# Registration Guide

BASA

BARROW ARTS & SCIENCES ACADEMY

2021-22

*Every effort has been made to ensure the accuracy of the information provided in this guide; however, Barrow Arts & Sciences Academy (BASA) reserves the right to amend any information contained herein, without notice. Parents and students are encouraged to communicate with the school counseling department and school administration to obtain the most up-to-date and accurate information regarding registration, scheduling, and classes.*

*TITLE VI AND TITLE IX NOTIFICATION The Barrow County School District does not discriminate in its education and employment programs on the basis of religion, age, race, color, national origin, gender, marital or parental status, and disability. This district complies with Title VI of the Civil Rights Act of 1964, Title IX education amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990 and the Perkins CTE Act of 2006. Inquires may be made to the respective coordinator regarding Title VI (Dr. Brad Bowling), Title IX (Dr. Ken Greene) and the Perkins Act (Dr. Jennifer Wood) or Dr. Matt Thompson regarding 504 and ADA at: Barrow County Schools, 179 West Athens St. Winder, GA 30680, 770-867-4527.*

# Registration Guide

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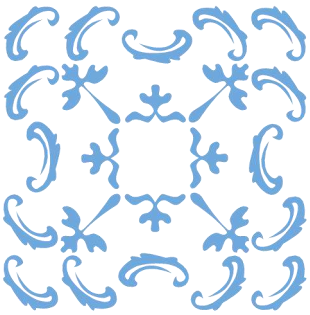


## Magnet application Procedures

Information sessions about Barrow Arts & Sciences Academy (BASA) are held in late October and early November, both virtually and in-person. An online application must be submitted by mid-November. Students will be notified of acceptance in late November and must accept or decline acceptance before Winter Break. Students will complete course requests for the upcoming school year during January or February.

## Registration Procedures

Prior to enrolling students who are new to Barrow County Schools, parents should go to https://www.barrow.k12.ga.us/departments/student-registration

Have the following on-hand before you begin the registration process:

1. Proof of Residency (dated within 30 days) such as a utility bill (electric, gas, water, cable/satellite, garbage or house phone), settlement statement or rental/lease agreement. If you're living with someone and do not have proof in your name, contact registration@barrow.k12.ga.us. Possible needed forms: Multi-Family Residence Certificate Form or Certificate of Rental Agreement

2. Student's Social Security Card (which is used solely for the purposes of identification and for application for the Hope scholarship and other post-secondary applications). Parents have the option of signing a waiver stating that they do not wish at the time of enrollment to provide a Social Security number

3. Student's Birth Certificate or other acceptable proof of age and identity

4. Georgia Immunization Form 3231

5. New Health Form 3300

## Course Selection

New students are seen individually by the magnet director, school administrator, or school counselor to complete the course requests for the next year. During this meeting, students have the opportunity identify the magnet pathway they desire. The counselor will work with the students to develop a plan that ensures that the student will meet the high school graduation requirements on time.

Students are encouraged to take the most rigorous courses possible in order to create a transcript that provides multiple options after high school graduation: 4-year college, 2-year college, technical school, military, or workplace. Students and parents should consider standardized test scores, grades, and teacher recommendations when selecting courses and levels. Students who wish to take a more rigorous course than is recommended must have a waiver signed by a parent/guardian before being enrolled in the course. Waivers will be honored pending space available in the requested course.

## Schedule Changes

Once the spring registration process has been completed and course requests have been approved by parents, schedule changes are strongly discouraged and will require a parent conference with the counselor.

Schedule changes are possible for the following reasons:

- Failure of a prerequisite course,
- Credit Recovery through Foothills Academy,
- Course cancellation due to low enrollment or other scheduling constraints, or
- Computer/registration error (ex. schedule contains a course that is not on the schedule request form)

## School Administration

| Position | Name | E-mail address |
|---|---|---|
| Principal/CEO | Dr. Dale Simpson | dale.simpson@barrow.k12.ga.us |
| Assistant Principal | Lathan Pooser | lathan.pooser@barrow.k12.ga.us |
| Assistant Principal | Laura Watts | laura.watts@barrow.k12.ga.us |
| Magnet Director | Dr. Cheryl Guy | cheryl.guy@barrow.k12.ga.us |

## School Counseling staff

The School Counseling Department hours of operation are Monday through Friday 7:15 a.m. to 3:15 p.m.

| Position | Name | E-mail address |
|---|---|---|
| Director of School Counseling | Dr. Cindy Murphy | cindy.murphy@barrow.k12.ga.us |
| Registrar | Donna Reeves | donna.reeves@barrow.k12.ga.us |
| Dual Enrollment Co-ordinator | Sherri Perry | sherri.perry@barrow.k12.ga.us |

## School Contact Information

| | |
|---|---|
| Address: | 1007 Austin Road |
| | Winder, GA 30680 |
| BASA Phone: | 678-425-2903 |
| BASA Fax: | 706-521-4969 |
| Sims Phone: | 770-867-7467 |
| Sims Fax: | 678-425-0905 |
| Website: | https://www.barrow.k12.ga.us/schools/basa/ |

## Parent–School Communication

### Contact Information

Parents should keep the school updated as to changes in contact information. Home phone numbers, cell phone numbers, and email addresses can be updated by contacting the School Registrar, Donna Reeves, at 770-867-7467 or donna.reeves@barrow.k12.ga.us.

### Parent Portal

Parents may access grade information through ParentPortal. ParentPortal can be accessed on the Barrow County Schools' webpage (barrow.k12.ga.us) in the top right corner. To set up an account, parents need an e-mail address, and their child's school ID number and birthdate. If you have questions about ParentPortal, please contact School Registrar, Donna Reeves at 770 -867-7467or donna.reeves@barrow.k12.ga.us.

Within Parent Portal, you will see a display of the student's schedule with grades. If you click on the grade, it will open a detailed report of the individual assignments that are included in the grade calculation. Also, within ParentPortal, parents can choose to have a weekly e-mail sent with a grade update. This option will send an e-mail with a grade report directly to the parent's e-mail address each Monday morning.

### Parent Conferences

Parents who desire a conference with a teacher may schedule them through their child's teacher or the school counselor. Telephone or video conferences can also be arranged. Concerns about grades, curriculum, or instruction should be discussed with the teacher first. If no resolution can be reached, then contact one of the school's administrators.

### Remind App

Parents receive an invitation from the school and teachers to join Remind groups for the campus and specific classes, clubs, and teams. This app can help keep parents and students up-to -date on school activities and can be an important way to communicate last-minute changes to schedules, etc.

### Social Media

Follow the school on Facebook (https://www.facebook.com/basablazers/), Twitter (@BASABlazers) and Instagram (basablazers). Also check the school website regularly for updates.

## GEORGIA DIPLOMA REQUIREMENTS

| **Graduation Requirements for Georgia High School Diploma** | | **Prerequisites for Freshman Admission to University of Georgia System** | |
|---|---|---|---|
| **Students and parents must ensure that courses selected each year allow students to earn the following <u>minimum</u> credits for a Georgia Diploma:** | | **Students who plan to enter a 4-year college immediately after graduation should check the school's specific entrance requirements.** | |
| Subject | Units Required | Subject | Units Required |
| English/Language Arts | 4 credits | English/Language Arts | 4 credits |
| Mathematics | 4 credits | Mathematics | 4 credits (Algebra 1, Algebra 2, Geometry, plus one higher level math) |
| Science | 4 credits | Science | 4 credits (Two must have laboratory component, should have at least 1 unit of biology, 1 unit of physical science or physics, and 1 unit of chemistry, earth systems, environmental science, or an advanced placement course) |
| Social Science | 4 credits required by BCSS<br>(3 credits required by GA DOE: must include courses in World History, US History, US Government and Economics) | Social Science | 3 credits (must include one focusing on US studies and one unit focusing on world studies) |
| Physical Education/Health | 1 credit | PE or JROTC | 1 credit PE or 3 credits of JROTC |
| CTAE, World Language, and/or Fine Arts | 3 credits<br>(must complete 1 pathway) | World Language or Computer Science | 2 credits in the same world language or 2 credits in computer science with a coding/ programming emphasis |
| Electives | 4 credits | | |
| **TOTAL** | **24 credits** | | |
| | | Students planning to go to a 4-year college or university should take the American College Testing Assessment (ACT) or the Scholastic Aptitude Test (SAT). These test scores are used as one indicator of a student's potential to do college work. | |

## Promotion Policy

At the beginning of each school year, students who are in a high school diploma program must meet the following minimum requirements to be classified in the following grade levels:

10th grade – Must have earned at least 6 total credits

11th grade - Must have earned a total of 13 credits, including 2 English credits, 1 math credit, 1 science credit, and 1 social studies credit

12th grade – Must have earned at least 18 total credits

## Graduation Participation

No student may participate in a graduation ceremony who has not met, prior to the date of the ceremony, all of the requirements for receiving one of the following credentials:

Georgia High School Diploma – Issued to students who have completed each of the 23 units of credit prescribed by the state and have met all attendance requirements.

Alternate Diploma – Issued to Special Education program students who have received instruction through an adapted curriculum and who met all of their Individual Educational Plan (IEP) and attendance requirements.

## Planning for the Future

Goal: Workforce

Students who plan to work immediately after high school should take advantage of Career & Technology programs at Sims Academy of Innovation & Technology. Students should participate in School-to-Work activities, such as job shadowing and work-based learning, while in high school.

Goal: Technical School

Students who plan to attend technical school programs, such as Lanier Tech, should also take advantage of Career & Technology programs at Sims Academy of Innovation & Technology. Students applying for a technical school need to take the ACCUPLACER Next Generation Placement Test. For more information, contact the school counselor.

Goal: Military

Military recruiters visit schools to talk to interested students. Students who plan to enter the military should take the ASVAB (Armed Services Vocational Aptitude Battery) test given each fall and spring at the school. Register for the ASVAB in the School Counseling Office.

Goal: College

Students who plan to enter a college or university after graduation should investigate the specific entrance requirements. Students wishing to apply to college must take a college entrance exam such as the ACT (American College Testing Assessment) or the SAT (Scholastic Aptitude Test). These tests are used by colleges and scholarship selection committees as one indicator of a student's potential to do college work. Students should select the most rigorous courses available to prepare them for college work. Honors and Advanced Placement programs are recommended.

