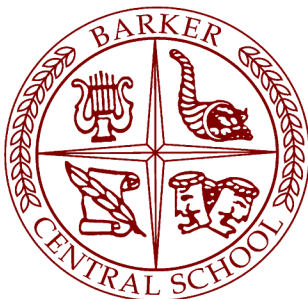


# BARKER CENTRAL SCHOOL

1628 Quaker Road  
Barker, NY 14012

Superintendent's Office	716-795-3832
Jr/Sr High School Office	716-795-3201
Guidance Office	716-795-9260



Mr. Jacob Reimer, Superintendent of Schools

Mr. Michael Carter, Business Administrator

Mrs. Micaela Love, District Principal

Mr. Christian Cornwell, Coordinator of Curriculum and Professional  
Development & Assistant Principal

Mr. Mark Learo, Director of Instructional Services & Assistant Principal

Mr. Michael Gendrue, School Counselor 10-12

Mrs. Shae Owens, School Counselor 7-9

## Board of Education

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Mr. John E. Sweeney Jr, Vice President

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Mrs. Emily Gow

Mrs. Jennifer Harris

Mrs. Virginia Voss

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## *INTRODUCTION*

This guide has been prepared to assist students with long-range program planning and in selecting courses of study. We strongly encourage students and parents to familiarize themselves with this publication and to use it as a resource guide.

Course offerings for the 2024-2025 school year have been reviewed carefully by teachers, counselors and administrators, and are designed to meet the needs of students at Barker Central School. Elective courses listed in this guide will be offered where sufficient student interest and availability of staffing exist.

It is important that students consider the course descriptions and prerequisites, keeping in mind their abilities and interests, and that they select courses which can contribute toward the accomplishment of their personal, educational and career goals. School counselors, in cooperation with teachers and administrators, will assist each student in planning a program of study and in selecting courses.

It is hoped that through studying and understanding the educational programs offered at Barker Central School, students will be informed to make intelligent decisions about the future.

*Course offerings are tentative and based on enrollment totals, teacher availability, board discretion and are subject to change.*

### **STATEMENT OF EQUAL RIGHTS - TITLE IX**

All students are hereby notified that according to the provisions of a federal law passed in 1972 (Title IX of the Educational Amendments of 1972) public schools may not discriminate against students because of their sex in the choice of courses they are permitted to take, the type of counseling provided, the student's actual or potential parental, family or marital status, or the participation in athletic activities such as physical education classes and clubs, intramural and interscholastic teams.

Any student having a question or concern regarding the above should direct their concern to the attention of the principal.

Course Requirements for NYS Regents Diploma		Course Requirements for NYS Advanced Regents Diploma	
English	4 units	English	4 units
Social Studies	4 units	Social Studies	4 units
Math	3 units	Math	3 units
Science	3 units	Science	3 units
Foreign Language	1 unit	Foreign Language	3 units •
Art and/or Music	1 unit	Art and/or Music	1 unit
Health	½ unit	Health	½ unit
Physical Education	2 units	Physical Education	2 units
22 total credits			
State Examination	Typical Year Exam Given	State Examination	Typical Year Exam Given
Algebra I	9 <sup>th</sup> or 10 <sup>th</sup>	Algebra I	9th grade
Science	9 <sup>th</sup> or 10 <sup>th</sup>	Geometry	10 <sup>th</sup> grade
Global Studies	10 <sup>th</sup> grade	Algebra II	11 <sup>th</sup> grade
US History	11 <sup>th</sup> grade	Science—Life Science	9 <sup>th</sup> grade
English Language Arts	11 <sup>th</sup> grade	Science—Physical Science	10th grade
• Students pursuing an <b>advanced regents diploma</b> may substitute a 5-unit occupational education, fine arts or tech sequence in lieu of a 3-unit foreign language requirement.		Global Studies	10 <sup>th</sup> grade
		US History	11 <sup>th</sup> grade
		English Language Arts	11 <sup>th</sup> grade
Students must pass locally developed examinations in foreign language to graduate.			
State exam passing grade is 65% or higher			
One pathways to graduation assessment may be utilized for graduation in place of one Regents exam where applicable.			

To receive a **Regents with Honors Diploma** or **Advanced Regents Diploma with Honors**, all necessary state exam scores must average 90% or higher.

To receive an **Advanced Regents Diploma with Mastery in Mathematics and/or Science**, three commencement level state examinations in mathematics and/or science with a minimum score of 85% on each exam must be obtained.

*\*The State Education Department may change requirements at any time.*

*Students who have been identified by the Committee on Special Education or the 504 committee, may be eligible to satisfy modified requirements.*



## ***MARKING PROCEDURES***

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A student's achievement level in each class is indicated by a numerical grade on the report card.

- **HIGH HONOR ROLL** – 95%-100% average without failing marks. Physical education is not averaged in but a failing grade will make a student ineligible for high honor roll.
- **HONOR ROLL** – 90%-94.9% average without failing marks. Physical education is not averaged in but a failing grade will make a student ineligible for honor roll.
- **MERIT ROLL** – 85%-89.9% average without failing marks. Physical education grade is not averaged in but a failing grade will make a student ineligible for commendable achievement.
- **FINAL EXAM** – For non-Regents courses, the final exam is worth 20% of the final average. For Regents courses, the final exam is worth 10% of the final average.
- **PASSING AVERAGE** – A passing grade of 70% or more is required to pass a course. A passing grade for state examinations, state proficiencies, and state competency tests remains at 65%.
- **REGENTS EXAMS** – All courses will require a final average of 70% in order to receive local credit for a high school diploma. The only exception will be for a regents course where a student has a four-quarter average of no less than 70% and a state exam score of 65% or better.
- **CREDIT RECOVERY** – The final average from the previous unsuccessful course will be used in determining the final average for Credit Recovery.

On the first three quarterly marking periods no grade will be averaged in lower than 55%. However, the fourth quarter and final exam mark on the report card will be the actual numerical grade earned by the student.

Teacher comments are used to indicate a student's social and work attitudes in class.

## **ACADEMIC PROGRESS REPORTS**

Progress reports are mailed to parents immediately following the 5th, 15th, 25th and 35th week of school. These reports may communicate satisfactory or unsatisfactory class work or explain a student's progress in a particular subject. If a parent has a concern with a particular subject area, they should contact the teacher immediately to discuss the situation.

## **ACADEMIC INTERVENTION SERVICES**

Academic Intervention Services means additional instruction which supplements the instruction provided in the general curriculum and is intended to assist students who are at risk of not achieving the State learning standards in English Language Arts, mathematics, social studies and/or science, or who are at risk of not gaining the knowledge and skills needed to meet or exceed designated performance levels on state assessments.

## **REQUIREMENTS FOR CLASS MEMBERSHIP**

- Grade 9:** Successful completion of 8th grade  
**Grade 10:** 5 total units of credit at the end of 9th grade  
**Grade 11:** 10.5 total units of credit at the end of 10th grade  
**Grade 12:** 15 total units of credit at the end of 11th grade and candidacy for graduation

## **RANKING OF STUDENTS**

1. Students will be ranked using a numerical average at the end of the junior year, after three-quarters of the senior year and again after graduation.
2. The method used will be to divide the total of the student's final numerical marks for all courses attempted by the total number of credits earned and attempted. Physical education grades will not be used for ranking purposes. If a course is failed and successfully repeated, the higher grade will be used.
3. The honor seniors will be those who at the end of the third quarter of the senior year are the top ten ranking seniors.
4. For the purpose of graduation ceremonies, the valedictorian and salutatorian are determined at the end of the third quarter of the senior year.

