12. This class can only accommodate 12 enrolled students per semester. Students are held responsible for the American Red Cross fee for certification card distribution. Please contact Mr. Calder with any questions.



**Family and Consumer Sciences** 

#### **Global and Gourmet Foods**

Through lecture and hands-on cooking, students explore global and American regional cuisines. We will start with safety and sanitation, then moving on to authentic recipes and ingredients. Correct cooking techniques and authentic traditional seasonings are emphasized. During your experience, you will begin a journey that will explore all 8 regions of the US and various countries such as Germany, England, Spain, France, Mexico and many more! Lastly, we will touch upon basic cooking vocabulary and measurement equations that focus primarily on kitchen equipment and production procedures in a professional kitchen. Remember, the main purpose of this course is to introduce and expand your appetite to foods you would not normally be accustomed to.

\*\*\*\*\*This class is available to grades 10-12. Global and Regional Foods fulfills the Career and Technical (CTE) graduation requirements. Full year class.

# Life After High School

This course is taken at the junior and senior level and gives students the tools to transition to college or just moving out of your parent's house. The skills taught in this course are imperative to ensuring that each and every student who graduates has a clear understanding of how to succeed in college or to live on your own. Students will engage in career exploration, college and major exploration, portfolio development, shopping and cooking on a budget, finances of running a home, car shopping, car maintenance and much more!

\*\*\*\*\*\*This class is only available to junior and seniors. 1 semester class and college credit through Erie Community College.

### **Housing and Textiles**

In this class, decisions as to where to live and trends related to making these decisions are studied with emphasis placed on the sociological, cultural, and aesthetic issues in housing. The elements and principles of design are also explored as they relate to architecture and interior planning. This course will explore the history of fashion, culture, design principles, equipment, and construction, wardrobe planning, textiles in relation to clothing and interior design. Students will gain an understanding of color, design, personal style, and appropriate clothing choices. Students research career possibilities in housing, design and clothing.

\*\*\*\*\*\*This class is available to grades 10-12. Clothing and Textiles Core combined with Housing and Environment Core is an approved substitution for the Fine Arts graduation requirement for any student. Full year class.





#### **ENGLISH**

The units in the field of English are directed toward the development of worthwhile citizens, enrichment of personal lives, and the preparation of vocational academic competency.

# **MAJOR TOPICS** (Grade 9, 10, 11, 12)

- I. Reading Skills
- II. <u>Literature</u>

**Short Story** 

Poetry

Novel

Biography

Drama

Essay

Magazine

# III. <u>Library Instruction & Research Techniques</u>

- IV. Vocabulary development
- V. Composition Writing

**Planning** 

Outlining

Paragraph

**Book Reports** 

Compositions: Poetry, Essays, Short Stories, Creative Writing,

Narrative, Descriptive, Persuasive, Compare/Contrast

Research Writing

- VI. Letter Writing
- VII. Grammar
- VIII. Punctuation
- IX. Capitalization
- X. Usage
- XI. Speech

Speeches

Interviews

Conversations

Reading Aloud

Oral Book Reports

#### **ENGLISH 9-11 (Language Arts)**

The grades 9-12 English classes are comprehensive programs aligned to the Common Core State Standards. These programs build a foundation that creates success in the aforementioned skills. See above for a complete list of subjects being studied.

#### **ENGLISH 10 HONORS**

The English Honors class will be an introductory course that initiates the beginning of advanced placement course work. In addition to all of the English standards that will be studied, students at this level will be taking the New York State Regents Exam in tenth grade instead of eleventh to commence the building of higher level English skills.

#### **ENGLISH 11 HONORS – Semester 1: Public Speaking**

The objective of this course is the development of clear and effective oral communication skills. Student will learn techniques, prepare and deliver various kinds of speeches. Students have the opportunity to enroll in SUNY Erie's EN 114 Public Speaking to earn 3 college credits.

#### **ENGLISH 11 HONORS – Semester 2: Creative Writing**

Through a wide variety of poetry, fiction, memoir, and drama, students will have the opportunity to develop their creative writing skills and produce original work in each genre. Students have the opportunity to enroll in SUNY Erie's EN 140 Creative Writing to earn 3 college credits.

#### **ENGLISH 12**

This is a course designed to develop reading and writing skills. The course will emphasize the use of rhetorical strategies in the development of ideas, career-appropriate writing, writing about literature, and the ability to analyze and utilize diverse cultural perspectives. Students have the opportunity to enroll in SUNY Erie's EN 100, Composition I: Rhetorical Strategies to earn 3 college credits.

#### **TELEVISION PRODUCTION 1 and 2 – (GRADES 9-12)**

Television Production 1 and 2 are semester long high school elective courses that offer real-world application of todays most advanced technology. Students will participate in video production and performance. This includes editing, videography, photography, reporting, directing, producing and all other jobs that require the production of a television show. The goal is to broadcast the morning announcements to the student body from an in-school studio.