## Georgia Scholarship Eligibility Requirements

Visit www.Gafutures.org for detailed information about Georgia HOPE and Zell Miller Scholarship programs.

What is the HOPE Scholarship and what are the academic eligibility requirements?

The HOPE Scholarship is a merit based scholarship that provides assistance towards the cost of tuition at eligible public and private Georgia postsecondary institutions. A student must graduate from an eligible high school with a minimum 3.0 HOPE GPA (as calculated by GSFC) and meet specific rigor course requirements.

What is the Zell Miller Scholarship and what are the academic eligibility requirements?

The Zell Miller Scholarship is a merit based scholarship that provides full tuition at a public postsecondary institution and tuition assistance at an eligible private postsecondary institution. A student must graduate from an eligible high school as valedictorian or salutatorian (meeting the requirements of the HOPE Scholarship) or graduate with a minimum 3.7 Zell Miller GPA (as calculated by GSFC) along with a minimum combined score of 1200 on the math and reading portions of a national administration of the SAT or a minimum composite score of 26 on a single national or state/district administration of the ACT and meet specific rigor course requirements.

What are rigor course requirements?

Students graduating from an eligible high school must meet rigorous course requirements (in addition to other requirements) in order to be eligible for the HOPE and Zell Miller Scholarships. Discuss course options with your high school counselor if you are not sure whether a course meets the rigor requirement. Students who graduate on or after May 1, 2017 must earn four rigor course credits.

## Grade Point Averages (GPA)

A student's rank in class is determined by two factors: the actual grade a student makes in the class and the weight factor (quality points) for that particular course. A student can receive more quality points for the same class by taking the course at a higher difficulty level. Barrow County Schools weights those courses taught at the honors and Advanced Placement levels. Postsecondary courses taken in the required core area are also weighted. Average level classes receive no additional weight. Weighted scores are determined in the following way:

Average courses Raw score x 1.00

Honors courses Raw score x 1.075

Adv. Placement courses Raw score x 1.10

Dual Enrollment/Postsecondary Options Raw score x 1.10

Both the raw score GPA and the weighted GPA will be reported at the end of each semester. Students do not receive any weight if a grade below 70 is received for a course. The weighted GPA is calculated by totaling the weighted score for all courses the student has taken and dividing by the total number of courses the student has taken. The weighted GPAs for each graduating class are then ranked from the highest average to the lowest average. Final class ranking is determined at the end of first semester of the school year.

## Class Rank and Honor Graduates

GPAs for Valedictorian and Salutatorian are calculated at the end of the seventh semester. For a student to be eligible for valedictorian and/or salutatorian for his/her graduating class, he/she must have attended Barrow Arts & Sciences Academy for four consecutive semesters during the junior and senior years.

**Valedictorian** – Valedictorian is the students with the highest class rank based on 7 semesters of work. The valedictorian is granted the opportunity to make the final remarks for the class in the Valedictory Address at the commencement exercises. The valedictorian will be designated as graduating "with highest honors."

**Salutatorian** – The salutatorian is the student with the second highest class rank based on 7 semesters of work. The salutatorian is granted the opportunity to welcome the graduates and their guests in the Salutatory Address at the commencement exercises. The salutatorian will be designated as graduating "with highest honors."

GPAs will be calculated to the one-thousandth decimal place. In the case of a tie for the highest honor, only 2 honor addresses will be given, the order of which will be determined by a coin toss. In the case of a tie for the second highest GPA, three honor addresses will be given, to include the Valedictory Address and two Salutatory Addresses, the order of which will be determined by a coin toss. In all other unusual circumstances, decisions regarding honor addresses will be made by a committee of faculty appointed by the principal.

**Honor Graduates** – The top 10% of graduates, based on class rank, will be designated as graduating "with honors."

## Course Failures & Repeating Courses

**Credit for Repeated Course (Failures)** – Students will be allowed to repeat courses when the final grade is F (0-69).

•Both courses will be reported on the student's transcript.

•Credit will be awarded only once upon passing the course when repeated.

•Both grades will be used in calculating the student's cumulative GPA.

**Credit for High School Courses Completed in Middle School** - Middle school students who attempt Carnegie unit courses for credit during middle school will have their grades recorded in the same manner as high school students. Courses will appear on the transcript and be used in calculating the student's GPA.

## Online Courses and Virtual Schools

**Georgia Virtual (GaVS) School Courses** – Students may enroll in GaVS courses when a desired course is not available through face-to-face instruction.

- Students must coordinate enrollment through their school counselor.
- Students may only enroll in one course at a time (except during summer school) and must complete that course before beginning another.
- Students who plan to apply for NCAA eligibility should verify that the course is accepted by the NCAA prior to enrollment (GaVS CEEB code is 110225).
- Students may not enroll in online courses for the regular school year after May 1.

**Other Virtual School Providers** – Students must have permission from the school principal PRIOR to enrollment in any online credit-bearing courses. The school will not accept credits for transcripts for any courses that were not pre-approved.

## NCAA Eligibility Standards

**Core Courses** – NCAA Division I and II requires 16 core courses. Be sure to look at the NCAA Eligibility Center's website for a list of approved courses (www.eligibilitycenter.org). Use that list as a guide.

Division I Core Courses: 4 years English, 3 years of mathematics (Algebra 1 or higher), 2 years of natural/physical science, 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 nondoctrinal religion/philosophy). Ten core courses must be completed before the beginning of a student's 12th grade year. Of the 10 completed, 7 must be in the areas of English, math, or science.

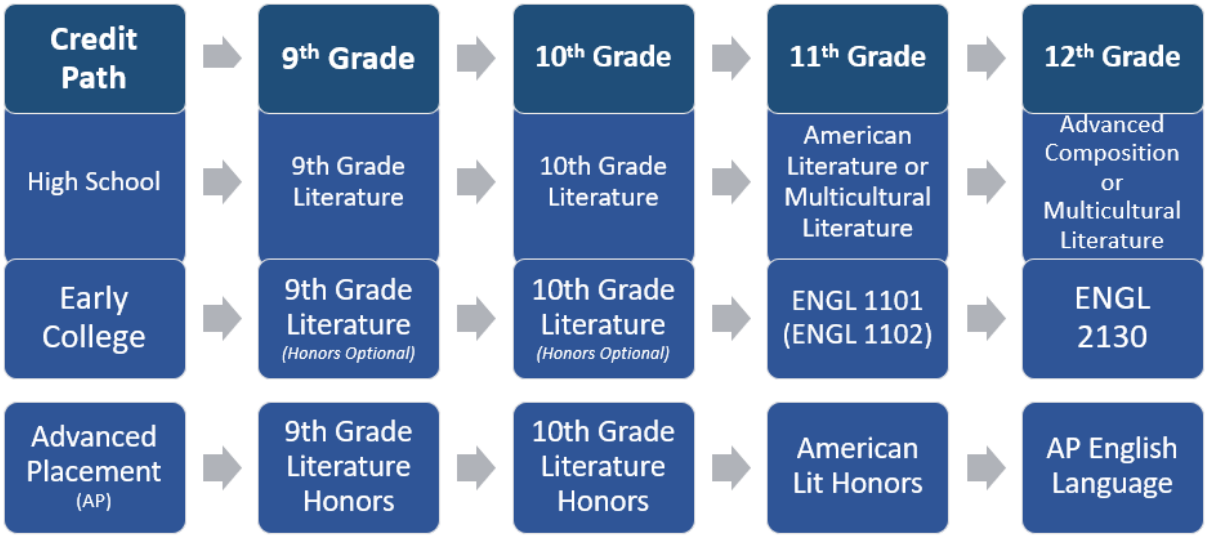
Division II Core Courses: 3 years of English, 2 years of mathematics (Algebra 1 or higher), 2 years of natural/physical science, 3 years of additional English, mathematics, or natural/ physical science, 2 years of social science, 4 years of additional courses (from any area above, foreign language, or nondoctrinal religion/philosophy).

**Grade Point Averages** – Only courses that appear on BASA's list of NCAA Courses will be used in the calculation of the NCAA core grade point average. Division I uses a sliding scale to match test scores and core grade-point averages. A minimum average of 2.3 is required for first-year collegiate competition. See NCAA website for the specific sliding scales. Division II requires a minimum core grade point average of 2.2 and a sliding scale is also used to match test scores and core GPAs.

**Test Scores** –SAT scores used for NCAA purposes includes only the critical reading and math sections (the Writing section is not used). The ACT score used for NCAA purposes is the sum of the following four sections: English, mathematics, reading, and science. When registering for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure that all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.

**Amateur certification** - Prospective student-athletes may register with the NCAA Eligibility Center (www.eligibilitycenter.org) as early as their sophomore year in high school. As part of the amateurism certification process, each prospective student-athlete will be asked to answer several questions regarding his or her sports-participation history.

## Language Arts Sequence




**Early College**
ENGL 1101 Composition & Rhetoric
ENGL 1102 Literature & Composition (Recommended for college requirements)
ENGL 2130 American Literature

**Advanced Placement**
AP English Language/Comp

**Online Learning**
Mythology
Speech

## English Courses

### 9 Lit

*Next in sequence: 10 Lit*

### 9 Lit Hon

*Next in sequence: 10 Lit Hon*

Grade: 9

This course focuses on a study of literary genres and informational texts; the students develop initial understanding of both the structure and the meaning of a literary work. The students explore the effect of the literary form in regards to interpretation. The students will read across the curriculum to develop academic and personal interests in different subjects. The students will also demonstrate competency in a variety of writing genres: argumentative, informational/expository, and narrative. The students will engage in research, timed writings, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of speaking and listening for a variety of purposes. The honors class is designed for students who want an extra challenge and are ready to accept significant responsibility for the learning process, including independent reading and extensive writing.

