

2016-2017
PAULDING COUNTY SCHOOL DISTRICT

CAREER PLANNER





Preparing students for success after high school is an inherent component of the Paulding County School District's Mission. Whether students plan to enter the workforce immediately or attend college after high school graduation, careful consideration of high school course options can impact their futures. To better prepare students for the demands of the 21st century economy and for post-secondary education, the Paulding County School District has provided this planning guide for use by students and their parents. Along with this guide students along with parents/guardians participate in annual BRIDGE Law Advisement activities and opportunities.

Keep this planning guide for the next four years and use it to set career goals and to plan for world of future work. Go over the information in the guide together and begin to have discussions concerning post high school plans and how you can reach the goals that you set. Bring this guide with you to each annual advisement opportunity at your high school and share with your school counselor as you all work together to map out the next year's BRIDGE Graduation Plan and schedule of courses. Finally, mark your choices in the guide as you go through high school and as your career decisions possibly change and evolve.

This planning guide shows the clear connection between class work and future success, pointing out the relevance of academic learning in the classroom. It also provides information on a variety of occupations that differ in the scope of education and training required to obtain future employment.

In the BRIDGE (Building Resourceful Individuals to Develop Georgia's Economy) section is a grades 6-12 listing of required advisement tasks.

DEAR PARENTS AND STUDENTS

EAST PAULDING HIGH SCHOOL

3320 East Paulding Drive
Dallas, GA 30157
Jason Freeman *Principal*
770-445-5100

HIRAM HIGH SCHOOL

702 Virgie Ballentine Drive,
Hiram, GA 30141
Misty Cooksey *Principal*
770-443-1182

NORTH PAULDING HIGH SCHOOL

300 North Paulding Drive,
Dallas, GA 30132
Dr. Mark Crowe *Principal*
770-443-9400

PAULDING HIGH SCHOOL

1297 Villa Rica Hwy.,
Dallas, GA 30157
Craig Wilcox *Principal*
770-443-8008

SOUTH PAULDING HIGH SCHOOL

1364 Winn Road,
Douglasville, GA 30134
Dr. Keith Rowland *Principal*
770-949-9221

PAULDING VIRTUAL ACADEMY

New Hope Education Center
4555 Dallas Acworth Hwy.
Douglasville, GA 30132
770-445-2656





PAULDING VIRTUAL ACADEMY

WHAT IS PAULDING VIRTUAL ACADEMY

The Paulding Virtual Academy will offer students the opportunity to use teacher supported, technology-based courses to earn new high school credit, recover credit, continue coursework, or accelerate their progression through high school and into college level course. Students will have the opportunity to master skills in required courses at their own pace and under an individualized plan that will be developed when they enter the program. Students will utilize technological tools including collaboration with experts in their field, virtual field trips, publishing work to outside audiences, and authentic learning opportunities through web-conferencing and discussion boards. There will be emphasis on connecting learning to real world applications. While participating in PVA activities, students will be supported by an instructor that will have access to valuable student data to make better informed instructional decisions for each individual student. Students at PVA will remain connected to their high school and continue eligibility to participate in athletics, clubs, JROTC, band and all other extra-curricular activities. Students will also be eligible to participate in graduate activities at their high school when all DOE graduation requirements have been met.

WHY DID THE DISTRICT DECIDE TO DEVELOP PVA?

Paulding County School District recognizes the changing educational landscape and the increasing use of technology to supplement and/or provide education. The district also recognizes that student learning styles vary and that the brick and mortar style of education may not maximize the potential of all students. Some students may wish to accelerate their academics and participate in dual enrollment. Other students may find the brick and mortar school building overwhelming and thereby difficult to focus. PVA is designed to serve students of all academic abilities.

PAULDING VIRTUAL ACADEMY PARTNERS

We have connected with community partners to support students at the Paulding Virtual Academy at New Hope Education Center that will meet the many diverse needs of students in our district. These partners will assist us in bringing about a significant change in the way that instruction is delivered to PVA students and how they plan for their future. Kennesaw State University, Georgia Highlands College and Chattahoochee Technical Institute have committed to help students plan their transition from Paulding Virtual Academy into post-secondary academic institutions in a variety of ways, includ-

ing having staff onsite at NHEC to assist students with admission applications and financial aid forms. Additionally, they will provide assistance in helping students with career planning and introduction into certification programs for those who do not desire or require a college degree for their career plans. These relationships will be further expanded to include dual enrollment opportunities on site at the New Hope Education Center Campus in the near future.