## **9-12 PHYSICAL EDUCATION MAKE-UP POLICY**

1. Missed classes may be made up by:
  - a. Performing 20 minutes of aerobic exercise in the weight room during intramurals.
  - b. After receiving permission from the teacher, a student can enter a physical education class for make-up credit during a free period.
2. Class failure may be made up by:
  - a. Attending summer school, if available, to make up credit.
  - b. The student will be enrolled in a second physical education class during the following semester.

## **DUAL ENROLLMENT PROCEDURES**

1. A student may be permitted to enroll in two English and social studies courses during any school year sequential to the first year of school if by doing so he/she may graduate and their schedule permits. Dual enrollment is subject to approval of the high school principal and parent/guardian.
2. A student may be permitted to enroll in two math and/or science courses during any school year sequential to the first year of school if by doing so he/she may graduate and their schedule permits. Dual enrollment is subject to approval of the high school principal and parent/guardian.

## **COURSE WITHDRAWAL PROCEDURES**

1. Some students, due to changing interests, goals and/or abilities, may wish to withdraw from an elected course(s) in which they have enrolled.
2. With an approved schedule change permission form, a student may withdraw from a course at any time prior to the end of the third week of the course.
3. **Students will not be allowed to drop or add a full-year course after the third week of school. Students will not be allowed to drop or add a half-year course after the third week of each semester.**

## **Non-diploma High School Exiting Credentials**

Some students, due to the nature of their disability, are not able to meet the necessary requirements set by the state of New York to earn a Local/Regents Diploma. An Individual Education Plan is developed in conjunction with the Committee on Special Education where comprehensive goals and objectives are formulated and evaluated on a regular basis throughout the school year. Satisfactory completion of the goals and standards, as specified in the IEP, can result in that student earning a **Skills and Achievement Commencement Credential or a Career Development and Occupational Studies Commencement Credential** and becoming eligible to participate in graduation ceremonies at the end of their program.

## **SECTION 504 STUDENTS**

Section 504 of the Rehabilitation Act allows for the provision of reasonable accommodations for those students who demonstrate a life impairing disability which substantially limits a major life function, but who are not classifiable as a special education student by the Committee on Special Education.

## **SAFETY NET FOR STUDENTS WITH DISABILITIES**

The Board of Regents approved a safety net for students with disabilities making it available to all students with disabilities identified by the Committee on Special Education, all 504 eligible students, and those students who may have been declassified while in junior or senior high school. To earn a high school Regents Diploma, all students will need to take and pass the required course work and five state examinations. The safety net allows students with disabilities who do not pass a state examination required for their class to meet the requirements for a local diploma by earning a reduced score (55-64) on any state examination. Additionally, a Compensatory Safety Net Option is available to students with disabilities, which under certain circumstances, may allow the student to meet the requirements for a local diploma by earning a further reduced score (45-54) on selected state exam(s).

## **VOCATIONAL CENTER ENROLLMENT PROCEDURES**

A two-phase orientation to the programs at the Center is provided during the fall and winter to tenth grade students. The orientation includes a video presentation, a general tour of the Center, and an opportunity to spend one-half day in the program of specific interest. At the conclusion of the orientation, students are asked to complete a brief application to attend the Center which will include parental permission. Enrollment at the Area Vocational Center is available to students during the 11th and/or 12th grade.

While attending the Center students are very limited as to the amount of time available at Barker in which to complete graduation requirements or electives. During the eleventh and twelfth grades, students have time to complete only the required English, social studies, math or science, and physical education courses.

Ideally, students should have completed the following coursework prior to attending the Center as eleventh grade students:

English	2 units	Foreign Language	1 unit
Social Studies	2 units	Health	½ unit
Math	2 units	Art or Music	1 unit
Science	2 units	Phys Ed - 8 units	(2 years)

## **ATTENDANCE POLICY**

The Education Law requires that the students enrolled in the schools of this District attend school on every school day unless legally excused. The District believes that the presence of the student and classroom participation are critical to the educational program offered, and, as such, are properly reflected in a student's final grade. The regular contact of students with one another in the classroom, and their participation in a well-planned instructional activity under the tutelage of a competent teacher, are vital to this purpose. Absences have a highly adverse effect upon the student as well as the entire educational program. Therefore, the Board of Education urges all parents to make every effort for their children to be in attendance.

Frequent absences of pupils from the regular classroom learning experiences disrupt the continuity of the instructional process. Therefore, regular, punctual attendance and cooperative participation in school is expected of all students. Any pupil who is absent from school will be required to make up work missed in assigned classes.

1. Any student absent more than 26 classes for a 40-week course or 13 classes for a 20-week course may not receive credit or a unit of study for this course. Any student who enters a course after the beginning date of the course will have absences handled on a pro-rated basis.
2. More than twenty (20) minutes late to class as a result of tardiness will be considered an absence from that class.
3. The Attendance Policy applies only to a student's unexcused absences.
4. Attendance at school-sponsored events that occur during the school day shall be counted as the equivalent of regular attendance.
5. Days for which a student is suspended from school may not be counted as absences unless the student fails to attend alternative equivalent instruction. Alternative equivalent instruction will commence immediately upon suspension. New York State Education Law does not require alternative equivalent instruction for a student over the age of sixteen (16).

## **ATTENDANCE POLICY - IMPLEMENTATION**

1. Parents are notified through an automated calling system when their child is absent on a daily basis.
2. Parents are notified every 5 weeks of their child's attendance for each class on the progress report or report card.
3. Every ten (10) weeks the principal and/or counselors will review the student attendance report and send a letter to parents of students exhibiting excessive attendance concerns. Parents will be encouraged to contact the school to develop strategies to improve student attendance.
4. The principal and/or counselor will meet with the student regarding his/her attendance and work with him/her to establish a plan for improved attendance.

## **CAREER & COLLEGE PLANNING**

College catalogs, college websites, financial aid information, scholarship information and training opportunities are available in the guidance office. Students should use the information to become familiar with the requirements of various colleges and vocations.

Colleges and universities differ considerably in size, appearance, facilities, educational philosophy and entrance requirements. Material about colleges should be gathered early in one's high school career and campus visits made before a student's senior year.

For more information regarding college testing and college planning, contact the guidance office directly or visit our website at [barkerccd.net](http://barkerccd.net).



## **TESTING FOR COLLEGE ADMISSIONS**

**The PSAT/NMSQT** (Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualification Test) is offered primarily to 11<sup>th</sup> grade students. The test is a version of the 3-hour SAT and is the qualification test for the National Merit Scholarship winners. The PSAT tests in the areas of critical reading, mathematics and writing skills.

**The SAT (Scholastic Aptitude Test) and the ACT (American College Testing)**: Is given throughout the school year at various test centers. Currently, all New York State operated Colleges and Universities and the majority of New York State private schools no longer require the exam(s) for admissions purposes. Therefore, student will need to decide if they want to take the exam. That decision can be made by consultation with parents, School Counselors, teachers, and after reviewing the requirements of colleges/universities of interest. If after researching schools of interest and if any schools require the exam or the student is unsure of potential colleges/universities of interest they should take the exam(s).

### ***GUIDELINES FOR PLANNING A HIGH SCHOOL PROGRAM***

Students and parents should study the overall curriculum carefully to plan a program which will best serve the student's goals and ambitions. The following questions are useful in planning:

1. Will the subjects I select enable me to meet the requirements for graduation?
2. Will I meet the minimum entrance requirements for schools beyond high school?
3. Are my subjects consistent with my career goals?
4. What course of study should I choose to provide an opportunity to participate in a BOCES vocation or technical program?
5. Am I taking a course load that is rigorous and challenging?

In addition to the brief course descriptions contained in this booklet, each counselor can share additional information about various programs. The following suggestions are offered regarding the choice of subjects.