### 10 Lit

*Next in sequence: American Lit or ENGL 1101&1002*

### 10 Lit Hon

*Next in sequence: ENGL 1101&1002 or American Lit Honors*

Grade: 10

This course focuses on a study of literary genres and informational texts; the students develop understanding that theme is what relates literature to life and that themes are recurring in the literary world. The students explore the effect of themes in regard to interpretation. The students will read across the curriculum to develop academic and personal interests in different subjects. While the focus is writing argument in tenth grade literature, the student will also demonstrate competency in informative/expository and narrative writing genres. The student will engage in research, timed writings, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of speaking and listening for a variety of purposes. The honors class is designed for students who want an extra challenge and are ready to accept significant responsibility for the learning process, including independent reading and extensive writing.

### American Lit

*Next in sequence: Advanced Composition*

### American Lit Hon

*Next in sequence: AP Language & Composition*

Grade: 11

This course focuses on the study of American literature and informational texts, writing modes and genres, and essential conventions for reading, writing, and speaking. The students read a variety of informational and literary texts in all genres and modes of discourse. Reading across the curriculum develops students' academic and personal interests in different subjects. While expository writing is the focus in American literature, the students will also demonstrate competency in argumentative and narrative genres. The students will engage in research, timed writing, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking. The students demonstrate an understanding of speaking and listening for a variety of purposes. The honors class is designed for students who want an extra challenge and are ready to accept significant responsibility for the learning process, including independent reading and extensive writing.

### Multicultural Lit

Grade: 11, 12

The course focuses on world literature and informational texts by and about people of diverse ethnic backgrounds. Students explore themes of linguistic and cultural diversity by comparing, contrasting, analyzing, and critiquing writing styles and universal themes. The students write argumentative, expository, narrative, analytical, and response essays. A research component is critical. The students observe and listen critically and respond appropriately to written and oral communication. Conventions are essential for reading, writing, and speaking. Instruction in language conventions will, therefore, occur within the context of reading, writing, and speaking rather than in isolation. The students understand and acquire new vocabulary and use it correctly in reading, writing, and speaking.

### ENGL 1101 & 1102 (Dual Credit, Lanier Tech)

*Next in sequence: ENGL 2130*

Grade: 11

In ENGL 1101 students explore the analysis of literature and articles about issues in the humanities and in society. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a review of standard grammatical and stylistic usage in proofreading and editing. An introduction to library resources lays the foundation for research. Topics include writing analysis and practice, revision, and research. Students write a research paper using library resources and using a formatting and documentation style appropriate to the purpose and audience. (Dual Credit, 3 credits from Lanier Technical College)

ENGL 1102 Emphasizes the student's ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature in historical and philosophical contexts. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature. (Dual Credit, 3 credits from Lanier Technical College)

### AP English Language & Composition

Grade: 12

This course focuses on content, purpose, and audience as the guide for the students' organization in writing. The course will enable students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The students will compose for a variety of purposes with a clear understanding of writer's purpose, audience expectations, and subjects as well as the way conventions and resources of language contribute to writing effectiveness. Expository, analytical, and argumentative writings support the academic and professional communication required by colleges; personal and reflective writing support the development of writing facility in any context. Students will examine primary and secondary sources to synthesize materials for their writing. An AP syllabus will be submitted and approved by College Board. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

### Advanced Composition

Grade: 12

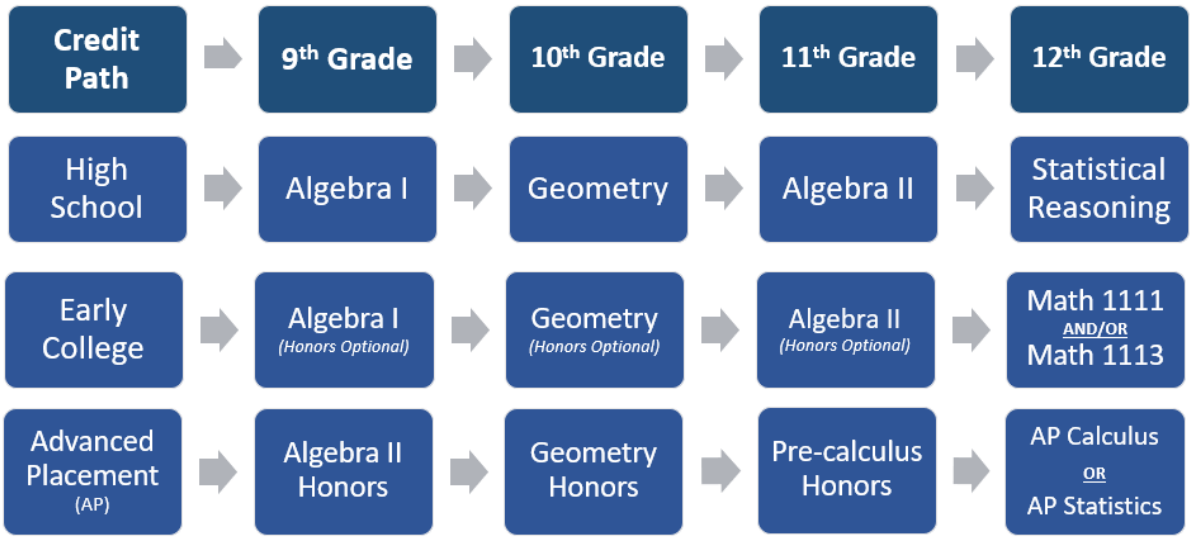
This course focuses on the writing process (planning, drafting, and revising). The students will focus on different writing genres and organizational structures: expository, argument, narrative, descriptive, comparison-contrast, exemplification, process analysis, classification, cause and effect, and definition. Advanced language skills (grammar and usage) will be a major component of this class. An emphasis on research is also required.

### ENGL 2130 (Dual Credit, Lanier Tech)

Grade: 12

ENGL 2130 emphasizes American literature as a reflection of culture and ideas. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Topics include literature and culture, essential themes and ideas, literature and history, and research skills. (Dual Credit, 3 credits from Lanier Technical College)

## Mathematics Sequence




**Early College**
MATH 1111 College Algebra
MATH 1113 Pre-calculus
*Georgia Tech Online:*
Linear Algebra
Multivariable Calculus

**Advanced Placement**
AP Calculus
AP Statistics

**Add'l Fourth Math Options**
Pre-calculus
College Readiness Mathematics

## Mathematics Courses

### Algebra 1

*Next in sequence: Geometry*

### Algebra 1 Hon

*Next in sequence: Geometry Hon*

Grade: 8, 9

This is the first course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. It includes a thorough study of linear, exponential and quadratic functions and graphs, systems of linear equations and inequalities, arithmetic and geometric sequences, solving literal equations, solving quadratic equations, and modeling data.

### Geometry

*Next in sequence: Algebra 2*

### Geometry Honors

*Next in sequence: Algebra 2 Hon*

Grade: 10, 11

This is the third course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. It includes fundamentals of proof, properties of polygons, coordinate geometry, right triangles, and right triangular trigonometry; properties of circles; and statistical inference. The honors level is rich in vocabulary, theorems, and postulates and will utilize advanced analytical methods to prove geometric relationships and will emphasize more advanced problem solving strategies.

### Algebra 2

*Next in sequence: Statistical Reasoning or MATH 111 and/or MATH 1113*

### Algebra 2 Hon

*Next in sequence: Pre-calculus Hon or MATH 111 and/or MATH 1113*

Grade: 10, 11

This is the second course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. In includes a thorough study of piecewise, absolute value, quadratic, polynomial, exponential, logarithmic and rational functions and graphs, solving logarithmic, exponential, quadratic and rational equations, rational exponents, inverse functions, complex numbers, composition of functions, and statistical sampling to make inferences about a population.

### Pre-Calculus Honors

*Next in sequence: AP Calculus-AB or AP Statistics*

Grade: 11

This is a course in pre-calculus and statistics, designed to prepare students to enter college at the calculus level. It includes rational, trigonometric, and inverse trigonometric functions; basic trigonometric identities and the laws of sines and cosines; conic sections; vectors; and probability. The honors level course is designed to offer students a foundation for AP Calculus courses, especially with limits and continuity. A graphing calculator is recommended for students in this course.

### MATH 1111

Grade: 12

MATH 1111 is a college algebra class that emphasizes techniques of problem solving using algebraic concepts. Topics include fundamental concepts of algebra, equations and inequalities, functions and graphs, and systems of equations; optional topics include sequences, series, and probability or analytic geometry.

### MATH 1113

Grade: 12

MATH 1113 is a college pre-calculus course. The topics discussed include an intensive study of polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs. Applications include simple maximum and minimum problems, exponential growth and decay.

### Statistical Reasoning

Grade: 12

Statistical Reasoning is a fourth mathematics course option for students who have completed Algebra I, Algebra II, and Geometry. The course provides experiences in statistics beyond the GSE sequence of courses, offering students opportunities to strengthen their understanding of the statistical method of inquiry and statistical simulations. Students will formulate statistical questions to be answered using data, will design and implement a plan to collect the appropriate data, will select appropriate graphical and numerical methods for data analysis, and will interpret their results to make connections with the initial question.