PAULDING VIRTUAL ACADEMY MISSION

The mission of the Paulding Virtual Academy at New Hope Education Center is to provide an individualized blended learning program to serve students in a non-traditional, focused environment emphasizing career skill development and building post-secondary connections required for future success. This mission will support our district's vision of success for every student today and tomorrow.



PUBLIC NOTICE PAULDING COUNTY SCHOOL DISTRICT

The Paulding County School system offers the following career and technical education programs for all students regardless of race, color, national origin, including those with limited English proficiency, sex or disability in grades 9-12.

- *Agriculture, Food, and Natural Resources*
- *Architecture and Construction*
- *Arts, A/V Technology, and Communications*
- *Business Management and Administration*
- *Education and Training*
- *Finance*
- *Government and Public Administration*
- *Health Science*
- *Hospitality and Tourism*
- *Human Services*
- *Information Technology*
- *Law, Public Safety, Corrections and Security*
- *Marketing*
- *Science, Technology, Engineering and Mathematics (STEM)*
- *Transportation Distribution and Logistics*

Persons seeking further information concerning the career and technical education offerings and specific pre-requisite criteria should contact:

Marores Perry, PSCD
Director of Career Technical Agriculture Education
 3236 Atlanta Hwy, Dallas, GA 30132
 770-443-8000
 mperry@paulding.k12.ga.us

The information provided in the Career Planner is subject to change as updates and/or requirements become final from the Georgia Department of Education, Paulding County School Board (policy), and/or other agencies such as the Georgia Student Finance Commission.

PAULDING COUNTY SCHOOL DISTRICT

NOTICE OF NON-DISCRIMINATION

The Paulding County School District Career and Technical Education department does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to other designated youth groups. The following person(s) has been designated to handle inquiries regarding the non-discrimination policies:

Sam Sabaka
504 Coordinator
 3236 Atlanta Hwy, Dallas, GA 30132
 770-443-8000

Don Breedlove
Title IX of the
Education Amendments of 1972,
Executive Director of Safety and Athletics
 3236 Atlanta Hwy
 Dallas, GA 30132
 dbreedlove@paulding.k12.ga.us



TABLE OF CONTENTS

SCHOOL KEY SYSTEM

Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school. If the ● is replaced with a ■ this indicates the class is Industry Certified. See page 30 for additional information on Industry Certification.

- East Paulding High School ● Paulding High School
- Hiram High School ● South Paulding High School
- North Paulding High School

DEAR PARENTS AND STUDENTS	2
PAULDING VIRTUAL ACADEMY	3
PAULDING COUNTY SCHOOL DISTRICT	4
TABLE OF CONTENTS	5-8
MISSION POSSIBLE: GRADUATION AND BEYOND	9
BRIDGE ADVISEMENT	10
GENERAL INFORMATION	11-14
TESTING OUT	15
WHAT DO I NEED TO GRADUATE?	16
INFORMATION FOR STUDENTS ENTERING HIGH SCHOOL	17-18
THE HOPE PROGRAM	19
GEORGIA STUDENT FINANCE COMMISSION	20
CTAE FOURTH SCIENCES AND EMBEDDED COURSES	21
MOVE ON WHEN READY (MOWR)	22-24
WHAT ARE CAREER PATHWAYS?	25
CAREER CLUSTERS	26
ADDITIONAL PATHWAYS	27-29
CERTIFICATIONS, OPPORTUNITIES AND ADDITIONAL RESOURCES	30-31
GEORGIA'S HOT CAREERS TO 2022	32-33
GEORGIA'S STEM CAREERS TO 2022	34-35

PATHWAYS

AGRICULTURE, FOOD, AND NATURAL RESOURCES

●	FOOD ANIMAL SYSTEMS PATHWAY	36
	02.47100 Basic Agriculture Science	
	02.42100 Animal Science and Biotechnology	
	01.43200 Agricultural Animal Production and Management	
●	PLANT AND LANDSCAPE SYSTEMS PATHWAY	37
	02.47100 Basic Agriculture Science	
	01.46100 General Horticulture and Plant Science	
	01.47000 Nursery and Landscape	
●	AGRICULTURAL MECHANICS SYSTEMS PATHWAY	38
	02.47100 Basic Agriculture Science	
	01.42100 Agricultural Mechanics Technology I	
	01.42200 Agricultural Mechanics Technology II	
●	FORESTRY/WILDLIFE SYSTEMS PATHWAY	39
	02.47100 Basic Agriculture Science	
	03.45100 Forest Science	
	03.45300 Wildlife Management	

TABLE OF CONTENTS

SCHOOL KEY SYSTEM

Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school. If the ● is replaced with a ■ this indicates the class is Industry Certified. See page 30 for additional information on Industry Certification.