1. A typical student schedule is at least six (6) subjects per year, plus physical education.
2. Students who plan to attend college are strongly urged to complete four (4) years of English, social studies, science, mathematics and second languages. This is the best preparation to succeed at the college level.
3. Students planning to obtain a technical education should plan a minimum of three (3) years of college preparatory science and mathematics.
4. All science classes ending with a state exam require lab periods in addition to class period. Students will not be allowed to take a state exam if a minimum number of labs are not completed.



## **FOUR-YEAR PLANNING WORKSHEET**

### **GRADE 9            2024-2025**

English 9

Global Studies I

Living Environment

Math\_\_\_\_\_

Art/Music\_\_\_\_\_

Spanish II

Physical Education

\_\_\_\_\_

\_\_\_\_\_

### **GRADE 10            2025 - 2026**

English 10

Global Studies II

Earth Science

Math\_\_\_\_\_

Spanish III

Health

Physical Education

\_\_\_\_\_

\_\_\_\_\_

### **GRADE 11            2026- 2027**

English 11

US History & Government

Science\_\_\_\_\_

Math\_\_\_\_\_

Physical Education

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### **GRADE 12            2027- 2028**

English 12

Economics

Participation in Government

Physical Education

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1. After careful consideration of possible selections, each student is encouraged to use a pencil in filling in the above chart with required and elective course choices.
2. All students are encouraged to be in 30 periods of instruction each week (6 classes each day) in addition to physical education.
3. Elective courses are any courses that a student wants to enroll in to further enhance their overall high school program beyond those required to earn a diploma.

# COLLEGE CREDIT PROGRAM

Students can earn college credits in English, mathematics, social studies, science, foreign language, computer, art and music at a fraction of the cost. Credits can be earned through CLEP, AP and in conjunction with local colleges.

**Advanced Placement** (AP) exams, given in the spring, reflect college level work.

- AP English Language & Composition
- AP US History
- AP Computer Science
- Ap Computer Science A

**Local Colleges** offer course work that reflects college courses offered at their campuses.

- English (Niagara County Community College)
- Pre-Calculus (Niagara County Community College)
- Calculus (Niagara County Community College)
- Statistics (Niagara County Community College)
- Biology (Niagara County Community College)
- Music Theory (Niagara County Community College)
- Digital 2D Animation (Niagara County Community College)
- Spanish IV (Niagara County Community College)
- Spanish V (Niagara County Community College)
- Sociology (Niagara University)
- US History (Genesee Community College)
- Studio Art (Genesee Community College)
- Drawing (Genesee Community College)
- Digital Imaging & Graphic Design (Genesee Community College)

*\* Availability of courses is dependent on enrollment and Board of Education approval.*

A fee is required for AP and CLEP exams and to receive college credit at Barker Central School or through the Niagara-Orleans Career and Tech-

# NCAA INITIAL-ELIGIBILITY CLEARINGHOUSE

To establish eligibility to compete in NCAA sports your first year at a Division I or Division II school you must meet the following requirements: completion of core-course requirements, minimum Grade Point Average in core courses, and submit final transcript with proof of graduation to the Eligibility Center.

**High School Core Classes** - Required for initial eligibility Division I & II:

## ***Division I 16 Core-Course Rule***

16 Core Courses:

- 4 years of English
- 3 years of mathematics (algebra 1 or higher)
- 2 years of natural/physical science (1 year of lab if offered)
- 1 year of additional English, mathematics or natural/physical science
- 2 years of social science
- 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy)

Ten (10) core courses completed before the seventh semester; seven (7) of the 10 must be in English, math or natural/physical science

## ***Division II 16 Core-Course Rule***

16 Core Courses:

- 3 years of English
- 2 years of mathematics (algebra 1 or higher)
- 2 years of natural/physical science (1 year of lab if offered)
- 3 years of additional English, mathematics or natural/physical science
- 2 years of social science
- 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy)

## ***Grade Point Average***

Minimum 2.3 core-course GPA.

### **High School Grade Point Average Conversion Chart**

<b><i>Numeric</i></b>	<b><i>Point</i></b>
90-100	4.0
80-89	3.0
70-79	2.0
65-69	1.0
0-64	0.0

Division I and II colleges require each student/athlete to submit the NCAA Initial Eligibility Clearinghouse Form with payment. This form is available at [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net). Students are encouraged to meet with their counselor as soon as possible if they intend on becoming a student/athlete in college. The NCAA recommends that students complete the Initial Eligibility Clearinghouse Form during the spring of their junior year to ensure that eligibility requirements are met.

# ENGLISH



## **English 9**

1 year—1 credit

Final: local exam/portfolio

This course is designed as a transition between Jr. high school and the rigors of high school English. The focus is on literature and writing with extensive journal writing, novel, and short story reading. Logical and critical thinking skills are emphasized, along with critical analysis of literature and writing. Vocabulary development is facilitated with exercises designed to reinforce multiple intelligences; high school level grammar is taught and practiced. Both grammar and vocabulary are reinforced and used in the writing and literature in which students engage. Various independent readings are assigned, along with written responses. Public presentation and research skills are also addressed. This course reinforces the skills and knowledge required by the new Common Core Learning Standards.

## **English 10**

1 year—1 credit

Final: local exam

English 10 provides students with the tools necessary to improve in writing, reading, and critical thinking. This course includes the study of world literature. You will read from a variety of literary genres including Shakespearean drama, American screenplays, novels, memoirs and short stories. Weeklong creative writing workshops will be implemented, and grammar and spelling development will be part of every unit presented, as well as speaking experiences.

## **English 10 Honors**

1 yr—1 credit

**Weight: 1.03**

Final: local exam

**Recommendation:** 90% final avg. Eng 9 & completion of summer reading assignment.

Designed for students who thoroughly enjoy reading, writing and critically analyzing literature. The focus of English 10 Honors is the study of world literature. Students will read a variety of literary genres to understand the universality of the human experience and to develop his/her abilities to interact intelligently with others. Summer reading is a requirement.

## **English 11**

1 year—1 credit

Final: state exam & project

English 11 will focus on skills and materials appropriate for college and world preparation. Included will be extensive study of American literature, research and analysis of non-fiction, English grammar, usage and vocabulary, and composition. Students will be proficient at answering composition questions involving literary analysis and will read poetry, essays, short stories, novels and dramas by major American authors. Students will further develop independent reading skills through reading workshop projects covering various genres. Since the New York State Regents English Comprehensive Exam and the PSAT & SAT are scheduled during the year, much of the course is oriented toward the skills and knowledge needed for the student's successful testing experience.

## **Journalism:**

1 year--1credit

Final: local exam

Journalism class covers such topics as the history and responsibilities of mass media, news writing and characteristics of a "good story," photography, meeting deadlines, newspaper and yearbook design. It is designed for students already adept in English grammar and writing skills. Prerequisite: Students must receive instructor's permission. GR. 9-12

## **AP English Language**

1 yr—1 credit

**Weight: 1.06**

Final: state exam/project

**Recommendation:** 90+ ELA average and recommendation of Eng 10 teacher

Designed as a college writing course with emphasis on preparation for the Advanced Placement exam in May, this class is a significant departure from conventional ELA courses in both content and rigor. Instruction will focus on higher-level thinking skills such as rhetorical analysis of non-fiction texts, annotated reading strategies, narrowly-focused writing assignments, and composition, revision, and editing techniques required for college-level work. Each week, participants are responsible for independently analyzing challenging texts and responding with specifically developed essays of at least 500 words. While students will also take the New York State Regents English Comprehensive Exam, direct, in-class instruction for that test will be minimal. Participants will be given ample opportunity to prepare independently through graded homework assignments and after-school review classes. SAT preparation will be incorporated into AP and Regents instruction whenever possible. A mandatory summer reading project is required. ***Also, an exam fee (due in November) is required to sit for the College Board Advanced Placement exam in May. ALL students are expected to take the AP exam.***

## **English 12**

1 year—1 credit

Final: project & portfolio

Designed to prepare students for both college and the work world, English 12 is reading, speaking and writing intensive. Works studied include contemporary nonfiction, American literature, contemporary novels, poetry and short stories. Much of the course-work focuses on reflective and practical writing and academic writing. The course also continues instruction in mechanics, grammar, and vocabulary. Students will complete an MLA-style research paper. The senior project is a major component of the course, in which students will conduct extensive research in order to explore avenues and opportunities for success in a particular career. This project is a requirement and counts as the final exam. Students will develop a professional credentials portfolio and practice public speaking in preparation for a professionally oriented career level employment interview.