#### **BUFFALO 101**

This class is an introduction to everything Buffalo. Buffalo 101 covers everything from the birth of the city to football, chicken wings, and Dyngus Day. In this full year course, students will be exploring the history of Buffalo and the surrounding areas. They will be analyzing Buffalo's historical significance and the impact the city has had on a local as well as national level. They will look at current events, architectural masterpieces, presidential ties, and of course, blizzards!

#### MYTHOLOGY, LEGENDS, AND LORE

This is a full year course that covers world mythology, legends and folklore. We will study mythology from a variety of cultures such as Greek, Roman, Egyptian, Norse, Native American, African and Asian. Students will investigate stories of gods, goddesses, and heroes to analyze the values and beliefs conveyed by that culture. Students will compare cultures to identify similarities and examine how these stories and beliefs have infiltrated and enriched art, literature, and modern society. This class will also explore multicultural legends and lore to see what they reveal about a culture. This class is designed to help students build upon their reading, writing and critical thinking skills while preparing them for life after high school.

#### DRAMA 1 and 2 Full Year Course broken into Drama 1 and Drama 2

The objectives of the course are for students to learn about the history of acting and theater, acting techniques, vocabulary, roles of various participants of a production (director, stage crew, etc.), writing a drama, and performance. A portfolio will also be created throughout the course. One credit will be earned with the successful completion of Drama 1 and Drama 2. Course is taught by Mrs. Koudounas.

#### MISCHIEF, MYSTERY, & MAYHEM IN LITERATURE AND MEDIA – Grades 9-12 Full Year

Throughout this course, students will examine the history and structure of modern and historical mystery fiction, the suspense story, and the detective story. Elements of mystery fiction are presented and then discussed in light of the particular works. This study includes literature, film, television, and podcasts with pieces by Edgar Allan Poe, Sir Arthur Conan Doyle, Delia Owens, and Agatha Christie. The unit will conclude with students composing their own mystery/mayhem/mischief writing piece.

# SOCIAL JUSTICE IN FILM AND LITERATURE - Grades 11 & 12 One semester

Social justice explores the many social justice issues facing the world today. The primary goal is to offer students an all-encompassing view of inequality in our society by examining major issues such as race, poverty, education, and privilege within films and contemporary literature.



To Kill a Mockinabird



# **FRENCH**

# French1a

This course introduces students, at the Grade 7 level, to a basic understanding of the French language. They learn useful expressions that are necessary for everyday conversation. Students become familiar with basic vocabulary for a variety of topics such as school, family, home, community, animals, sports, transportation, travel and more. Grammar is taught in conjunction with these topics, as it is needed for personal expression. The students become familiar with Francophone countries through a series of projects that take place throughout the year.

#### French 1b

Pre-requisite: French 1a Length of course: 40 weeks

The objective of French 1a is to closely follow the NYS Learning Standards for LOTE . From the first day of class, students are speaking, listening, reading and writing in the French language. All lessons and communication takes place in French in a friendly and encouraging environment. Students learn the fundamentals of French grammar: how to converse in the spoken and written form using the present and past tenses; how to discuss their preferences; persuade others and solicit information; how to describe their world and the people in it. The curriculum includes a comparison of French culture with American culture, with the focus being on understanding the cultural differences. The final quarter of this course is spent in review for the NYS Proficiency test. Students have the opportunity to take previous Proficiency tests in order to become familiar with the format. Moreover, they learn test-taking strategies specifically developed for passing a foreign language test.

Length of Course: 40 weeks

Length of Course: 40 weeks

Length of Course: 40 weeks

#### French II (Checkpoint B Part I)

Prerequisite: French 1a and 1b (plus passing proficiency test) Credits: 1
French II is a course of study for student's continuing the process of learning to speak French.
French II begins the Checkpoint B curriculum of the New York State syllabus. Students enrolled in this course have successfully passed the NYS LOTE Proficiency Exam at the end of 8th grade. A foundation of listening, speaking, writing, and reading skills is provided within the context of grammar concepts and thematic vocabulary where students learn to address a multitude of topics in French. Skills taught in French II are in alignment with the New York State LOTE Standards.

#### French III (Checkpoint B Part II)

Prerequisite: French IIR Credits: 1

French III is the continuation of French II. Students enrolled in this course will have successfully completed French II. A foundation of listening, speaking, writing, and reading skills is provided within the context of grammar concepts and thematic vocabulary where students learn to address a multitude of topics in French. Skills taught in French III are in alignment with the New York State LOTE Standards. Students will be able to comprehend, speak and write French at an intermediate-low level. Students will take a Level III Comprehensive Exam in June. French III completes the work required for Checkpoint B of the N. Y.S. Syllabus. Successful completion of both the course and the Regents exam will qualify students to be eligible for a Regents diploma with advanced designation.

# French IV: French Culture and Civilization in France

Prerequisite: French IIR & IIIR Credits: 1

French IV is a continuation of the advanced courses. Students enrolled in this course have completed at least two years of language study and have acquired some proficiency in the French language. French IV offers students the chance to explore the culture and civilization of France in depth while continuing the process of learning specific grammatical concepts in the French language. The receptive skills: writing, reading, and translation are developed in this course. French literature and authentic materials will be integrated among the varied lessons of culture and civilization. The goal is to develop a higher proficiency using the language as extensively as possible. There will be class discussions, oral presentations and technology-based assessments. Essays and informal writings are also an integral part of the program. Students will also see films that correspond to the culture and civilization of France.