- | | |
|------------------------------|------------------------------|
| ● East Paulding High School | ● Paulding High School |
| ■ Hiram High School | ● South Paulding High School |
| ● North Paulding High School | |

ARCHITECTURE AND CONSTRUCTION

● ●	ARCHITECTURAL DRAWING AND DESIGN PATHWAY	40
	48.54100 Introduction to Drafting and Design	
	48.54500 Architecture Drawing and Design I	
	48.54600 Architecture Drawing and Design II	
■ ●	CARPENTRY PATHWAY	41
	46.54500 Industry Fundamentals and Occupational Safety	
	46.54600 Introduction to Construction	
	46.55000 Carpentry I	
●	ELECTRICAL PATHWAY	42
	46.54500 Industry Fundamentals and Occupational Safety	
	46.54600 Introduction to Construction	
	46.56000 Electrical I	

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS

■ ■ ●	GRAPHIC DESIGN PATHWAYS	43
	48.56100 Introduction to Graphics and Design	
	48.56200 Graphic Design and Production	
	48.52800 Advanced Graphic Design	
■	GRAPHIC COMMUNICATIONS PATHWAY	44
	48.56100 Introduction to Graphics and Design	
	48.56200 Graphic Design and Production	
	48.52800 Advanced Graphic Design	

BUSINESS MANAGEMENT AND ADMINISTRATION

● ■ ● ●	BUSINESS AND TECHNOLOGY PATHWAY	45
	07.44130 Introduction to Business and Technology	
	07.44100 Business and Technology	
	07.45100 Business Communication	
■ ■ ●	ENTREPRENEURSHIP PATHWAY	46
	07.44130 Introduction to Business and Technology	
	06.41500 Legal Environment of Business	
	06.41600 Entrepreneurship	

EDUCATION AND TRAINING

●	EARLY CHILDHOOD CARE AND EDUCATION I PATHWAY	47
	20.52810 Early Childhood Education I	
	20.42400 Early Childhood Education II	
	20.42600 Early Childhood Education Practicum	
● ● ●	TEACHING AS A PROFESSION (only 10, 11, 12)	48
	13.01100 Examining the Teaching Profession	
	13.01200 Contemporary Issues in Education	
	13.01300 Teaching as a Profession Practicum	

FINANCE

■	BUSINESS ACCOUNTING PATHWAY	49
	07.44130 Introduction to Business and Technology	
	07.42600 Financial Literacy	
	07.41100 Principles of Accounting I	
■	FINANCIAL SERVICES PATHWAY	50
	07.44130 Introduction to Business and Technology	
	07.42600 Financial Literacy	
	07.43100 Banking, Investing and Insurance	

TABLE OF CONTENTS

SCHOOL KEY SYSTEM

Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school. If the ● is replaced with a ■ this indicates the class is Industry Certified. See page 30 for additional information on Industry Certification.

- East Paulding High School ● Paulding High School
- Hiram High School ● South Paulding High School
- North Paulding High School

GOVERNMENT AND PUBLIC ADMINISTRATION

●	JROTC AIR FORCE PATHWAY	51
	28.01100 Aerospace Science: A Journey Into Aviation History Leadership I	
	28.01200 Aerospace Science: Science of Flight and Leadership II	
	28.01500 Aerospace Science: Exploration of Space and Leadership III	
	28.01600 Aerospace Science: Management of the Cadet Corps and/or Leadership IV	

● ● ● ●	JROTC ARMY PATHWAY	52
	28.03100 JROTC Army Leadership Education I	
	28.03200 JROTC Army Leadership Education II	
	28.03300 JROTC Army Leadership Education III	
	28.03400 JROTC Army Leadership Education IV	

HEALTH SCIENCE

■	THERAPEUTIC SERVICES - ALLIED HEALTH AND MEDICINE PATHWAY	53
	25.52100 Introduction to Healthcare Science	
	25.44000 Essentials of Healthcare	
	25.43700 Allied Health and Medicine	

●	BIOTECHNOLOGY RESEARCH AND DEVELOPMENT PATHWAY	54
	25.52100 Introduction to Healthcare Science	
	25.57000 Essentials of Biotechnology	
	25.56900 Application of Biotechnology	