**AP Statistics**

Grade: 12

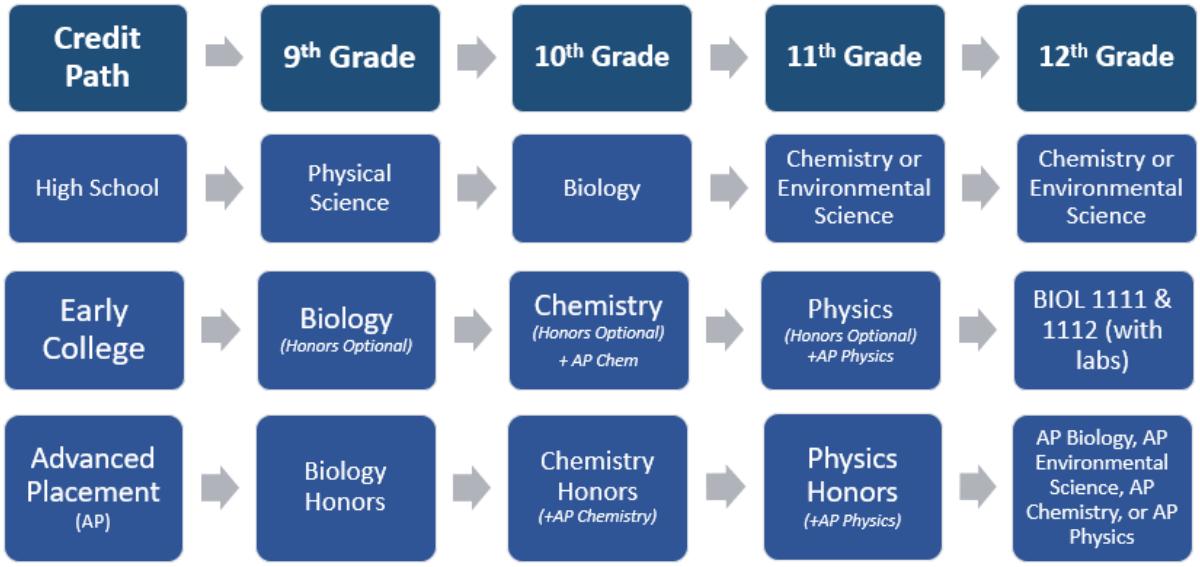
AP Statistics is a college-level course that focuses on the use of tools for collecting, analyzing, and drawing conclusions from data. Students will become familiar with statistical software for the computer and will design and conduct an experiment or survey on a topic of their interest. A graphing calculator is required for students in this course. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

**AP Calculus – AB**

Grade: 12

AP Calculus – AB is a highly rigorous course with an emphasis on a variety of functions and their rates of change. The derivative and area under the curve will serve as the theme of the course. Students will analyze various functions with a high emphasis on limits, intermediate value theorem, continuity, differentiation techniques, related rates, optimization, mean value theorem, integration techniques, fundamental theorem of calculus, and volume of solids. A graphing calculator is required for students in this course. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

## Science Sequence




**Early College**
BIOL 1111 – Biology I w/ Lab
BIOL 1112 – Biology II w/ Lab

**Advanced Placement**
AP Biology
AP Chemistry
AP Physics
AP Environmental Science

**CTAE *Counts as 4th Science***
AP Computer Science Principles
AP Computer Science A
Game Design: Animation & Simulation
Essentials of Healthcare
Essentials of Biotechnology
Sports Medicine

## Science Courses

### Physical Science

*Next in sequence: Biology*

Grade: 9

The Physical Science curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to have a richer knowledge base in physical science. This course is designed as a survey course of chemistry and physics. This curriculum includes the more abstract concepts such as the conceptualization of the structure of atoms, motion and forces, and the conservation of energy and matter, the action/reaction principle, and wave behavior. Students investigate physical science concepts through experience in laboratories and field work using the processes of inquiry.

### Biology

*Next in sequence: Chemistry*

### Biology Honors

*Next in sequence: Chemistry Honors*

Grade: 9

The Biology curriculum is designed to continue student investigations of the life sciences that began in grades K-8 and provide students the necessary skills to be proficient in biology. This curriculum includes more abstract concepts such as the interdependence of organisms, the relationship of matter, energy, and organization in living systems, the behavior of organisms, and biological evolution. Students will investigate biological concepts through experience in laboratories and field work using the processes of inquiry.

## Chemistry

*Next in sequence: Physics*

## Chemistry Honors

*Next in sequence: Physics Honors*

Grade: 10, 11

The Chemistry curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in chemistry. This curriculum includes more abstract concepts such as the structure of atoms, structure and properties of matter, characterization of the properties that describe solutions and the nature of acids and bases, and the conservation and interaction of energy and matter. Students investigate chemistry concepts through experience in laboratories and field work using the processes of inquiry.

## AP Biology

*Next in sequence: Additional AP science or Dual Enrollment*

Grade: 11, 12

This course is designed to be the equivalent of a two semester college introductory biology course usually taken by biology majors during their first year. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and on in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The topics covered on the course are molecules and cells, heredity and evolution, and organisms and populations.

## AP Chemistry

Grade: 10, 11, 12

*Next in sequence: Additional AP science or Dual Enrollment*

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. AP chemistry students should study topics related to the structure and states of matter (atomic theory, atomic structure, chemical bonding, nuclear chemistry, gases laws, kinetic molecular theory, liquids and solids and solutions), chemical reactions (reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics), and descriptive chemistry (chemical reactivity, products of chemical reactions, relationships in the periodic table, and organic chemistry). Extensive laboratory work is included. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

## Physics

## Physics Honors

Grade: 11, 12

The Physics curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in physics. This curriculum includes more abstract concepts such as interactions of matter and energy, velocity, acceleration, force, energy, momentum, and charge. This course introduces the students to the study of the correction to Newtonian physics given by quantum mechanics and relativity. Students investigate physics concepts through experience in laboratories and field work using the processes of inquiry.

**AP Physics– 1**

Grade: 11, 12

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Although this course is offered in the fall semester, students will take the AP Exam in May. Students are encouraged to pair this course with AP Physics - 2. See www.collegeboard.org for more information about the Advanced Placement program.

**AP Physics - 2**

Grade: 11, 12

AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

**Environmental Science**

Grade: 12

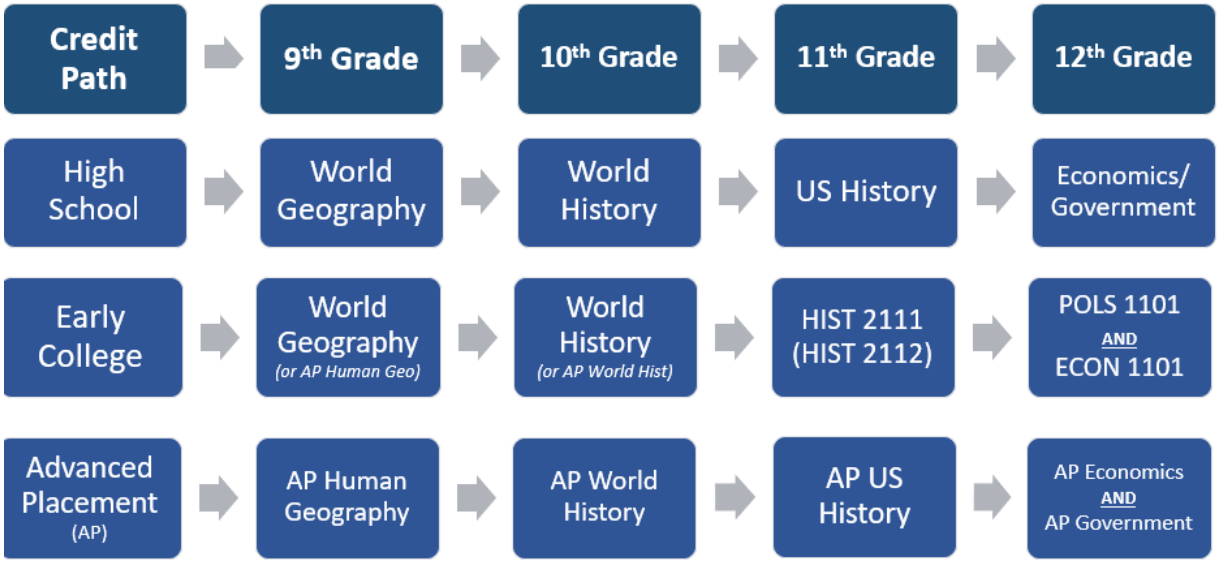
The Environmental Science curriculum is extensively performance, lab and field based. It integrates the study of many components of our environment, including the human impact on our planet. Instruction focuses on student data collection and analysis. Some concepts are global; in those cases, interpretation of global data sets from scientific sources is strongly recommended. Students utilize resources on the Internet for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts are integrated throughout the course. Whenever possible, careers related to environmental science are emphasized.

**AP Environmental Science**

Grade: 12

AP Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The following themes provide a foundation for the structure of the AP Environmental Science course: (1) Science is a process, (2) Energy conversions underlie all ecological processes, (3) The Earth itself is one interconnected system, (4) Humans alter natural systems, (5) Environmental problems have a cultural and social context, and (6) Human survival depends on developing practices that will achieve sustainable systems. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

## Social Studies Sequence




| Early College | Advanced Placement | Online Learning |
|---|---|---|
| HIST 2111 – US History (up to 1877) | AP Human Geography | AP Psychology |
| HIST 2112 – US History (after 1877) (recommended for college requirement) | AP World History | |
| | AP US History | |
| PSYC 1101 – Psychology | AP Macroeconomics | |
| SOCI 1101 - Sociology | AP US Government & Politics | |

## Social Studies Courses

### World Geography

*Next in sequence: World History*

Grade: 9

Students investigate regions of the world and how these regions influence the historical, economical, political and cultural development in an interdependent world. Includes geographic concepts, physical phenomena and the relationship of people to their environment, as well as environmental issues and decision-making skills. Content is organized around the five themes of geography: regions, location (position on earth's surface), place (physical and human characteristics), relationships within places, and movement (human interaction on the earth).

### AP Human Geography

*Next in sequence: AP World History*

Grade: 9

The purpose of AP Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Students must be committed to spending several hours per week on comprehensive reading, research, and writing assignments outside of class. Students take the AP exam in May. More information may be found at www.collegeboard.org.

### World History

*Next in sequence: US History*

Grade: 10

World History is survey course beginning with the earliest civilizations and highlighting important developments throughout the world until the early 21st century. The course includes topics related to Early Civilizations and Classical Empires; Growth, Expansion, and the Emergence of the Modern World; Global Interaction and Conflict; and the Contemporary World.

### AP World History

*Next in sequence: AP US History or HIST 2111*

Grade: 10

AP World History is a broad survey of world history from ancient civilizations to the present and includes the study of cultural, political, social and economic history. Research and writing skills are stressed and are designed to provide students with the analytical skills and factual knowledge necessary for success on the AP exam. Students take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

### United States History

*Next in sequence: US Government and Economics*

Grade: 11

United States History examines the history of the United States beginning with the British settlement of North America . The course's main focus is the development of the United States in the 20th and 21st centuries. The course includes topics related to Colonization through the Constitution; New Republic to Reconstruction; Industrialization, Reform, and Imperialism; Establishment as a World Power; and the Modern Era.