# **Spanish 1a** Length of Course: 20 weeks

This course introduces students, at the Grade 7 level, to a basic understanding of the Spanish language. They learn useful expressions that are necessary for everyday conversation. Students become familiar with basic vocabulary for a variety of topics such as school, family, home, community, animals, sports, transportation, travel and more. Grammar is taught in conjunction with these topics, as it is needed for personal expression. The students become familiar with Spanish speaking countries through a series of projects take place throughout the year.



#### **SPANISH**

#### SPANISH I, II, III, IV, V

Our students are required to have an adequate proficiency in one or more foreign languages. Spanish is the second most spoken language in the world, and increasingly dominates the world market. Students must educate and inform themselves of the Hispanic culture and demonstrate the ability to engage in conversation, provide and obtain information, express feelings and emotions, and exchange opinions in Spanish.

School policy requires that all students take <u>Spanish IA, IB, II and III</u> to fulfill New York State and high school graduation requirements. Advanced study to <u>Spanish V</u> is highly recommended for those students pursuing advanced studies at a college or university after graduation.

The course sequence in <u>Spanish IA, IB, II, and III</u> will prepare the students to achieve these goals, as well as allow them to use the language both within and beyond the school setting. Students will also show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment. Finally, students will appreciate Spanish as a second language and as an asset to professional environments and advanced studies at institutions of higher learning.

Students will be recommended to <u>Spanish IV/V</u> based on their <u>Spanish III</u> Regents Exam scores. This course is designed to enhance their knowledge of the culture of the contemporary Spanish-speaking world through the study of Latin American and Spanish authors, painters and singers. Continued focus on advanced acquisition will continue to be a primary goal, with special attention given to idiomatic and colloquial expressions and the more complex aspects of grammar will be reinforced. Students register for this class with the understanding that they are working towards the College Level Examination Program (CLEP) test in Spanish. This course has variable content and can be taken in both the Junior and Senior years.

<u>Spanish IB</u> and <u>Spanish III</u> culminate with NYS required Checkpoint exams. Spanish II culminates with a teacher designed exam written to state and national standards. Students in <u>Spanish IV/V</u> will complete a Capstone Project.



#### **MATHEMATICS**

#### **ALGEBRA I (Next Generation)**

Algebra I is a 40-week course open to students who have passed Math 8. Students who enroll in this course will prepare to take the New York State Regents in Algebra I in June 2024. Passing the Algebra Regents Exam (Next Generation) is required to graduate. Students who pass this course will earn one math credit.

#### PRE-ALGEBRA

Pre-Algebra is a 40-week course open to students who have passed Math 8. This course is designed to give students some prerequisite skills for Algebra I Common Core. This is recommended for students who require extra time in math. Students who pass this course will earn one math credit.

#### **GEOMETRY (Common Core)**

Geometry is a 40-week course open to students in grades 9 through 12 who have passed Algebra Common Core. Students enrolled in this course will prepare to take the New York State Regents Exam in Geometry Common Core in June 2024. Students who pass this course will earn one math credit.

#### **ALGEBRA II (Common Core)**

Algebra II is a 40-week course open to students in grades 10 through 12 who have passed Regents exams in Algebra Common Core and Geometry Common Core. Students enrolled in this course will prepare to take the New York State Algebra II Common Core Regents Exam in June 2024. Students who pass this course will earn one math credit.

#### **TOPICS IN ALGEBRA AND GEOMETRY**

This is a 40-week course open to students in grades 11 and 12 who have passed Algebra and need an additional math credit in order to graduate. Students who pass this course will earn one math credit.

#### **INTRO TO COMPUTER SCIENCE**

This year-long course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. The course covers many topics including the Internet, Big Data and Privacy, and Programming and Algorithms. Computer Science Principles is open to students in grades 11 and 12. Students who pass this course will earn one math credit.

#### PRE-CALCULUS-MA 145

This is a 40-week course open to students who have passed the Regents Exams in Algebra I Common Core, Geometry Common Core and Algebra II Common Core. This course is designed to prepare students for college level Calculus. Students who pass this course will earn one math credit towards high school graduation. Students who earn a final average of at least 70% will receive three college credits (MA 145: College Mathematics) through the Dual Enrollments program at Hilbert College. These credits are transferrable to other college and universities.

#### **CALCULUS-MA 205**

This course is a 40-week course open to students who have passed Pre-Calculus. Students who pass this course will earn one math credit towards high school graduation. Students who earn a final average of at least a 70% will receive three college credits (MA 205: Survey of Calculus) through the Dual Enrollment program at Hilbert College. These credits are transferrable to other colleges and universities.