## **English 12 College**

1 yr—1 credit

**Weight: 1.06**

Final: local, portfolio

**Recommendation:** 90%+ ELA & ELA state exam, Eng.11 teacher recommendation

The fall semester is a college writing course. Instruction will focus on higher-level thinking skills such as rhetorical analysis of non-fiction texts, annotated reading strategies, narrowly-focused writing assignments, and composition, revision, and editing techniques required for college-level work. Participants are responsible for independently analyzing challenging texts and responding with specifically developed essays of at least 500 words. Significant amounts of in-class instruction will focus on developing elevated language fluency, including advanced grammar, diction/vocabulary, and command of syntax. The spring semester introduces students to several genres of literature, and contemporary critical-theoretical approaches literary scholars use. Students read and write extensively in this course, arguing for their own interpretations, applying critical approaches to literature and incorporating secondary source ideas in thesis-driven analysis. Students will also be required to complete Barker's career oriented senior project. ***A fee is required to receive college credit from Niagara County Community College due both in September & January.***

# SOCIAL STUDIES



## **Global Studies I**

1 year—1 credit

Final: local exam

Prerequisite: Soc St 8

This is part 1 of a state mandated 2-year course. The content will be taught chronologically and the topics include an introduction to global history, the ancient world, expanding zones of Exchange and Encounter, Global Interactions and First Global Age up through the Renaissance. The emphasis will be on the themes of geography, belief systems, politics and economics. The course will concentrate on document analysis, Enduring issues and Enduring issue essays. Grade 9

## **Global Studies II**

1 year—1 credit

Final: state exam

Prerequisite: Global I

Global History and Geography is the second half of a two year course. The Regents exam will assess material covered in Grade 10 only. This course is designed to cover World History from 1750 to the present day. It is a cross-cultural chronological examination of the modern World. In order to fully understand the current day, it is essential to explore the beginning and development of trends which pave the way to today's experiences. Grade 10.

## **Global Studies II Honors**

1 year—1 credit

**Weight: 1.03**

Final: state exam

Prerequisite: Global I

**Recommendation:** 90% final average in Global Studies I

Global Studies II Honors incorporates the Global II curriculum and standards while also preparing students for Advanced Placement and collegiate courses. Students will be challenged with more complex writing assignments, deeper analytical activities and a rigorous approach to the curriculum. Students must be in good standing from Global Studies I to be recommended to this course. Grade 10.

## **US History & Government**

1 year—1 credit

Final: state exam

Prerequisite: Global 2

The course is a chronological survey in the history of the United States. Emphasis will be on the United States as a developing industrial and post-industrial nation. You will also study constitutional and legal issues. Throughout the course you will learn about the problems of our dynamic industrial society in an increasingly complex and technology oriented world. Grade 11

## **AP US History**

1 year—1 credit

**Weight: 1.06**

Final: state exam

This course offers an overview of American history from the eve of colonization through present day. We will focus on the ideas and attitudes of ordinary Americans, as well as on the contributions of better known figures. Our goal is to understand not only what happened but also why it happened. Through lectures, readings videos, and discussions we will consider a wide range of scholarly interpretations. As the year progresses, you will be encouraged to make your own assessments about the events creating the American experience. Students are expected to keep up with the rigorous nature of the course, including weekly reading and writing assignments, and completion of a required summer assignment. ***An exam fee (due in November) is required to sit for the College Board Advanced Placement exam in May. Additionally, a fee is required to receive Genesee Community College credit due both in September and January. ALL students are expected to take the AP exam.*** Grade 11

## **Government & Economics**

1 year—1 credit

Final: local exam

Prerequisite: senior status

This full-year course seeks to combine both twelfth grade graduation requirements: Participation in Government and Economics. Participation in Government aims to provide students with opportunities to become engaged in the political process by acquiring the knowledge and practicing the skills necessary for active citizenship. Throughout the course students will learn about the foundations of American democracy, civil liberties, rights, responsibilities and duties of citizenship, and the shaping of public policy. As part of course completion, students are required to complete a set amount of community service hours and specific community meetings designated by the district. In the Economics portion of the class, students will examine their individual responsibility for managing personal finances, the role of supply and demand in determining prices, and changes in the American workforce. Students will also explore the challenges facing the US due to the effects of globalization. This is a required course for graduation. Grade 12.

## **WW II and America**

S1 or S2-1/2 credit

Final: local exam or project

Prerequisite: None

The instability created in Europe by World War I (1914-18) set the stage for World War II—which broke out two decades later and would prove even more devastating. Throughout this course we will examine the Atlantic and Pacific Theaters, the roles of countries, leaders, soldiers, and everyday people in this destructive global war. A focus will be on the American war effort at home and in the Atlantic and Pacific Theaters.

## **Introduction to Psychology**

S1—1/2 credit

Final: project

Prerequisite: senior status

An elective designed to introduce students to the vast and diverse field of psychology. Students will learn the principles, concepts and theories that constitute the core of the study of psychology. The main objective is to give students the knowledge to better understand themselves, their lives and their communities. Topics of study include sensation and perception, consciousness, learning, intelligence, memory, thinking and language, and motivation and emotion. Grades 11-12

## **Niagara County History:**

Prerequisite: None

S1—1/2 credit

Final: local exam

This semester-long course focuses on the study of Niagara County from the time of the Native Americans to the present. Throughout the course, students will be introduced to historical locations, events, and people throughout the county including: Fort Niagara, the Erie Canal, Niagara Falls, the Underground Railroad, Belva Lockwood, the Sutherland Sisters, Birdsill Holly, and Homan Walsh. To research these topics, students will become acquainted with and utilize different resources from local organizations in our area including the Town of Somerset Historian, the Town of Somerset Historical Society, and the Niagara County Historical Society. Part of the course will also focus on the local history of the Town of Somerset and the Village of Barker, including the Babcock House, the Salt Spring, and the 30 Mile Point Lighthouse. Through this course, students will hopefully gain a deeper appreciation for our local history and the impact that Niagara County has had not only on New York State, but the United States as well. Grades 11-12.