### AP US History

*Next in sequence: AP US Government & Politics and AP Macroeconomics or POLS 1101 and ECON 2105*

Grade: 11

AP United States History is a broad survey of American history from 1415 to the present. It is the equivalent to two college introductory courses in American history and is designed to provide students with the analytical skills and factual knowledge necessary for success on the AP exam. All students will take the U.S History SC End-of-Course Exam which determines 20% of their final grade. In addition, all students are required to take the AP Exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

### HIST 2111 & 2112 (Dual Credit, Lanier Tech)

*Next in sequence: POLS 1101 and ECON 2105*

Grade: 11

HIST 2111 is a survey of the history of the United States to 1877. Topics include exploration and colonization through Reconstruction, emphasis is placed on the social, cultural, political, and economic evolution of the United States.

HIST 2112 Emphasizes the study of the social, cultural, and political history of the United States from 1865 to the beginning of the twenty-first century and will equip the student to better understand the problems and challenges of the contemporary world in relation to events and trends in modern American history. The course also provides an overview of the history of Georgia and the development of its constitution.

### US Government

Grade: 12

*Next in sequence: Economics*

US Government provides students with an understanding of the foundations of the American government system. Topics of study include political behavior, the Constitution, the three branches of government, civil rights, and state and local governments. Students are expected to participate in outside readings and citizenship activities.

### AP United States Government & Politics

Grades: 12

The AP US Government & Politics course is offered for the qualified college bound senior. The course covers federalism, separation of powers, influences on the formulation and adoption of the Constitution, political beliefs, political parties and elections, interest groups, institutions and policy processes and civil liberties and civil rights. Students take the AP exam in May. A complete syllabus may be found at www.collegeboard.com.

### POLS 1101 (Dual Credit, Lanier Tech)

Grade: 12

Political Science 1101 emphasizes the study of government and politics in the United States. The focus of the course will provide an overview of the Constitutional foundations of the American political processes with a focus on government institutions and political procedures. The course will examine the constitutional framework, federalism, civil liberties and civil rights, public opinion, the media, special interest groups, political parties, and the election process along with the three branches of government. In addition, this course will examine the processes of Georgia state government. Topics include foundations of government, political behavior, and governing institutions.

### Economics

Grade: 12

Economics provides students with an understanding of the basic structure and operation of the American economic system. The course includes topics related to Fundamental Economic Concepts, Microeconomics Concepts, Macroeconomics Concepts, International Economics, and Personal Finance Economics.

### AP Macroeconomics

Grade: 12

Conforms to College Board topics for the Advanced Placement Macroeconomics Examination. Covers basic economic concepts, measurement of economic performance, national income and price determination and international economics and growth. Students take the AP exam in May. A complete syllabus can be found at www.collegeboard.org.

### ECON 2105 (Dual Credit, Lanier Tech)

Grade: 12

Economics 2105 provides a description and analysis of macroeconomic principles and policies. Topics include basic economic principles, macroeconomic concepts, equilibrium in the goods and money markets, macroeconomic equilibrium and the impact of fiscal and monetary policies.

## World Language Courses

### Spanish 1

*Next in sequence: Spanish 2*

Grade: 9, 10

Spanish 1 introduces the Spanish language; emphasizes all skills: listening, speaking, reading, and writing skills in an integrated way. Includes how to greet and take leave of someone, to ask and respond to basic questions, to speak and read within a range of carefully selected topics and to develop an understanding of Spanish-speaking cultures.

### Spanish 2

*Next in sequence: Spanish 3*

Grade: 10, 11

Spanish 2 enhances Level One skills in Spanish and provides opportunities to develop listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in how to greet and take leave of someone, to ask and respond to basic questions, to speak and read within a range of carefully selected topics and to increase understanding of Spanish-speaking cultures.

### Spanish 3

*Next in sequence: Spanish 4*

Grade: 11, 12

Spanish 3 enhances Level Two skills in Spanish and provides further opportunities to increase listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in previous topics and introduces new topics; offers further opportunities to increase understanding of Spanish-speaking cultures.

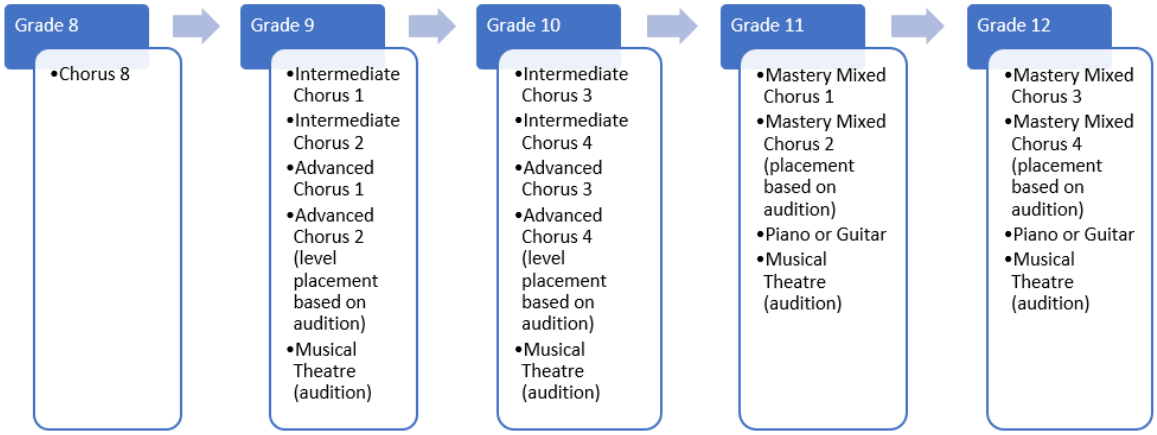
### Spanish 4

Grade: 11, 12

Spanish 4 enhances Level Three skills in Spanish and provides further opportunities to increase listening, speaking, reading, and writing skills in an integrated way. Provides continued language development through exploration of familiar and unfamiliar topics and provides opportunities for a broader and more extensive understanding of Spanish-speaking cultures.

**Additional Language courses may be available through Georgia Virtual School (GaVS).**

# Fine Arts Courses– Performing Arts




**Intermediate Chorus 1-4**

Grade: 9, 10

Provides intermediate-level performers opportunities to increase performance skills and knowledge in mixed choral singing. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self paced progress through all four levels. Stresses individual progress and group experiences.

**Advanced Chorus 1-4**

Grade: 9, 10, 11, 12

Provides advanced-level performers opportunities to increase performance skills and knowledge in mixed choral singing. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self paced progress through all four levels. Stresses individual progress and group experiences.

**Mastery Mixed Chorus 1-4**

Grade: 11, 12

This course provides opportunities for mastery-level performers to increase performance skills and knowledge in choral singing. It covers performance and production of more complex choral literature with an emphasis on analysis and theoretical studies, historical and cultural contributions and influences, and the creative aspects of music and music appreciation. An emphasis is placed on self-paced progress and a variety of group experiences.

**Beginning Piano Techniques 1-2**

Grade: 9, 10, 11, 12

Introduces basic piano keyboard techniques. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music.

### Beginning Guitar Techniques 1-2

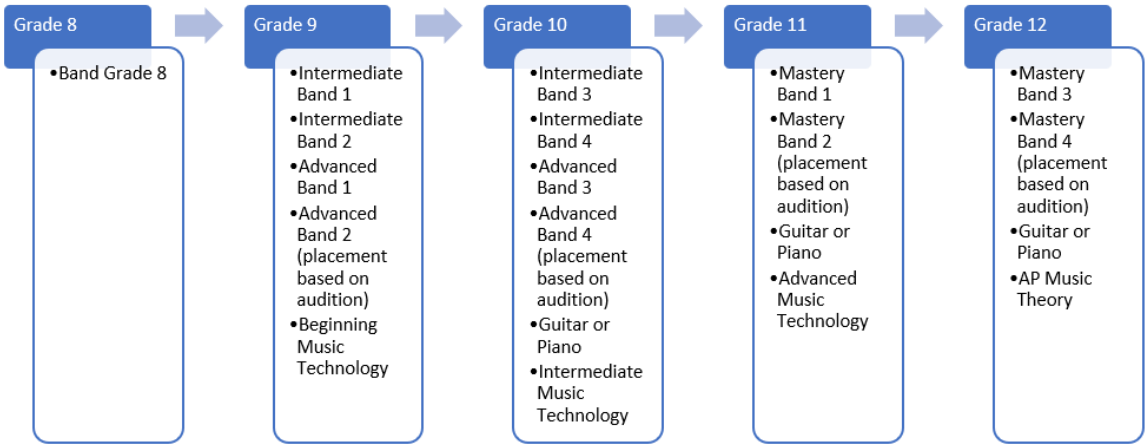
Grade: 9, 10, 11, 12

This course is designed to be a beginning guitar course in which students perform, respond, create, and connect to music through the guitar.

### Musical Theatre 1-4

Grades 9, 10, 11, 12 (By Audition only)

Introduces the style and characteristic elements of musical theater. Explores the mechanics of production, staging, voice, and dance. Explores the career opportunities available in musical theatre and offers opportunity for performance.




### Intermediate Band 1-4

Grade: 9, 10

This performance-based class provides opportunities for intermediate-level performers to increase performance skills and precision on a wind or percussion instrument. Includes performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses individual progress and learning and group experiences. Strengthens reading skills. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

### Advanced Band 1-4

Grade: 9, 10, 11, 12

This performance-based class provides opportunities for advanced-level performers to increase, develop and refine performance skills and precision on a wind or percussion instrument. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music at advanced levels of understanding. Organizes objectives for self-paced progress. Stresses individual progress and learning strategies, and ensemble experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

**Mastery Band 1-4**

Grades: 11, 12

Provides opportunities for students to develop master skills in music reading and performance techniques. A variety of mastery band literature of various historical and contemporary styles and genres is performed. Students extend their knowledge of music theory, including analysis of form. Exploration of compositional and improvisational techniques of instrumental music.