#### **STATISTICS**

This course is a 40-week course open to students who have passed Algebra II Common Core. This course is designed to provide students with a working knowledge of descriptive and inferential statistics, along with practical computer applications. It is intended to make students aware of the power of statistics and its uses. Students who pass this course will earn one math credit towards high school graduation. Students who earn a final average of at least 70% will receive three college credits (MA 200: Topics in Statistics) through the Dual Enrollment program at Hilbert College. These credits are transferrable to other colleges and universities.



#### **MUSIC**

The music program at North Collins Central School includes both academic and performing components. It is the philosophy of the music department that music education is for every student. To insure this, the following guidelines have been established.

#### SENIOR HIGH BAND - ½ credit

Senior High Band meets every other day for 40 minutes. Students earn one half credit toward the music/art requirement for graduation. Students will benefit most from this class with recurring participation from year to year. Band repertoire ranges from Grades III-VI which includes standard band literature as well as patriotic and pop music. Students perform for the Homecoming Pep Rally, evening Holiday and Spring Concerts as well as at the Community Memorial Day ceremony. All performances are mandatory. Additionally, students may opt to march in the Homecoming and Memorial Day parades. Additional performances are added based on student interest from year to year. Attendance at weekly group lessons on a rotating schedule are included in the band grade.

All instrumental students have the opportunity to participate in regional festivals where their solo skills can be rated. Selected students will be encouraged to audition for All-County, Area All-State and/or All-State Instrumental Ensembles.

#### Prerequisite:

Satisfactory participation in the North Collins Band program at the Elementary and Junior High levels, completion of lesson book three or at the director's discretion.

#### JUNIOR HIGH BAND

Junior High Band meets for one 40 minute period every other day. Band repertoire ranges from Grades II-III which includes standard band literature as well as patriotic and pop music. Students perform in the evening Holiday and Spring Concerts as well as at the Community Memorial Day ceremony. All performances are mandatory. Additionally, students may opt to march in the Homecoming and Memorial Day parades. Attendance at weekly group lessons on a rotating schedule are included in the band grade. Students will benefit most from this class with recurring participation from year to year.

All instrumental students have the opportunity to participate in regional festivals where their solo skills can be rated. Selected students will be encouraged to audition for All-County, Area All-State and/or All-State Instrumental Ensembles.

#### **Prerequisite:**

Satisfactory participation in the North Collins Band program at the Elementary Level.

#### SENIOR HIGH MIXED CHOIR - ½ credit

Chorus membership is open to all students in grades 9-12. These students will learn correct vocal technique, become familiar with quality choral music of various time periods and enjoy the opportunity of performing in a musical ensemble.

Rehearsals are every other day for one 40-minute period. Students earn one half credit toward graduation. Performances include three or more evening concerts and additional performances outside of school when scheduled. Attendance is required at all performances.

All choral students have the opportunity to participate in regional festivals where their solo vocal skills can be rated. Selected students will be encouraged to audition for All-County, Area All-State and/or All-State Choral Ensembles.

#### **JUNIOR HIGH CHORUS**

Junior High Chorus is open to all students in grades 7-8.

Students participating in chorus will learn correct vocal technique, become familiar with a variety of choral music and enjoy the opportunity of performing in a musical ensemble.

Rehearsals are every other day for a 40 minute period. Performances include three or more evening concerts and additional performances outside of school when scheduled. Attendance is required at all performances.

All choral students have the opportunity to participate in regional festivals where their solo vocal skills can be rated. Selected students will be encouraged to audition for All-County and/or Area All-State ensembles.

#### PIANO CLASS – 1 credit

This is a 40 week music elective which meets the first half of the year every day for 40 minutes. Students will learn to read music and expand their capabilities at their individual levels. The class concludes with a small recital in the auditorium. Class size is limited to six students.

#### THE BEATLES – ½ credit

An intensive study into the music and lives of one of the greatest and most influential bands of all time. This class will meet every day for one semester.

#### **LEADERSHIP – ½ credit**

Exploration of what it takes to be a strong leader. With hands-on activities and projects, students will develop skills to take their leadership to the next level. This class will meet every day for one semester.



#### PHYSICAL EDUCATION

The goal of the physical education department is to provide a safe, enjoyable and constructive learning environment that is conducive to the abilities and interests of all the students. Goals of PE included time towards daily physical activity, developing skills and knowledge to maintain personal health outside of the classroom and having opportunities to become active during the school day.

We are focused on the physical, mental, and social well-being of our students and its correlation to daily performance in all venues.

As a continuation from elementary physical education, prior sport specific skills are enhanced. We also include new advanced skills which are introduced along with more complex strategies. A continual emphasis on sportsmanship, socialization and the use of community resources is emphasized as an integral part of our curriculum. Students will complete a physical fitness assessment twice each school year, once in the fall and again in the spring. Students are encouraged to maintain or bet either average performance measures or their own past test numbers, whichever is highest.

#### PHYSICAL EDUCATION Grading: (Required for graduation)

Students will receive a grade out of 4 points for each Physical Education class.

How to EARN the 4 points...

Being prepared with athletic sneakers will earn you 1 out of the 4 possible points for that class. If you change your clothing for that class into athletic clothing, you will earn 0.5 bonus points.