# MATH



## **Pre-Algebra**

1 year—1 credit

Final: local exam

Prerequisite: Math 8

This course will be an introduction to the basic skills and concepts required to take common core algebra 1 as a sophomore. Topics included in this course will be linear equations, linear inequalities, systems of linear equations, functions and inequalities, functions, linear functions, polynomials, factoring, quadratic equations and functions, exponential functions, and Data analysis. The focus for this class is to prepare for the common core algebra 1 state exam in June of the sophomore year. Grade 9

## **Algebra I**

1 year—1 credit

Final: state exam

Prerequisite: Math 8 or Pre-Alg

This is the first course for the State Regents Mathematics requirement for graduation given in Barker. Passing the Algebra 1 Regents Exam is necessary for a New York State Regents Diploma. This course will require students to take notes, read a math text, study notes, take chapter tests, and take the cumulative state exam at the end of the year. Topics include: Linear Equations and Functions, Linear inequalities, Systems of Linear Equations and Inequalities, Exponents and Exponential Functions, Polynomials, Factoring, Quadratic Equations and Functions, Rational Expressions and Functions, and Data Analysis. Grades 9-10

## **Geometry**

1 year—1 credit

Final: state exam

Prerequisite: Algebra 1

The focal point of this course is the geometry content strand. The course will take the skills and concepts learned in the algebra course and apply them to new geometric concepts. Topics covered will include geometric relationships, transformational geometry, coordinate geometry, constructions, and informal and formal proofs. Grades 10-11, accelerated 9

## **Algebra II**

1 year—1 credit

Final: state exam

Prerequisite: Geometry

This course is the last of the three courses in which you must pass a regents in order to meet the regents diploma with advanced designation requirements for mathematics. Topics covered will include the complex number system, regression equations, exponential functions, logarithms, statistics and trigonometric functions, graphs, and identities. Grades 11-12, accelerated 10

## **Math Exploration I & II**

1 year—1 credit

Final: local exam

Prerequisite: Algebra 1

To be taken by students who have successfully completed the algebra or geometry curriculum and passed the regents exam. The course is designed to help students understand how mathematics applies to all aspects of life using consumer and career math. Topics to be covered will be done by lecture, research, hands-on experiences, class activities, formal assessments and projects. The course will explore the world of work, career exploration, decision making, entrepreneurship, insurance and risk: life, health, disability and financial planning, personal finance, credit and debt, automotive expenses and research, earning and spending, living on a budget, professional development, professional examinations, and finding a job. We will also visit other topics of interest to the class. Grades 10-12

## Pre-Calculus/College

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1 year—1 credit

Final: local/college exam

Prerequisite: Algebra II

**Weight: 1.06**

**Recommendation:** 80% or higher alg II final ave

Topics introduced in integrated algebra, geometry and algebra II, including number theory, conics, and analytical geometry, will be discussed in more depth. There will be a strong emphasis on advanced algebra and trigonometry as well as a significant segment of time for verbal problems. Pre-calculus topics such as limits and functions will be studied. Further explorations with the scientific and graphing calculator will be included. Students will have the opportunity to earn four college credits from NCCC for this course. **A fee will be required to receive Niagara County Community College credit due in September.** Grades 11-12

### Calculus/College

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1 year—1 credit

Final: local/college exam

Prerequisite: Pre-Calc

**Weight: 1.06**

**Recommendation:** 85% or higher pre-calculus final ave

This course will include differential and integral calculus. The emphasis will be on application, although theory will be discussed in some topics. All students will have the opportunity to earn four college credits from Niagara County Community College for each semester enrolled. Students will have the option of submitting these credits to colleges of their choice for evaluation for transfer credit. **A fee is required for Niagara County Community College credit due both in September and January.** Grade 12

## Statistics/College

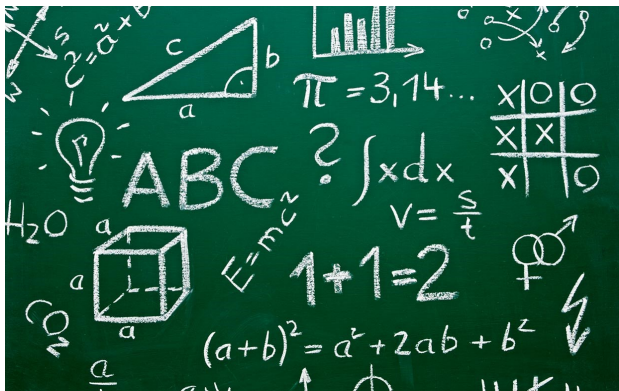
1 year—1 credit

Final: local/college exam

Prerequisite: Alg II & reg attd

**Weight: 1.06**

Introductions to statistical concepts including statistics, basic probability rules, conditional probability, probability distributions, estimation of parameters, hypothesis testing using one or two samples, correlation and regression. Students will have the opportunity to earn three college credits from NCCC for this course. **A fee is required to receive Niagara County Community College credit due in September.** Grades 11-12



# SCIENCE



## **Living Environment**

1 year—1 credit

Final: state exam/portfolio

Prerequisite: Science 8

Living Environment is a laboratory based science course which uses scientific inquiry to develop explanations of natural phenomena. Students are required to complete a minimum amount of laboratory experience time and submit written laboratory reports in order to be eligible to take the regents exam at the completion of the course. Seven biological themes are covered: Unity and Diversity; Dynamic Equilibrium; Genetics; Evolution; Reproduction and Development; Ecology and Human Impact. Grade 9

## **Earth Science**

1 year—1 credit

Final: state exam

Prerequisite: Liv Env

This course focuses on the dynamic forces at work on our planet and in the universe. Topics include the earth's inner structure, geologic history, weather, plate tectonics, oceans, and stars. In addition to the regular daily class workload, one additional period of laboratory work is required each week. Grade 10

## **Chemistry**

1 year—1 credit

Final: state exam/lab portfolio

**Prerequisite:** Gr 10-85+% Liv Env & adv Math; Gr 11-enrolled in a Math course

This course is a study of the structure of matter, changes in the composition of matter, and the principles that govern such changes. Some topics included are chemical bonding, acids and bases, electro-chemistry, organic chemistry, and chemical kinetics and equilibrium. In addition to regular classes, two laboratory periods per cycle are required. Scientific calculator is required. Grades 10-12

## **Advanced Chemistry/Honors**

1 year—1 credit

Weight: 1.03

Final exam: local

**Offered every other year.**

**Prerequisite:** regents Chemistry; enrollment in Algebra II or higher

Advanced college level study of chemical principles which include matter, the periodic table, the atom and bonding. Higher level math relationships will be studied. Laboratory investigations will be part of the class. A scientific or graphing calculator and a composition notebook is required. Grades 11-12

## **Physics**

1 year—1 credit

Final: state exam

Prerequisite: Algebra II

**Offered every other year.**

In this course you will study motion and energy, forces, electricity, magnetism, light, and nuclear physics. There is a considerable amount of mathematical content. In addition to this class, two laboratory periods each cycle is required. Grades 11 -12

### **Biology I & II/College**

1 year—1 credit

**Weight: 1.06**

Final: local exam/college

**Prerequisite:** 80%+ Chemistry final average, college Bio I for college Bio II

This course represents a two-semester study of topics in college general biology. Initial emphasis will be the study of the classification, structure and function of living organisms. The second semester will focus on human anatomy and function of the major organ systems. This course meets SUNY general education requirements for Natural Science (NS). Students, upon successful completion of both courses, will earn 8 credits from NCCC. This course is the equivalent of BIO 109E (General Biology I), and BIO 110E (General Biology II) plus labs from NCCC. A scientific or graphing calculator and a zip or flash drive is required. A large set of colored pencils is strongly recommended. **A fee is required for Niagara County Community College credit due both in September and January.** Grades 11-12

### **Forensics**

1 year—1 credit

Final exam: local

Prerequisite: Liv Env/Earth Sci

Forensic Science is geared toward the non-science/math major to fulfill the 3rd year science requirement. Students will incorporate the scientific method along with critical thinking skills to learn to solve criminal cases. Students will investigate topics such as observation Skills, Evidence collection, Study of Hair, Fiber and Textiles, Fingerprints, DNA and Blood Spatter. Students will focus on Toxicology, Handwriting Analysis, Cause of Death, Forensic Anthropology, Casts and Impressions, and Arson. We will round out the learning experience with two exciting activities. Students will be able to participate in an Autopsy via a Virtual Field Trip, and a cumulative project will be set up where groups of students will create a crime scene for other groups to analyze and solve. There is no separate laboratory session but required laboratory experiences will be incorporated into the regular class periods. Grades 11-12