**AP Music Theory**

Grade: 12

Conforms to College Board topics for the Advanced Placement Music Theory Examination. Covers terminology and notational skills, writing skills, visual analysis and aural skills and advanced levels of understanding. Students take the AP exam in May. A complete syllabus may be found at www.collegeboard.com.

**Beginning Music Technology**

Grade: 9, 10, 11, 12

Students learn how to use digital tools and resources to create, present, respond, and connect to music as an art form and/or industry.

**Intermediate Music Technology**

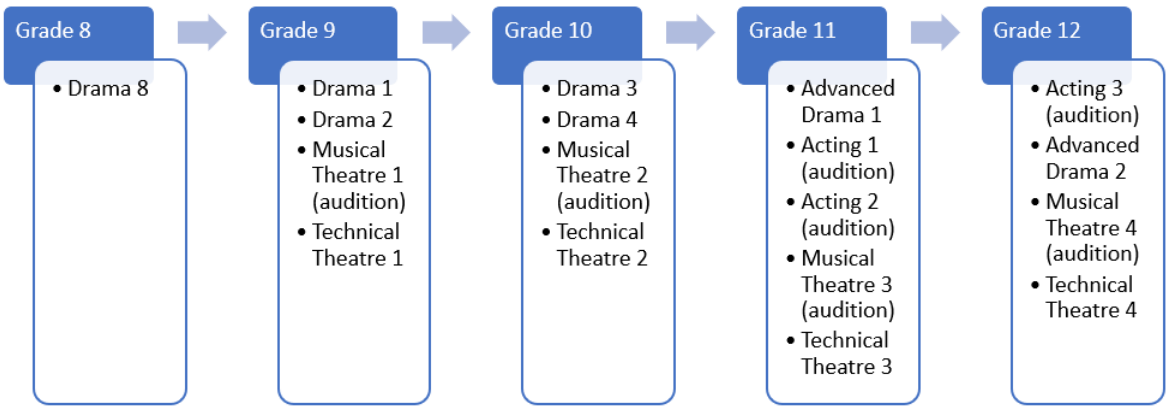
Grade: 9, 10, 11, 12

Students learn and further expand how to use digital tools and resources to create, present, respond, and connect to music as an art form and/or industry.

**Advanced Music Technology**

Grade: 10, 11, 12

Students will compose and arrange songs using notation software, analyze formal elements of music, and learn correct operational techniques for sound reinforcement systems.




**Drama 1-4**

Grade: 9, 10, 11, 12

This course serves as an introduction to the theatre arts. Students investigate theatre as a whole by exploring the techniques and origins of a wide variety of theatre arts in various cultures and periods. Drama 2-4 enhances skills by producing specific theatre styles in depth with performance opportunities.

**Acting 1-3**

Grade: 10, 11, 12 (By audition only)

Introduces the acting process and the role of the actor in various styles/methods with a focus on scene study. Stresses developing imagination, observation, concentration powers, and self-discipline. Includes developing physical and vocal control while transmitting emotions, convictions, and ideas; enhances self-confidence and self-awareness. Theatre is used as a means to encourage cooperative learning, team work, organization, and leadership skills. The class allows all students the opportunity to perform on a regular basis.

**Advanced Drama 1-2**

Grade: 11, 12

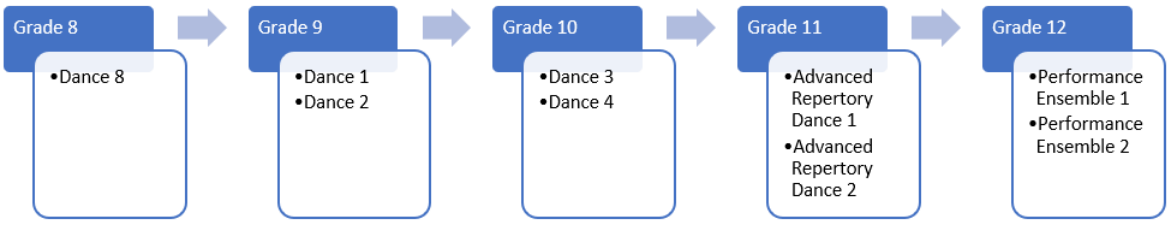
These courses focus on student direction, playwriting, and design.

**Musical Theatre**—See course descriptions on page 26.

**Technical Theatre 1-4**

Grade: 9, 10, 11, 12

This course explores the definition, design, and use of technical elements associated with theatre sets, props, costumes, makeup, lights, and sound.




**Dance 1-4**

Grade: 9, 10, 11

Dance introduces students to basic dance knowledge in order to develop coordination, flexibility, and strength while acquiring technical skills in preparation for further dance study. Students explore the role of dance in various cultures, and observe and critique dance performances using specified criteria and appropriate dance terminology. These classes further develop knowledge and skills in various dance forms with an emphasis on technical instruction in ballet, jazz, and modern techniques, public performance techniques, and choreographic concepts. Students study dance analysis, dance history, and movement sciences as they relate to injury prevention and technical training.

**Advanced Repertory Dance 1-2**

Grade: 11, 12

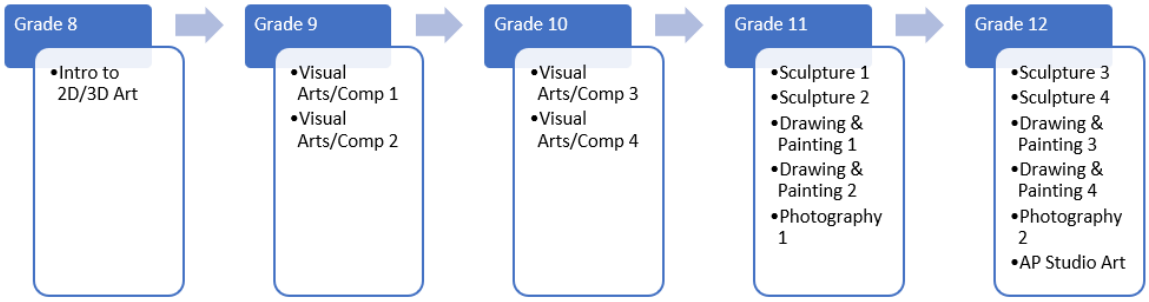
This is an advanced-level dance technique class. Students explore and strengthen intermediate-level dance skills within the traditional format of a technique-based dance class including, but not limited to, ballet, modern, and jazz. Students learn choreography from historical dance works by dance pioneers.

**Performance Ensemble 1-2**

Grade: 12

Focuses on utilizing pre-professional ballet and contemporary techniques with an emphasis on presenting faculty and student generated works in varied settings (e.g. traditional stages, site-specific works, younger audiences, assisted living communities). The goal of the class is to increase dance awareness to the public by performing for the extended community at large.

## FINE ARTS COURSES– VISUAL ARTS




**Visual Arts Comprehensive 1-4**

Grade: 9, 10, 11, 12

These courses introduce art history, art criticism, aesthetic judgment, and studio production. Emphasizes the ability to understand and use elements and principles of design through a variety of media, processes, and visual resources. Explores master artworks for historical and cultural significance.

**Sculpture 1-4**

Grade: 11, 12

Introduces the design and production of relief sculpture and sculpture-in-the-round. Emphasizes the historical origins and functions of sculpture in Western and non-Western cultures. Includes additive, subtractive, and modeling methods. Explores traditional and nontraditional materials for sculpted works and the work of both historical and contemporary sculptural artists. Students must have completed Visual Arts Comprehensive 1-2 and be recommended by the instructor before enrolling.

**Drawing & Painting 1-4**

Grade: 11, 12

Introduces drawing and painting techniques and a variety of drawing and painting media. Stresses critical analysis of master paintings and drawings of different styles and historical periods; emphasizes problem-solving techniques to achieve desired results in personal work. Students must have completed Visual Arts Comprehensive 1-2 and be recommended by the instructor before enrolling.

**Photography 1-2**

Grade: 11, 12

Introduces photography as an art form. Covers the historical development of photography and photographic design and its cultural influences. Emphasizes the basics of exposing and processing photographs by introducing traditional and digital photography. Stresses appropriate processing techniques and safe use of photographic materials and equipment. Cultivates personal expression of ideas and depth of exploration in selected photo techniques. Students must have completed Visual Arts Comprehensive 1-2 and be recommended by the instructor before enrolling.

**AP Studio Art**

Grade: 12

Conforms to College Board topics for the Advanced Placement Studio Art Drawing, 2D Design, or 3D Design Portfolio Examination. Requires submission of original works and slides to be evaluated on quality. Provides experiences using different drawing media and approaches; designed for students interested in the practical experiences of art. Students submit a portfolio for the AP exam in May.  A complete syllabus may be found at www.collegeboard.com.

## Physical Education Courses

**Health & Physical Education**

Grade: 9, 10

Physical Education introduces instruction in methods to attain a healthy level of physical fitness; implements a lifetime fitness program based on a personal fitness assessment and stresses strength, muscular endurance, flexibility, body composition, and cardiovascular endurance; includes instruction in fitness principles, nutrition, fad diets, weight control, stress management, adherence strategies, and consumer information; and promotes self-awareness and responsibility for fitness.

## STEM Program -Engineering Core

### Foundations of Engineering & Technology

Grade: 9, 10, 11

Marketing introduces marketing concepts and examines the economic, marketing, and business fundamentals, in addition to the marketing functions of selling, promotion, and distribution. The standards listed are core standards and those standards reflecting the needs of the local business community.

### Engineering Concepts

Grade: 10, 11

Engineering Concepts is the second course in the Engineering and Technology Pathway. Students will learn to design technical solutions to engineering problems using a whole systems approach to engineering design. Students will demonstrate the application of mathematical tools, teamwork, and communications skills in solving various design challenges, while maintaining a safe work environment.

### Engineering Applications

Grade: 11, 12

Engineering Applications is the third course in the Engineering and Technology Pathway. Students will apply their knowledge of Science, Technology, Engineering, and Math (STEM) to develop solutions to technological problems. Solutions will be developed using a combination of engineering software and prototype production processes. Students will use market research, cost benefit analysis, and an understanding of the design cycle to create and present design, marketing, and business plans for their solutions. A capstone project will allow students to demonstrate their depth of knowledge of the engineering design process and prepare them for future opportunities in the field of engineering.