The other three points will come from how active you are during the class period, including fully completing one of the two required warm ups. Other considerations will be made for respect, effort, sportsmanship, and safety during each class period. Heart rate monitors will be required for students using the track or fitness room during each class. Baseline target heart rate zones for all units will be 60%-80% of your maximum heart rate (220-your age). All watches are preset and will be assigned to each individual student to ensure heart rate accuracy. Our baseline expectation of time in the elevated heart rate zone will be 20 minutes. Each student's grade comes from how much time they spend in the target zone.

In the event that a student cannot participate due to a medical excuse (provided by a medical doctor), they will be required to complete assignments outside of class. These will be determined by the teacher. If a student is feeling ill, a note from a parent will be allowed for ONE class excuse. Students will receive a zero for a class when they have unexcused absence from school. They can make up the zero by having a parent call the school when they are absent or send a note upon their return to school. Upon request, they can do an extra credit assignment to make up low grades or unexcused absences.

#### **SCIENCE**



### **INTERMEDIATE LEVEL SCIENCE (Grades 7-8)**

At the end of Grade 8 Science Instruction, all students must take a NYSED Science Assessment Exam based on material <u>and</u> skills (content <u>and</u> process) that was presented in grades 5-8. Major areas of emphasis are Earth and Space Science, Life Science and Physical Science. The Intermediate Level Science Assessment includes a one hour performance exam given in May and a 2-3 hour written exam administered in June.

#### **SCIENCE GRADES 9-12:**

Our society is becoming more technologically advanced every day. To be a successful and productive member, one needs to be scientifically literate. Whether you are college or career bound after high school, science should be a part of your daily courses.

All New York State <u>high school graduates must have 3 credits in science</u>. College bound students should have 4 credits. Read the following options. Discuss your choices with your family and your guidance counselor in light of what you plan to do after high school. Keep your options open! You never know what the future may bring, so now is the best time to take introductory science courses.

#### LABORATORY REQUIREMENT FOR REGENTS COURSES

Laboratory experience is required in each of the commencement level science courses – Living Environment (Biology), and Physical Setting (Earth Science, Chemistry and/or Physics). This requirement follows directly from the fact that these courses are laboratory sciences, and successful completion of any one of them earns for the student one unit of credit for laboratory science. Students must be engaged in hands-on laboratory activities for 1200 minutes/year minimum.

Satisfactory written reports of these laboratory experiences must be prepared by the student and submitted by the student. These reports will be kept in the school for at least 6 months following the date of the examination, except in instances where a senior requests such reports for further work. Please note that Section 8.2 of the Rules of the Board of Regents states: "Only those persons who have satisfactorily met the laboratory requirement for a science shall be admitted to a Regents examination in such science." Additional information is presented in the student's agenda.

#### **GRADE 9: REGENTS EARTH SCIENCE**

Earth Science is a physical science dealing with topics related to planet Earth. The course is designed to give students a basic understanding of the planet on which we live. Topics include Earth's place in the universe, navigation on Earth, Earth's composition and resources, Earth's dynamic landforms, and Earth's atmosphere. These concepts have practical applications and can be observed in daily life on Earth. The course draws heavily on mathematical calculations and skills such as data illustration and graphical interpretation. Students are encouraged to be enrolled in Algebra. Credit is earned after completing the laboratory requirement **and** passing the NYSED exam.

#### **GRADE 10: REGENTS LIVING ENVIRONMENT-BIOLOGY**

NYS requirement is for <u>all students to take</u> the Living Environment (LE) class. Living Environment is a course designed to give students a basic understanding of the living world. Students are expected to apply scientific concepts, principals and theories pertaining to the living environment and recognize the historical development of ideas in science. In addition to coursework, students are expected to satisfactorily complete the laboratory requirement. Credit is earned after completing the laboratory requirement **and** passing the NYSED exam.

Chemistry requires skills in basic problem solving and formula calculation that students should have obtained in grade 9 & 10 Math. Students will engage in a variety of hands-on activities throughout the course that will make a connection between Chemistry and the real world. This course will serve as both a regents course, as well grant students credit through Hilbert College.

# <u>GRADE 12: COLLEGE PHYSICS</u>-PY 140 Prerequisites: CC Algebra II. Chemistry is strongly recommended.

Topics covered in the course include: Mechanics, Energy, Electricity and Magnetism, Waves and Modern Physics. Students actively engage in experimentation and data collection to develop physics concepts. Physics requires the use of math skills. At a minimum, students should have passed Algebra II/Trig. Students are encouraged to be enrolled in Pre-Calculus or Calculus. This course will serve as both a regents course, as well as grant credit through Hilbert College.

#### 9-12 SCIENCE ELECTIVES:

# **COLLEGE BIOLOGY-BI 140** Prerequisites: Regents L.E. and Chemistry.

Physics is strongly recommended.

1 credit

The College Biology Course is a college level course offered through Hilbert College. College Biology is a one year course in biological concepts, allowing students to earn a college credit in biology. The goal of the course is for students to learn important facts about the natural world and to understand the significance of these facts within the context of major biological concepts. The course will emphasize such topics as biochemistry, cell structure, transport and division, photosynthesis, cellular respiration, protein synthesis, and plant and animal diversity.