### **Anatomy & Physiology**

1 year—1 credit

Final exam: local

Prerequisite: Living Env

Anatomy and Physiology is a course that will help prepare any student interested in pursuing a career in the medical and health fields including physical therapy, nursing, radiology and physical education. This course will help students to become more aware of the human body and to be better prepared for college A&P and biology classes. In the first semester, students will explore cell structure, biochemistry, tissue types, integumentary system and skeletal system. The muscular, cardiovascular, nervous systems and fetal development will be investigated during the second semester. Students have the flexibility of taking both semesters to earn one credit or taking one module to earn 1/2 credit. Grades 11 -12



# FOREIGN LANGUAGE



## Spanish II

1 year—1 credit

Final: local exam

Prerequisite: Spanish I

The emphasis continues to be on broadening the student's base of vocabulary. Basic writing skills will be developed by individual and group preparation of brief reports, skits, short letters and weekly compositions. Homework and class work will reinforce the grammar skills being presented. Students will be able to engage in short conversations concerning various everyday situations. Grade 9

## Spanish III

1 year—1 credit

Final: local exam

Prerequisite: Spanish II

Students will review the grammar learned in Spanish I and Spanish II. They will improve reading, writing, listening and speaking skills. Students will improve their oral skills through frequent discussions, oral presentations, and skits. Reading skills will be sharpened through the use of authentic documents and writing skills will be refined with weekly compositions. Culture will be infused throughout the entire course. Students are required to pass the locally developed exam as part of the requirement for the Advanced Regents Diploma. Grades 10-12

## Spanish IV/College

1 year—1 credit

**Weight: 1.06**

Final: local exam

Prerequisite: Spanish III

Course emphasis will be to encourage conversation in a casual setting. The focus will be on audio linguistic skills and review of Spanish grammar. Activities will include reading about and discussing current events, reading short stories, novels, plays and cultural information. Students will write and present skits, television advertisements and debates. Students will prepare various projects related to the Hispanic culture. The primary language of the classroom will be Spanish, with English used only as necessary. Spanish IV/College will give the student the opportunity to express creatively. At least one guest speaker will visit the class and will discuss some aspect of the Hispanic culture. **A fee is required for Niagara County Community College credit due in September.** Grades 11-12

## Spanish V/College

1 year—1 credit

**Weight: 1.06**

Final: project

Prerequisite: Spanish IV/C

Spanish V/College offers students the opportunity to continue studying Spanish and demonstrate basic proficiency in the understanding and use of a foreign language. The curriculum will be predominately culture and conversation. Students will focus on advanced grammar, cultural mores, idiomatic expressions, regional vernacular and spontaneous speech, and concepts not covered in depth in Spanish IV/College. Students who fulfill the requirements for the seal of biliteracy will receive the distinction on their diploma. **A fee is required for Niagara County Community College credit due in September.** Grade 12



# MUSIC



## **Sr High School Band**

1 yr—1 credit

**Prerequisite:** participation/member in school Band for 3 yr min.

This band plays concerts throughout the year and competes annually at NYSSMA (All-State), Darien Lake, as well as overnight trips all across the country. Students also have opportunities to compete individually and in small ensembles in county and state competitions and band festivals. Daily practice is necessary to be successful in this program. Weekly lessons are required.

Grades 9-12

## **Concert Choir**

1 yr—1 credit

Final exam: local

This Choir performs music from all styles, time periods and genres. There is a high expectation for behavior and excellence. Participation in this ensemble will be determined each year by the director. No audition is required for membership. Voice lessons, concerts, competitions and other trips will occur throughout the year. Concert attendance is mandatory. All are welcome regardless of prior experience. Grades 9-12

## **Music Theory/College**

1 yr—1 credit

**Weight: 1.06**

Final: local exam

**Prerequisite:** Music participation 3 yr. min., tchr approval, fluency in reading music

**Offered: every other year**

This course teaches the basic rules and principles involved in using the language of music by teaching students to analyze music aurally and visually. It fulfills a primary prerequisite toward the development of skills in composing, arranging, harmonizing, and improvising music. Ear training, keyboard skills and creative composition are emphasized. **A fee is required for Niagara County Community College credit due in September.** Grades 9-12

# BUSINESS



## **Accounting**

1 yr—1 credit

Final: local exam

Prerequisite: none

This course is designed to develop initial occupational competency in accounting. Students will learn to analyze and record business transactions, utilize source documents, record transactions in a variety of journals and prepare financial statements. This course may be used as a 3rd unit in math. Grades 10-12

## **Advanced Accounting**

S1—1/2 credit

Final: local exam

Prerequisite: Accounting

This course is designed to develop skills and attitudes, which are prerequisites of higher accounting education and accounting positions. Students will be able to analyze and interpret transactions, accounts and financial statements as a basis for sound business decision-making. Grades 11-12.

## **Career & Finance**

S1 or S2-1/2 credit

Final: local exam

Prerequisite: none

Students will have a better understanding of their roles as consumers, savers, investors, credit users as well as being a productive member of society. The focus of this course will be on various forms of earning a paycheck and the fringe benefits of a career; how taxes are computed for a paycheck as well as filling out some simple tax forms; learning the value of money management, credit calculations and costs, and budgeting; the costs of insurance and risk management; and the importance of saving, investing and planning for retirement. Students will complete an online budgeting simulation. This course introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. They study income and wealth; examine financial institutions; learn how businesses raise capital; and study key investment-related terms and concepts. They also research how innovations have changed the financial services field. Students explore careers that exist in finance today.

# ART



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## **Studio in Art College**

1 yr—1 credit

**Weight: 1.06**

Final: project

Prerequisite: none

Students explore a range of art forms including drawing, painting, printmaking and more. Emphasis is on understanding the elements of art and principles of design as a basis for composition. Interesting facts about artists and the works they created are critically analyzed throughout the course to spark interest, appreciation and understanding of the art world. This course is an introduction to the arts and is an ideal choice for students who wish to strengthen their creative potential and prepare for more advanced electives in the arts. **A fee is required for Genesee Community College credit due in September.** Grades 9-12.

## **Drawing College**

S1—1/2 credit

**Weight: 1.06**

Final: project

Prerequisite: Studio Art

This course is an introduction to the basic technical and perceptual approaches to drawing. Students will be working in a variety of traditional media such as charcoal, pastels, pencil, color pencil, markers and ink. Subject matter includes still life, nature studies, landscape and working from one's own imagination. The student will gain an understanding of the fundamental techniques of drawing as the primary means of documentation, communication and self-expression. **A fee is required to receive Genesee Community College credit due in September.** Grades 10-12

### Painting

S2—1/2 credit

Final: project

Prerequisite: Studio Art

This course is an introduction to the basic principles, media and techniques of painting in watercolor, acrylics and oils. The development of understanding color mixing, exploration of form, content and space is emphasized while working with abstract and realistic subject matters. The course synthesizes composition, creative thought and critical thinking. Grades 10-12

### Ceramics

S1 or S2—1/2 credit

Final: project

Prerequisite: none

This course introduces students to the nature and function of clay as an art medium. Students learn and apply a variety of subtractive and additive hand-forming techniques (pinch, coil, slab, carving) and other techniques to manipulate clay into a functional and/or sculptural art form. Grades 10-12

### Digital 2D Animation College

S1—1/2 credit

**Weight: 1.06**

Prerequisite: none

Students will explore the world of computer animation and will be introduced to various animating techniques. Students will learn how to use digital software to create computer graphics and generate animations through a variety of software programs. Throughout the course students will explore the history and evolution of animation and current trends in technology. **A fee is required for Niagara County Community College credit due in September.** Grades 10-12

### Digital Imaging & Graphic Design College

S2—1/2 credit

**Weight: 1.06**

Final: project

Prerequisite: none

This course will teach the fundamentals of digital imaging and graphic design through the creative process of combining art and technology to communicate ideas. Computer drawing, photography and design skills are utilized in projects that include creating logos, magazine covers, t-shirt designs and photo manipulations. Students interested in graphic design and photography would benefit greatly from this experience. Throughout this course students will learn Adobe Photoshop and Illustrator techniques to create their designs. **A fee is required for Genesee Community College credit due in January.** Grades 10-12