## STEM Program–Architecture

### Introduction to Drafting and Design

Grade: 9, 10, 11

This course is the foundational course for the Architectural Drafting and Design pathway. Emphasis is placed on safety, geometric construction, fundamentals of computer-aided drafting, and multi-view drawings. Students learn drafting techniques through the study of geometric construction at which time they are introduced to computer-aided drafting and design.

### Architectural Drawing and Design I

Grade: 9, 10, 11, 12

This course introduces students to the basic terminology, concepts, and principles of architectural design. Emphasis is placed on house designs, floor plans, roof designs, elevations (interior and exterior), schedules, and foundations

### Architectural Drawing and Design II

Grade: 10, 11, 12

This course builds on the skills developed in level I. Emphasis is placed on the design process, site plans, electrical plans, plumbing plans, sections and details, project presentations, and a course portfolio. The standards are aligned with the drafting and design standards in Georgia's technical colleges. Students who successfully complete this course should be prepared to take an End of Pathway Assessment.

## STEM Program–Computer Science

**Introduction to Digital Technology**

Grade: 9, 10, 11

Introduction to Digital Technology is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Various forms of technologies will be highlighted to expose students to the emerging technologies. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills prepare students to be college and career ready.

**AP Computer Science Principles**

Grade: 10, 11, 12

AP Computer Science Principles introduces students to the foundational concepts of the field and challenges them to explore how computing and technology can impact the world. Students take the AP exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

**AP Computer Science A**

Grade: 11, 12

AP Computer Science A conforms to the College Board syllabus for the Advanced Placement Computer Science A examination. The course covers programming methodology, features of programming languages, fundamental data structures, algorithms, and computer systems. Students take the AP exam in May. See www.collegeboard.org for more information about the Advanced Placement program.

## STEM Program–Cybersecurity

**Introduction to Digital Technology** - see description above

**Intro to Cybersecurity**

Grade: 10, 11

Introduction to Cybersecurity is designed to provide students the basic concepts and terminology of cybersecurity. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, application of cybersecurity practices and devices, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization's information, and a broad range of other topics.

**Advanced Cybersecurity**

Grade: 10, 11, 12

Advanced Cybersecurity is designed to provide students the advanced concepts and terminology of cybersecurity. The course explores the field of cybersecurity with updated content including new innovations in technology and methodologies. It builds on existing concepts introduced in Introduction to Cybersecurity and expands into malware threats, cryptography, organizational security, and wireless technologies.

## STEM Program—Game Design & Development

**Introduction to Digital Technology** - see description on page 32

**AP Computer Science Principles**—see description on page 32

**Game Design: Animation & Simulation**

Grade: 11, 12

Students completing this course will gain an understanding of the fundamental principles used at every stage of the game creation process. First, game genres and modes of play are explored in terms of the psychology of incentives, motivation to play, and social networking. Next, virtual characters and non-player characters are reviewed from concept drawing to 2D and 3D art, rigging, and animation. Next, level design, storytelling, and animation are added to develop a virtual world around the characters. These same techniques are at work in training simulator systems, virtual shopping experiences, augmented reality, and a number of other important career options. Schools offering this program can provide a foundation of traditional drawing, illustration, and art courses to make way for the 2D and 3D animation, storytelling, character development, audio, and game technology.

## STEM Program—Robotics

**Introduction to Digital Technology** - see description on page 32

**Intro to Mechatronics**

Grade: 9, 10, 11

By completing this course, students will be introduced to direct current concepts and applications, pneumatic system fundamentals, and programmable logic controllers (PLCs). Topics include, but are not limited to, electrical laws and principles, magnetism, series, parallel, and simple combination DC circuits, pneumatic system principles and components, and PLC installation and programming. Theory and practical application concepts are discussed and illustrated through labs. Furthermore, this course introduces students to the operational theory, systems terminology, installation, and programming procedures for PLCs. Emphasis is placed on PLC programming, connections, installation, and start-up procedures. Other topics include timers and counters, relay logic instructions, and hardware and software applications.

**AC Theory, Electric Motors, and Hydraulic Systems**

Grade: 11, 12

This course further expands the student's knowledge and understanding of Mechatronics through introducing students to: alternating current theory and applications of varying sine wave voltages and current, inductance and capacitance, motor theory and operating principles, control devices, symbols and schematic diagrams, preventative maintenance and troubleshooting, and hydraulic system principles and components. Theory and practical application concepts are discussed and illustrated through labs.

**Semiconductors, Mechanical Systems, and Pump and Piping Systems**

Grade: 11, 12

By completing this course, students will be introduced to electronics theory, mechanical systems, and pump and piping systems. Topics include, but are not limited to, diodes and amplifiers, semiconductor fundamentals, mechanical drives, measurement processes and techniques, maintenance tools, manufacturing processes, bearing design and application, and pump and piping systems. Theory and practical application concepts are discussed and illustrated through labs.

## STEM Dual Enrollment

Contact Dual Enrollment Coordinator, Sherri Perry, sherri.perry@barrowk12.ga.us

Automotive Technology

Computer Networking

Health Information Technology

Mechatronics

Welding

## Digital Media Arts–AV Technology & Communications

**Audio & Video Tech & Film I**

Grade: 9, 10, 11

This course will serve as the foundational course in the Audio & Video Technology & Film pathway. The course prepares students for employment or entry into a post-secondary education program in the audio and video technology career field. Topics covered may include, but are not limited to: terminology, safety, basic equipment, script writing, production teams, production and programming, lighting, recording and editing, studio production, and professional ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program. All material covered in Audio & Video Technology & Film I will be utilized in subsequent courses.

**Audio & Video Tech & Film II**

Grade: 9, 10, 11

This one credit course is the second in a series of three that prepare students for a career in Audio Video Technology and Film production and/or to transfer to a postsecondary program for further study. Topics include: Planning, Writing, Directing and Editing a Production; Field Equipment Functions; Operational Set-Up and Maintenance; Advanced Editing Operations; Studio Productions; Performance; Audio/Video Control Systems; Production Graphics; Career Opportunities; and Professional Ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

**Audio & Video Tech & Film III**

Grade: 11, 12

This one credit transition course is designed to facilitate student-led projects under the guidance of the instructor. Students work cooperatively and independently in all phases of production. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA), and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

**Video Applications**

Grade: 11, 12

Broadcast/Video Production Applications is the fourth course in the BVP pathway and is designed to assist students in mastering skills necessary to gain entry level employment or to pursue a post-secondary degree or certificate. Topics include advanced camcorder techniques, audio production, scriptwriting, producing, directing, editing, employability skills, and development of a digital portfolio to include resume', references, and production samples.

## Digital Media Arts–Graphic Design

**Introduction to Graphics & Design**

Grade: 9, 10

This course is designed as the foundational course for both the Graphics Production and Graphics Design pathways. The Graphics and Design course provides students with the processes involved in the technologies of printing, publishing, packaging, electronic imaging, and their allied industries. In addition, the Graphics and Design course offers a range of cognitive skills, aesthetics, and crafts that includes typography, visual arts, and page layout.

**Graphic Design & Production**

Grade: 9, 10, 11

This course builds on knowledge and skills learned in the Introduction to Graphics and Design course and focuses on procedures commonly used in the graphic communication and design industries. Students will gain more experience in creative problem solving and the practical implementation of those solutions across multiple areas of graphic design and graphic communications.

**Advanced Graphic Design**

Grade: 10, 11, 12

Students will continue to explore the principles of design and layout procedures relating to the field of graphic design in an increasingly independent manner. Content will cover electronic systems and software programs used in graphic design, page composition, image conversion, and digital printing. Knowledge and skills in digital design and imaging will be enhanced through experiences that simulate the graphic design industry and school-based and work-based learning opportunities.

**Advanced Graphic Output Processes**

Grade: 11, 12

Students gain experience in successfully completing the output processes of various projects in an increasingly independent manner from direct teacher control. Students also learn to manage the output and completion process as a whole including customer relations management, printing, finishing, and binding. Students accumulate work samples that will constitute their personal portfolio. Upon successful completion of the course, students are prepared to move into employment or a post-secondary education environment where self-motivation and a high level of skill are expected.

## Culinary Arts & Hospitality management

### Culinary Arts

**Introduction to Culinary Arts**

Grade: 9, 10

Introduction to Culinary Arts is the foundational course designed to introduce students to fundamental food preparation terms, concepts, and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills, and terminology are covered and mastered with an emphasis on basic kitchen and dining room safety, sanitation, equipment maintenance and operation procedures. The course also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts.

**Culinary Arts I**

Grade: 9, 10, 11

Culinary Arts I is designed to create a complete foundation and understanding of Culinary Arts leading to postsecondary education or a food-service career. This fundamentals course begins to involve in-depth knowledge and hands-on skill mastery of culinary arts.

**Culinary Arts II**

Grade: 10, 11, 12

Culinary Arts II is an advanced and rigorous in-depth course designed for the student who is continuing in the Culinary Arts Pathway and wishes to continue their education at the post-secondary level or enter the food-service industry as a proficient and well-rounded individual. Strong importance is given to refining hands-on production of the classic fundamentals in the commercial kitchen.

### Dual Enrollment- Culinary Arts

Contact Dual Enrollment Coordinator, Sherri Perry, sherri.perry@barrowk12.ga.us

## Hospitality Management

### Marketing Principles

Grade: 9, 10, 11

Marketing Principles is the foundational course for the Hospitality, Recreation & Tourism, Marketing and Management and Marketing Communications and Promotion Pathways. Marketing Principles addresses all the ways in which marketing satisfies consumer and business needs and wants for products and services. Students develop a basic understanding of Employability, Foundational and Business Administration skills, Economics, Entrepreneurship, Financial Analysis, Human Resources Management, Information Management, Marketing, Operations, Professional Development, Strategic Management, and Global Marketing strategies. Instructional projects with real businesses, work-based learning activities including School-Based Enterprises, and DECA application experiences should be incorporated in this course.