#### COMPUTER GAME DESIGN Grades 9-12

.5 credit

Students will learn the basics of designing their own computer games. The course will be focused around the Unity game engine, which has created some popular games including: Hearthstone, Cities: Skylines, Fallout: Shelters, and Escape from Tarkov. We will learn how a game engine combines with basic coding in order to create unique and fun games, in either 2D or 3D.

#### **SCIENCE OF TOYS** Grades 11-12

1 credit

This course will encourage students to investigate the scientific principles within familiar toys. Students will search for connections between these principles and real-life situations. Often they will be asked to use the principles they've learned to create; building their own example of the concepts they've discovered.

#### **ROBOTICS** Grades 7-8 and Grades 9-12

.5 credit

Students will learn about engineering through creative problem solving. The course will focus on designing robotic systems using core STEM principles. We will also learn to use Autodesk Inventor, which can be used to design, and eventually 3D print our own robotics parts. Other topics include DC motors, drive train design, mechanical power transmission, and lifting mechanisms.

#### **EXERCISE SCIENCE: Grades 11-12**

1 credit

#### Prerequisite: Successful Completion of Regents Living Environment

Exercise Science is a hybrid class involving both classroom lectures as well as the "hands-on" application of a strength training program in the school weight room/gymnasium. Students will learn about the history of physical and sports culture as well as the physical, cognitive, and emotional benefits of strength training. Students will learn how to safely and effectively perform an exercise program, a valuable skill that may improve their lifelong health and fitness.

Who should take this course? Students interested in athletics, coaching, personal training, nutrition, health, anatomy, and physical rehabilitation.

# GEOGRAPHIC INFORMATION SYSTEMS- GIS 201 GRADES 11-12 1 credit

An introductory level geospatial technology course designed to introduce students to the concepts and theories of geographic information systems (GIS), drone technology and the practice of geospatial analysis. Students will learn to apply GIS concepts through hands-on exercises designed to explore and analyze spatial data. Students will use leading geospatial software and drone technology used by numerous professions. Student-based projects can focus on economics, social sciences, environmental conservation, health sciences, community planning and agriculture. *Upon successful completion of the course, 3 college credits are available from SUNY Fredonia.* 

### **ANIMAL BEHAVIOR-ABEC 101**

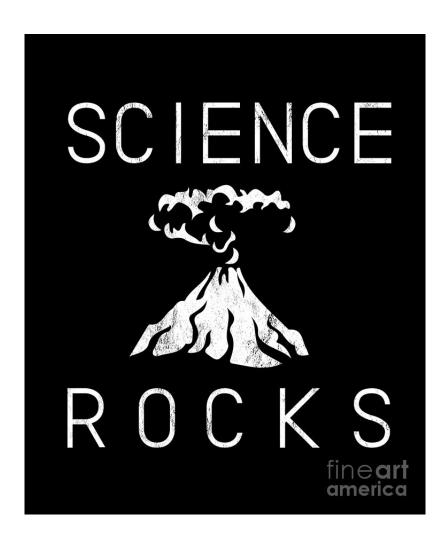
**GRADES 11-12** 

1 credit

#### Prerequisite: Successful completion of Regents Living Environment

Animal behavior is a full year science elective for students interested in learning about animals. This course combines concepts in both Psychology and Biology to help students understand the innate, learned, and social behavior of animals. Students will explore topics in social hierarchy, animal communication, tool use and intelligence, as well as foraging behavior. Real scientific studies about Alex the Parrot, Hans the Horse, Washoe the Chimpanzee, Koko the Gorilla and Harlow's Monkeys will be discussed. In addition, students will learn about the most famous animal behavior experts on the planet such as Dian Fossey, Jane Goodell, Louis Leaky, etc. Fun, handson activities will be completed during the year such as learning the "Waggle Dance" to understand how bees communicate and seeing what it is like to forage for food as a blind mole rat.

Who should take this course? Students who love animals, students interested in pursuing a career in veterinary medicine, animal husbandry or scientific research, and students who want to understand their domesticated pet's behaviors.





**SOCIAL STUDIES** 

It should be noted that <u>all</u> students <u>must</u> successfully complete two Regents Examinations in Social

Studies (Global History & Geography II and United States History & Government) in order to be graduated from any high school in New York State.

#### **SOCIAL STUDIES HONORS PROGRAM**

During the student's junior year, students who have demonstrated the required competencies will be eligible to take an Advanced Placement course in United States History. Successful completion of the Advanced Placement course could enable the student to earn college credit while still in high school.

Selection for this program is on a competitive basis and is a compliment to the student's accomplishments and demonstrated potential for higher achievement. That is, nomination for the program indicates that the student's teachers believe that the student possesses intellectual and emotional maturity, as well as the intrinsic desire to perform at a collegiate level.