### Portfolio/Advanced Studio

1 yr—1 credit

Final: project

Prerequisite: 3 Art classes

Portfolio and Advanced Studio is for the serious art student and offers additional advanced level art experience. This course is designed for the student who wishes to further develop skills and techniques that were introduced in previous art courses. Preference will be given to students who are entering an art design field upon graduation. A major focus for each student is the development of a portfolio for evaluation and/or college admission. A range of media (drawings, paintings, sculpture, photography, etc.) techniques and concepts can be explored in their studio work depending on individual student interests, abilities and future aspirations. Students will develop confidence in their concepts and skills through a series of open-ended challenges that result in personal, relevant and meaningful works of art. Students gradually develop themes of personal interest in their studio and investigation work and will determine areas that they want to focus on independently. Grade 12



# TECHNOLOGY



## **Robotics**

1 yr.—1 credit

Final: project

Prerequisite: none

Student will learn robotics by designing, building and testing VEX robots in class and in competitions. Student will also learn how use 3D printers, laser engraver/cutter, and CNC routers to make beautiful modern projects. Grades 10-12

## **Design & Drawing for Production (DDP)**

1 yr.—1 credit

Final: project

Prerequisite: none

In this introductory technical drawing course, you will develop your 2-dimensional computer graphic drafting and drawing skills. It covers the base concepts and conventions and industry standards on which the rest of our AutoCAD classes are based. You will learn to create drawings of your designs, parts and assemblies of your design. Grades 9-12.

## **Materials Processing**

S1—1/2 credit

Final: project

Prerequisite: none

This class is a project-based course designed to familiarize students with all of the tools and machines that are commonly used to cut, bend, shape, weld and fabricate things. Major segments of the class are devoted to sheet metal fabrication, welding, use of torches for cutting and brazing, lathe turning and milling machine operation and composite materials. Grades 9-12

## **Product Research & Development**

S2— 1/2 credit

Final: local exam

Prerequisite: Material Processing

Students will design and build a project from scratch. Using 3D printing, laser cutting, and/or traditional tools they will build prototypes of their ideas and work to improve them before making a version that is good for production.

## **Production Systems**

S1— 1/2 credit

Final: local exam

Prerequisite: none

Students will complete a variety of projects using a large assortment of hand and power tools including computer-controlled router and laser. They will be introduced to basic furniture construction and basic cabinetry. Student will have some choice in the projects they complete.

## **Construction Systems**

S2—1/2 credit

Final: project

Prerequisite: Production Sysyems

In this course students will explore the application of tools and materials to design and produce wood-framed, residential structures. Students learn to work with blue-prints as well as estimating materials needed to build a typical house. Students explore career opportunities in the construction industry. Students may build a full-scale, partial section of a house containing a floor, walls, roofing, ceiling, wiring, insulation and plumbing. They will also produce a scale model, wood-framed house. Grades 9-12

### **Architectural Design & Drawing—course offered every other year**

1 credit

Final: portfolio

Prerequisite: DDP

This project-based course will use 2D skills from DDP and take a practical learning approach to cover the process of creating a 3D model in AutoCAD then rendering that model to realistic views. The students will 3D model all the architectural elements from a design and bring a modern house to life with real world lighting materials and render the final result. The class includes exploration of the history of architecture and great architects, and will build a scale model of a design. Grades 10-12

### **Computer Aided Drawing (CAD)**

1 yr—1 credit

Final: project

Prerequisite: DDP

**Offered: every other year, 2020-2021**

Students will solve drawing problems and complete drawings using Solidworks three-dimensional drawing software. Students will draw machine parts, screw threads, electronic schematics and gears. Students will also design a three-dimensional mountain bike. Grades 10-12

### **Game Development with JAVA script (Build your own I.O. game)**

S1—1/2 credit

Final: project

Prerequisite: none

See, how fun and rewarding it can be using JavaScript for building games. JavaScript games can be played in the browser or mobile phone. If your goal is to build games now to play online, this class is for you. Designed for the beginner or experienced JavaScript programmer, you will build your own .IO game Grades 9-12

### **Problem-Solving and Computing**

S2—1/2 credit

Final: project

Prerequisite: none

Have a Problem? Solve it with a computer. Problem Solving and Computing is an interactive and fun introduction to the programming field. You will practice using a problem-solving approach to address puzzles, challenges, and real-world scenarios through coding. Next, you will work in design teams to learn how computers input, output, store, and process information to help humans solve problems. The course concludes with a project in which you design an application that helps solve your chosen problem. Grades 9-12

### **AP Computer Science A**

1 credit

Final: Project

Prerequisite: Algebra 1

APCSA is a fun and interactive course emphasizing computer programming. It is designed to help students master the basics of object-oriented programming and design using the Java programming language and to pass the College Board AP Computer Science A Exam. ***An exam fee (due in November) is required to sit for the College Board Advanced Placement exam in May. ALL students are expected to take the AP exam.***

### **AP Computer Science**

1 credit

Final: project

Prerequisite: none

AP Computer Science Principles is a year-long course that introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Students will explore such big ideas as Digital Information, The Internet, App Design, How Data is Used, Cybersecurity, and Artificial Intelligence. It is suggested that the student complete at least a half-year of technology or computer science course. ***An exam fee (due in November) is required to sit for the College Board Advanced Placement exam in May. ALL students are expected to take the AP exam.***

### **Technical Drawing College**

1 credit

Final: project

Prerequisite: Junior Status

TEL 101 is College Credit bearing class. Students passing the course will earn credit through SUNY Oswego. Students will learn techniques of technical drawing to convey ideas and designs. Students will use engineering graphics as a tool for communication and problem solving. Course content will include a contemporary systematic process for the development of graphic representations (drawings) to communicate ideas, objects, or systems. Instruction will address standards and practice accepted as universal language within industry. Emphasis will be placed on skills development through hands-on laboratory experience.

## **Health, Safety, Physical Education**

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### **Health Education**

S1 or S2—1/2 credit

Final: local exam

Students will gain an understanding and apply skills necessary for lifetime physical, emotional, mental and social health. Topics of study include being a health consumer, how to evaluate health information, personality development, stress management, mental illnesses, suicide prevention, evaluating eating & exercise habits and setting goals to improve health, alcohol and drug use/abuse, reproduction and healthy pregnancy, infectious disease/STI's, the US Healthcare system and global health issues. Grades 9-12

### **Physical Education**

S1 & S2—1/2 credit

In grades 9 through 12, students are involved in individual games, team, fitness and cooperative activities. The following units are included in the curriculum: outdoor education, table tennis, pickle ball, badminton, tennis, golf, aerobics, dance, swimming, basketball, volleyball, softball, soccer, flag football, field/floor hockey, frisbee activities, orienteering, team handball, fitness activities, outdoor picnic games and physical fitness testing. Each student is required to change for physical education (shorts, sweats, sneakers). Grades 9-12

### **Weightlifting**

S1 or S2— 1/2 credit

Students will perform various weight lifting exercises to improve on sports performance and general physical preparedness for a healthy life style.

### **Dance Aerobics**

S1 or S2— 1/2 credit

Dance Aerobics is available to students in grades 9-12. The course will be an introduction to a variety of dance styles, aerobics, and yoga. There is a high expectation for behavior and willingness to participate. No prior experience is necessary. All students participating may need to wear exercise clothing or bring a change of clothes for participation.

## VOCATIONAL EDUCATION

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***Vocational Education*** may be for any student who plans to enter the labor market after completing high school. A student who is mature for his age and has learned to cooperate with teachers and fellow workers has the most to gain from the program. Students who still exhibit immature behavior are dangerous to have in a program where they are working with machinery valued at many thousands of dollars and capable of causing injury.