### Hospitality, Recreation & Tourism Essentials

Grade: 10, 11, 12

The second course in the Hospitality, Recreation & Tourism Pathway educates students on the basics of marketing and business in relation to the Hospitality, Recreation, and Tourism industry in the U.S. and abroad. Students will study destination geography, world economies, and historical timelines related to major segments of the hospitality industry. Students will determine how the lodging industry uses marketing to achieve its goals. The vital roles of group, convention and meeting planning, human relations, communications and ethics will be discussed along with the recreation industry segment.

### Hospitality, Recreation & Tourism Management

Grade: 11, 12

The third course in the Hospitality, Recreation & Tourism Pathway will ensure that students develop a leadership perspective about social, environmental, economic and consumer factors impacting the HRT industry. Students will analyze operations, control systems, management structures, service levels, cost effective operations and related technology. Students will demonstrate skills in handling legal and liability issues and human resources functions. Throughout the course, students will develop an innate understanding that exemplary customer service skills define success in the industry.

## Sustainable Agriculture

### Basic Agriculture Science & Technology

Grade: 9, 10

This course is designed as the foundational course for all Agriculture, Food & Natural Resources Pathways. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and agri-related technologies. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**Environmental Science & Stewardship**

Grade: 9, 10

This course is designed as a component of one of the pathways in the Environmental Systems Pathway. The course delves into the environment, natural resources, ecosystems, soils, land use, chemicals in the environment, and water and air quality. After completing the course, the student should be aware of issues in our society relating to environmental concerns as well as land use and waste management.

**Sustainable Agriculture**

Grade: 10, 11, 12

This course is designed to introduce students to the concepts of sustainability related to agriculture production. Students will learn how to implement production and marketing practices that are profitable and environmentally sound while meeting the needs of both the present and future generations.

## Biomedical Sciences – Core

**Introduction to Healthcare Science**

Grade: 9, 10

During this first course, students are introduced to healthcare history, careers, law and ethics, cultural diversity, healthcare language and math, infection control, professionalism, communication, basics of the organization of healthcare facilities, and types of healthcare insurance. Students will be introduced to standard precautions and learn about confidentiality through HIPAA. As students explore healthcare careers, they will discuss education levels and requirements for success.

**Essentials of Healthcare**

Grade: 9, 10, 11

Anatomy and Physiology is a vital part of most healthcare post-secondary education programs. The Essentials of Healthcare is a medical-focused anatomy course addressing the physiology of each body system, along with the investigation of common diseases, disorders and emerging diseases. The prevention of disease and the diagnosis and treatment that might be utilized are addressed, along with medical terminology related to each system. This course provides an opportunity to demonstrate technical skills that enforce the goal of helping students make connections between medical procedures and the pathophysiology of diseases and disorders.

**Allied Health & Medicine**

Grade: 10, 11, 12

This course is designed to offer students the opportunity to become effective and efficient multi-skilled healthcare providers as they develop a working knowledge of various allied health opportunities. Students focusing on a career path in the healthcare field may apply classroom/lab knowledge and skills in the clinical setting as they participate in direct or simulated client care. The curriculum allows instructors to provide options for classroom/student growth opportunities in areas of interest to the student. These options may be determined by community need, available resources, and/or student interest.

## Biomedical Sciences – Biotechnology & Research

**Intro to Healthcare Science** - see description above

**Essentials of Biotechnology**

Grade: 10, 11, 12

This is the second course in the career pathway that introduces students to the broad understanding of the fundamentals of biotechnology and the impact on society. The knowledge and skills in this course provides a basic overview of current trends and careers in biotechnology, with an emphasis on basic laboratory skills, along with the business, regulatory, and ethical aspects of biotechnology. The prerequisite for the course is Introduction to Healthcare Science Technology.

**Applications of Biotechnology**

Grade: 11, 12

This course further introduces students to the fundamentals of biotechnology. Included in this course are additional techniques in biotechnology. Additionally, a deeper level of laboratory safety and applications in biotechnology is emphasized. The knowledge and skills gained in this course will provide students with a greater understanding of biotechnology and prepare students for skill application in a workplace setting.

## Biomedical Sciences – Sports Medicine

**Intro to Healthcare Science** - see description on page 39

**Essentials of Healthcare** - see description on page 39

**Sports Medicine**

Grade: 9, 10, 11

This course is appropriate for students who wish to pursue a career in healthcare with a focus on the musculoskeletal system, injury assessment, injury prevention, or rehabilitation including careers in Sports Medicine and Rehabilitative Services. This course will enable students to receive initial exposure to therapeutic services skills and attitudes applicable to the healthcare industry. The concepts of anatomy and physiology, assessment, preventative and rehabilitative care are introduced. Fundamental healthcare skills development is initiated, including medical terminology, kinesiology, patient assessment, record keeping, and basic life support. The prerequisites for this course are Introduction to Healthcare and Essentials of Healthcare. Mastery of these standards through project-based learning, technical-skills practice, and leadership-development activities of the career and technical student organization will provide students with a competitive edge for entry into either the healthcare global marketplace or a post-secondary institution to pursue further education and training.

**Exercise Science & Physiology**

Grade: 11, 12

This course is appropriate for students wishing to pursue a career in personal training or for those who desire an introduction in the field of exercise physiology. The course will enable students to perform fitness assessments, according to current guidelines, and to use data to develop exercise and training routines, fitness plans, and nutritional programs to fit the needs of clients. The concepts of human kinesiology will be evaluated and fundamental skills of goal setting, record keeping, and instruction techniques will be covered in the course. Proficiency in using and teaching others to use various types of exercise equipment and stretching techniques will be developed. Personal, professional, and ethical skills, as well as the guidelines, and safety practices required within the field of personal training, will be learned and practiced. The ability to create routines and programs for fitness to meet the needs of the general population and to meet the special needs of targeted groups of individuals will be developed. The prerequisites for this course are Introduction to Healthcare and Essentials of Healthcare. Successful completion of this course along with any other requirements may lead to a potential eligibility to take the Personal Trainer Exam through a certifying body.

## Biomedical Sciences – Veterinary Science

**Basic Agricultural Science**

Grade: 9, 10

This course is designed as the foundational course for all Agriculture, Food & Natural Resources Pathways. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and agri-related technologies.

**Animal Science & Biotechnology**

Grade: 9, 10, 11

This course is designed to introduce students to the scientific principles that underlie the breeding and husbandry of agricultural animals, and the production, processing, and distribution of agricultural animal products. This course introduces scientific principles applied to the animal industry; covers reproduction, production technology, processing, and distribution of agricultural animal products.

**Veterinary Science**

Grade: 10, 11, 12

The agricultural education course in veterinary science covers the basics of animal care. Topics covered include disease, parasites, feeding, shelter, grooming, and general animal care.

## Dual Enrollment – Biomedical Science

Contact Dual Enrollment Coordinator, Sherri Perry, sherri.perry@barrowk12.ga.us

Certified Nursing Assistant

Emergency Medical Responder

Health Information Technology

Medical Administrative Assistant

# Individual Graduation Planning Worksheet

Career Goal:

Post-secondary plans (list possible colleges or universities, military branches, etc…):

| | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|---|---|---|---|
| English (4 credits) | | | | |
| Math (4 credits) | | | | |
| Science (4 credits) | | | | |
| Social Sciences (3 credits, must include 1 World History, 1 US History, .5 US Gov't and .5 Economics) | | | | |
| Physical Education (1 credit) | | | | |
| CTAE, World Language, and/or Fine Arts (3 credits) | | | | |
| Additional electives (4 credits) | | | | |

## Year by Year planning worksheet

| Grade 9 Courses | |
|---|---|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

| Grade 10 Courses | |
|---|---|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

| Grade 11 Courses | |
|---|---|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

| Grade 12 Courses | |
|---|---|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

# BASA Diploma Worksheet (2020)

| English | 4 Units |
|---|---|
| ____9th Grade Literature/9th Grade Literature Honors<br>____10th Grade Literature/10th Grade Literature Honors<br>____American Lit/American Lit Honors/AP Language/DE<br>____English Literature/Eng Literature Honors/AP Lit/DE | |
| **Mathematics** | **4 Units** |
| ____ Algebra I/ Algebra I Honors/<br>____ Algebra II/ Algebra II Honors/<br>____Geometry/Geometry Honors<br>____Stat. Reasoning/Pre-Cal/AP Cal/AP Stats/DE | |
| **Science** | **4 Units** |
| ____Biology/Biology Honors<br>____Chemistry/Chemistry Honors/AP Biology/AP Chem<br>____Physics/Physics Honors/AP Physics<br>____4th Science (can include AP, specific CTAE courses,DE course<br>_____ | |
| **Social Studies** | **3 Units** |
| ____World Geography/AP Human Geography<br>____World History/AP World History<br>____US History/AP US History/DE HIST 2111<br>____Economics/ Gov't (.5 each)/AP Econ/AP Gov't /DE | |
| **CTAE and/or World Language amd/or Fine arts** | **3 Units** |
| ____ _____<br>____ _____<br>____ _____ | |
| **Health/Personal Fitness/ ROTC (3 classes)** | **1 Unit** |
| | |
| **Other Electives** | **4 Units** |
| ____ _____<br>____ _____<br>____ _____<br>____ _____ | |
| **TOTAL** | **23 Units** |

Promotion Policy
10th- Must have earned 6 credits
11th- Must have earned 13 credits- 2 english; 1 math; 1 Science credit, 1 social studies credit
12th- Must have earned 18 total credits

Student Name:_____

Anticipated Graduation Date:_____

Magnet Pathway:_____

Optional Endorsements/Seals

____Advanced Placement (3 AP Courses)
____ _____
____ _____
____ _____

__Healthcare/STEM Pathway (3 courses/same area)
____ _____
____ _____
____ _____

____ Visual/Performing Arts (3 courses/same area)
____ _____
____ _____
____ _____

____ Innovation/Other _____(3 courses)
____ _____
____ _____
____ _____

GA Futures Account Information:

Username:
Password:

HOPE 3.0 academic GPA, 4 rigor credits

Zell 3.7 academic GPA, 4 rigor credits (ACT-26; SAT 1200- in one test seating)
4 Rigor Credits:
1_____
2_____
3_____
4_____