While this program requires additional effort from the student, the long-term benefits can be significant. A student's participation in the program will be noted on his/her school transcript. This is an accomplishment which will be favorably noted by college admissions counselors. Additionally, successful completion of AP courses could potentially lessen the financial burden of the student's college tuition.

In addition to the Advanced Placement US History course, the Social Studies Department provides an opportunity for students to take a modified version of that course and to earn college credit through Erie Community College. This course is open to qualified juniors and seniors. Students who are considering matriculating to a college or university in the SUNY system are strongly encouraged to take advantage of this opportunity.

### **GLOBAL HISTORY AND GEOGRAPHY** - (Overview)

In New York State, Global History and Geography is a two-year course of study. Global History I is a freshman-level course and Global History II is designed to be conducted during the student's sophomore year.

The primary purpose of the course is to acquaint students with the variety of cultures found in the world and to understand and appreciate these cultures through an investigation of the geography, history, religion, customs and institutions of the people.

Global History I is a chronological survey of world history and culture from the Neolithic Revolution until 1750. Global History II begins in 1750 and runs through contemporary times.

Currently, the New York State Education Department's guidelines and requirements for this course are undergoing changes. Specifically, the traditional, comprehensive State evaluation has been replaced by the Regents Exam in Global History and Geography (Grade 10).

The new exam is divided into three parts: Part I will contain 28 multiple-choice questions, all of which are "stimulus-based" (i.e., based upon a prompt of some type—a map, for example, or a short reading); Part II consists of two sets of Constructed Response Questions (in which the students must provide written responses to thematically-arranged topics); and Part III, which is an Enduring Issues Essay.

# **GLOBAL HISTORY AND GEOGRAPHY I** - (GRADE 9)

The methods employed include lecture and note taking, study guides, individual research and committee work.

The emphasis in the study is on understanding major concepts or ideas about each culture with a limited emphasis on minor factual details.

Major topics in each culture include: Geography; History; Colonization; Nationalism and Independence; Government; Current Problems and Foreign relations.

# GLOBAL HISTORY AND GEOGRAPHY II - (GRADE 10)

This course presents a chronological narrative of world history. Within this framework, a number of integrated themes that form the patterns of civilization are presented. Among the themes are political/economic development, the influence of geography, the growth of science and technology and the effect of contact between cultures and creativity in the arts.

# <u>UNITED STATES HISTORY AND GOVERNMENT</u> - (GRADE 11)

New York has recently revised the syllabus in American History and Government to start with an overview of the structure and evolution of the U.S. constitutional government up to 1865. The history of the United States is then traced with a special focus on key constitutional themes which scholars call the "13 Enduring Issues" of our democracy.

#### **Units of study include:**

#### **Unit 1 - Constitutional Foundations**

This is the study of the constitution and the foundations on which our constitution is based. Early tests of the constitution are emphasized.

#### Unit 2 - Industrialization of the United States

This chronological study beginning in 1865 shows Americas development as an industrial leader with an emphasis on its relationship to the constitution.

#### **Unit 3 - The Progressive Movement**

Studying the reforms and movements of the last quarter of the 19th century with their constitutional background.

#### Unit 4 - At Home and Abroad - Prosperity and Depression

An overview of America in its relationship in the world and domestic problems during the early 20th century.

#### Unit 5 - The United States in an Age of Global Crisis

The story of a rapidly changing world and America's developing role as a world leader.

#### **Unit 6 - A World in Uncertain Times**

Both domestic and foreign situations since 1950 are the major focus. A large emphasis on our changing constitutional ideas.

## **UNITED STATES HISTORY-HI 101**

This course is a challenging course that is meant to be the equivalent of a freshman college course and may result in college credit. This course consists of a two-semester survey of United States history from the colonial period to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of original documents. The Houghton Mifflin college textbook, *The American Pageant*, is used, and an average nightly reading assignment consists of 10 to 20 pages. Students will also be trained in note-taking skills as most of the classes are lecture based. A final exam in the form of the New York State Regents Examination is required at the end of the course. *Upon successfully completion of the course, 3 college credits available from SUNY ECC.* 

#### **SENIOR ECONOMICS**

Economic theory and reality will be demonstrated as the students participate in **The Buffalo News** Stock Market Game.

#### Unit 1 - Introduction

- A. What is Economics?
- B. Economic Systems
- C. Supply, Demand and Prices

#### Unit 2 - Micro economics

- A. The Consumer in the Economy
- B. Launching a business
- C. Financing a business
- D. Production and marketing
- E. Competition
- F. Role of Labor
- G. Role of Government

#### Unit 3 - Macro-economics

- A. Money 7 Financial Institutions
- B. Economic Stability
- C. Current Economic Problems
  - 1 Urban
  - 2. Poverty
  - 3. Farm
  - 4. Economic Growth & the Environment

#### Unit 4 - The Global Economy

- A. Why trade with foreign lands
- B. How international trade differs from domestic
- C. How payments are made in international trade
- D. Recent trends in our balance of payments have affected us all.