The following is a listing and a brief description of each course currently available. Students who elect to participate in one of these programs are scheduled to take English, social studies and physical education at Barker and devote the remainder of the school day to training in their chosen occupational area at the Vocational Center. A one-year program earns 3 credits, two-year program earns 6 credits. Programs are for juniors and seniors, exams are local.

### **Adv Manufacturing/Engineering**

This program is designed to develop skills which will allow students to obtain employment in the Advanced Manufacturing and Engineering Fields. Students will be exposed to Precision Machining, Computer Aided Design and Welding Technologies, experiencing the interaction of multiple technologies in a real manufacturing environment and from field trips to local industries. All students will follow approved industry methods and engineering standard while learning to fabricate industry specific metal products.



### **Animal Science**

This program is for students who have a desire to work with large or small animals. Throughout the program students will recognize the important roles animals play in society from individual ownership to scientific research with far reaching implications. This course teaches specialized and advanced skills in areas such as veterinary assisting, care and handling of animals in a laboratory or veterinary setting, dog grooming, and kennel/pet shop management.

### **Animation and Video Production**

Our college-level media production facilities include digital video and audio equipment, a green screen and studio space, and Macintosh workstations. Students are trained to use industry-standard software, including Adobe Flash, Apple Final Cut Pro, Motion, Blender, Audacity, Adobe Photoshop and Adobe Illustrator.

## **Auto Body**

This program is for students who want to learn to repair, refinish and paint automobile bodies, fenders and frames. They also learn about body trim, hardware, door locks, remote controls and glass window regulators. NOCTI, I-CAR and ASE certified.



## **Automotive Technology**

This program is designed to help prepare students who want to enter the automotive field in an independent repair facility, a new or used car dealership, a fleet of maintenance repair shops or a parts distribution facility. NATEF and AYES certified.



## **Building Trades**

This program is designed to prepare students to enter directly into the construction field or continue their education at a post-secondary level. Students build small projects and work as a team to build full-scale projects. They also use their skills to work on service projects in the local community.

## **Certified Personal Trainer**

This program is designed for students seeking competency in health, fitness and exercise instruction. Students perform fundamental health and fitness assessments and learn to design and implement fitness programs. Students are provided with the most relevant scientific information regarding the assessment, design and implementation of safe, effective and efficient personal exercise instruction.



## **Computer Technology**

Students will learn all aspects of computer technology including standard software packages, operating systems and hardware architecture. Students will be able to describe internal components of a computer/laptop, assemble a computer system, install an operating system, troubleshoot using system tools and diagnostic software, explore networking, programming and multi-media.

## **Conservation**

This program is designed to give students a better understanding of our natural resources and the reasoning for preserving them with activity based learning experiences.

## **Cosmetology**

Students will learn the latest techniques and apply them in a full service salon which is open to the public. After students have successfully completed 1000 hours of cosmetology they are prepared to apply for licensing through New York State.



### **Culinary Arts**

Students are exposed to a variety of careers within the culinary arts and food preparation field. Students will become familiar with the workings of a modern kitchen while preparing foods of various types. This program qualifies students for acceptance at post-secondary schools specializing in training necessary to become master chefs, restaurant managers, owners, or instructors of culinary arts trades.



### **Diesel Technology/Heavy Equipment**

This program should be considered by students interested in working with machines in the construction, agriculture, trucking and bus industry, lawn and garden industry, small engine automotive, welding, industrial machine maintenance and armed forces.

### **Early Childhood Education**

Students spend time teaching preschool children and gaining hands-on experience working in the on-site preschool program (ages 2-5). The curriculum includes several professional development opportunities such as Disabilities Awareness training, CPR, Standard First Aid, SAVE, and Identification/Reporting of Child Abuse.

### **Electricity/Electronics**

Students will study electronics technology with many analog and digital projects to build. Residential house wiring and industrial motor control along with training on PLC's are included. Classes may wire a modular home or work on projects outside the center.



### **Emergency Medical Services**

This program focuses on the skills required for certification and advancement in the field of Emergency Health Care/Pre-Hospital Care. Multiple certifications are offered in this program including; American Heart Association First Aid, NYS Emergency Medical Technician Certification and NHTSA Certification.



### **Fashion Design and Interior Decorating**

Upon completion of this course, students will be able to use geometric concepts to create paper patterns and perform mathematical computations related to apparel and textile industry. They will also be able to perform basic maintenance on domestic and industrial sewing machines and trouble shooting sewing machine operations. Students will analyze and adjust patterns for various figure types using a toile and sloper as well as demonstrate basic patternmaking system of flat patter, pattern drafting and draping. Measuring and layout skills will be performed and students will be able to differentiate market segmentation and develop market research strategies.

### **Graphic Communications-Digital Design/Production**

This program was developed by combining art, design, technology and production. Students learn the skills involved in the creation and production of graphics projects from print to new media. Students will discover and enjoy the promotional world of advertising and marketing.

### **Allied Health Tech Prep**

Students in this program gain firsthand knowledge of current and emerging opportunities in health care. The program begins by teaching the fundamental knowledge and behavior required to work in the health care field. Students are encouraged to explore and experience a variety of health professions through shadowing experiences. Once students identify a particular area of interest, they are matched with a mentor and assigned an internship.



### **Health Occupations Technician**

This program focuses on the art and science of providing patient care with real life experience in a variety of health care settings. This is a very active program with classroom, lab and clinical components. Upon successful completion, students are eligible to take the NYS Nursing Assistant Certification exam. Also included is the NYS Health Education Core giving the student **high school health credit**.

### **Heating/Ventilation/Air Conditioning and Refrigeration**

This program provides students with employable skills in the service and installation of residential and commercial heating, air conditioning and refrigeration units. A comprehensive technical and hands-on training program that covers all critical aspects of the HVAC/R field. Students will understand refrigeration, cooling systems and heating units. Students will learn to install, maintain, troubleshoot and repair both residential and commercial systems in a fully operational HVAC/R lab. Instruction includes wireless and Wi-Fi control systems. NOCTI and OSHA certification is available to all students.



### **Security & Law Enforcement**

Students interact with many guest speakers from the criminal justice field and visit numerous agencies to learn about this career field. This program will orient the student to careers and introduce them to the criminal justice system. NOCTI certification is available to all students.

### **Web Development & Game Programming**

This program is geared toward students interested in exploring the creativity and technology of web and game creation. Using industry-standard software and development tools, students in this program will learn the importance of user-interface design, as it relates to both web and game creation.

### **Welding**

This program is designed to develop skills in all areas of welding and metal fabrication, but most specifically those areas where there is the greatest employment potential. It is set up with a structured step-by-step order for moving through the various welding methods and processes.





## **GUIDANCE & COUNSELING SERVICES**

The Barker Central School District provides guidance and counseling services to every student as a person of inherent worth, differing from each other with respect to intellectual ability, interests, values, skills and talents. Counselors provide a friendly, non-judgmental atmosphere where they help students:

- ✓ learn about themselves, their interests, values and abilities
- ✓ explore alternatives
- ✓ reach decisions
- ✓ carry out plans of action
- ✓ assist parents and teachers as they work with students
- ✓ provide opportunities to discuss ways of improving grades and overcoming academic difficulties
- ✓ assist in program planning and meeting graduation requirements
- ✓ provide students with opportunities to obtain career and educational information
- ✓ provide opportunities for career and post-high school planning
- ✓ provide opportunities to discuss concerns and share information with students, parents and teachers
- ✓ provide information and suggestions for referrals to appropriate community services as needed

The Guidance Office is open daily from 7:30 AM to 3:30 PM. Counselors are available during regular school hours and by appointment. Students are encouraged to meet with their counselor and to request an appointment when needed.