# PARTICIPATION IN GOVERNMENT - ONE SEMESTER - (GRADE 12)

This course is designed to help students in grade 12 participate effectively in government. Public policy decisions are being made constantly and are affecting your daily lives. To be a part of these decision making processes in your local, state, national, and international communities, you need to acquire the necessary skills for analyzing and judging actual and proposed policies. This course will provide you with the necessary means to become better citizens.

#### **Social Studies Electives:**

#### WORLD WAR II - full year class, 1 credit Grades 9-12

World War II remains the most total and destructive conflict in human history. It involved all of the major industrial countries at the time and wrought unparalleled physical destruction of countries, landscapes, and people, including both combatants and noncombatants. In this course we will examine all aspects of World War II; we will look at the great campaigns and theatres of war, important battles and turning points, and important leaders. We will also examine the single acts of heroism, the resistance movements in occupied territories, and the lesser known engagements like the Battle of New Guinea. Lastly, students will take command themselves and fight World War II and alternate historical scenarios through wargames like *War Room*, designed by Larry Harris and published by Nightengale Games or *Cataclysm: A Second World War* designed by William Terdoslavich and published by GMT Games.

#### HISTORY ON THE TABLE – full year class, 1 credit Grades 9-12

The British East India Trading Company, the race to expand railroad networks in the midwest, The United States Civil War, World War II, and the ruthless competition between fast food empires are some of the most important events in our history; they are also major events that have been implemented as games to play on your table. In this course, we will play the games that examine these critical moments in history to see how well they simulate and explore the history they represent. Join us to play out these pivotal moments and more!

# INTRODUCTION TO SOCIOLOGY - one semester, ½ credit Grades 11 & 12

Sociology is essentially the study of human behavior - how they act, interact, and react with others. Sociology is an elective course designed to familiarize students with various cultures and the problems resulting from people living in groups. This course covers topics such as culture, social institutions, collective behavior, social change, social deviation, the family, religion, racial and ethnic minorities, poverty, and crime.



#### **TECHNOLOGY**

# **DESIGN & DRAWING FOR PRODUCTION**

<u>This course will satisfy your art requirement for graduation</u>, and consists of Technical and Architectural drawing.

Technical Drawing - teaches basic concepts and principles of Technical Drawing projection, size description, pictorial representation, and techniques and tools.

This type of drawing is the vehicle for worldwide communication and is an integral step in the process toward product design.

Architectural Drawing - teaches the design and drafting related to building construction. Topics include culture and history, tools and techniques, lettering and dimensioning, and preparation of site, floor, elevation, section, and perspective drawings.

#### **POWER AND ENERGY - HALF YEAR**

In this course students will study various energy systems and their applications in today's technological world. Students will complete laboratory activities stressing creative problem solving and engineering. Topics of study will include land, and air transportation systems. (Grades 9-12) (Offered Spring semester)

#### **PRODUCTION SYSTEMS - HALF YEAR**

A 1/2 unit course providing instruction on the systems of manufacturing and construction; their resources, processes, products, and quality assurance; their impact on society, the economy, the environment, and manufacturing. (Offered Fall semester) (Grades 9-12)

<u>Topics of study to include:</u> Dovetail construction, transit operation, sheet metal forming, foundry casting, welding, and others as time permits. This course will give they student a wide array of experiences that will directly impact life after high school and possible career choices.

#### TERMINAL VELOCITY - HALF YEAR

A 20 week course that will investigate forces and motion in our universe.

- Why will a ship made of steel float while a tiny pebble sinks?
- How can a 90 pound person move a 2,000 pound boulder?

As topics like this are explored, students will construct models to visualize and test the known and unknown. This is a hands-on class designed to help answer some of the questions we all have.

#### **INDEPENDENT STUDY: TECHNOLOGY – (Grades 9-12)**

There are many possibilities in the Technology Department for individualized, contract-based course work. Independent studies have sometimes been extensions of a particular course that the student has taken (e.g., Production Systems or Design and Drawing). Often they are designed to create a course of interest to the student such as "Fabrication, Design and Construction." More information is available from the Guidance Department.





#### **COLLEGE CREDIT COURSES - ADVANCED STUDIES PROGRAM**

#### **Benefits of Advanced Studies Credit**

High school students may benefit in a number of ways from the Advanced Studies Program courses.

- They earn college credit while completing high school.
- They can apply the credit toward a program of study at Erie Community College or they may elect to transfer the credit to another college.
- Students get an opportunity to experience college level courses while still attending high school.

High school credit will be awarded and college credit can be awarded for an additional fee.

The following college courses are offered at North Collins High School for possible college credit:

US History (HI 101) Grade 11

English 110 College Composition (Advanced English, 1st semester – Grade 11)

English 140 Creative Writing (Advanced English, 2<sup>nd</sup> semester – Grade 11)

**English 111 Composition & Interpretation of Literature (English 12)** 

Accounting, Intro. Business, Pre-Calculus, Calculus, Statistics, Chemistry, Physics, Biology, Geographic Information Systems, Animal Behavior

Teachers qualified to teach the following courses have been named adjunct professors. A passing grade in these courses results in one high school credit and three college credits. A "C" will transfer to any state college. The college will invoice you for enrolled courses.