● ● ● ●	THERAPEUTIC SERVICES - PATIENT CARE PATHWAY	55
	25.52100 Introduction to Healthcare Science	
	25.44000 Essentials of Healthcare	
	25.43600 Patient Care Fundamentals	

● ● ●	THERAPEUTIC SERVICES - SPORTS MEDICINE PATHWAY	56
	25.52100 Introduction to Healthcare Science	
	25.44000 Essentials of Healthcare	
	25.44600 Sports Medicine	

HOSPITALITY AND TOURISM

● ● ●	CULINARY ARTS PATHWAY	57
	20.53100 Introduction to Culinary Arts	
	20.53210 Culinary Arts II	
	20.53310 Culinary Arts III	

■	SPORTS AND ENTERTAINMENT MARKETING PATHWAY	58
	08.47400 Marketing Principles	
	08.47800 Introduction to Sports and Entertainment Marketing	
	08.48500 Advanced Sports and Entertainment Marketing	

HUMAN SERVICES

● ● ● ● ●	PERSONAL CARE SERVICES - COSMETOLOGY PATHWAY	59
	12.54400 Introduction to Personal Care Services	
	12.41000 Cosmetology Services II	
	12.41100 Cosmetology Services III	

INFORMATION TECHNOLOGY

● ● ● ●	WEB AND DIGITAL DESIGN PATHWAY	60
	11.41500 Introduction to Digital Technology	
	11.45100 Digital Design	
	11.45200 Web Design	

TABLE OF CONTENTS

SCHOOL KEY SYSTEM

Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school. If the ● is replaced with a ■ this indicates the class is Industry Certified. See page 30 for additional information on Industry Certification.

- | | |
|------------------------------|------------------------------|
| ● East Paulding High School | ● Paulding High School |
| ● Hiram High School | ● South Paulding High School |
| ● North Paulding High School | |

LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

● ● ● ●	LAW ENFORCEMENT SERVICES - CRIMINAL INVESTIGATIONS PATHWAY	61
	43.45000 Introduction to Law, Public Safety, Correction and Security	
	43.45100 Criminal Justice Essentials	
	43.45300 Criminal Investigations	

MARKETING

■ ■ ■	MARKETING AND MANAGEMENT PATHWAY	62
	08.47400 Marketing Principles	
	08.44100 Marketing and Entrepreneurship	
	08.44200 Marketing and Management	

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)

■ ■	ENGINEERING DRAFTING AND DESIGN PATHWAY	63
	48.54100 Introduction to Drafting and Design	
	48.54200 Survey of Engineering Drawing	
	48.54300 3D Modeling and Analysis	

TRANSPORTATION, DISTRIBUTION AND LOGISTICS(STEM)

● ● ■ ● ■	AUTOMOBILE MAINTENANCE AND LIGHT REPAIR PATHWAY	64
	47.53100 Basic Maintenance and Light Repair	
	47.53210 Maintenance and Light Repair 2	
	47.53310 Maintenance and Light Repair 3	

SPECIALTIES

● ● ● ● ■	WORK-BASED LEARNING	65
● ● ● ● ■	CAREER AND TECHNICAL STUDENT ORGANIZATIONS	66-67

ACADEMIC AND HONORS, AP CLASSES

	ENGLISH	68-73
	MATHEMATICS	74-78
	SCIENCE	79-84
	SOCIAL STUDIES	85-89

ELECTIVES

	WORLD LANGUAGE	90-91
	FINE ARTS	92-96
	PHYSICAL EDUCATION	97-99



MISSION POSSIBLE: GRADUATION AND BEYOND



Mission Possible: Graduation and Beyond is a district-wide program that places emphasis throughout all grade levels that students and parents/ guardians will focus on graduating from high school with students being able to meet career goals after high school. In addition, students work collaboratively with school counselors to make certain that academic and career goals are identified and met through annual BRIDGE (Building Resourceful Individuals to Develop Georgia's Economy) Advisement opportunities.

Under this initiative, students are referred to as the "Class of" Therefore, during the 8th grade year a student has been and will be referred to as a student in the Class of "...", just as students have been in prior years beginning in elementary. All middle school students complete individual career portfolios using the Georgia Career Information System. In addition to these worthwhile activities, students receive academic support and annual advisement/transition opportunities. Information is provided for students and parents as the student both enters and leaves middle school as well as during high school.

As students move to high school, high school counselors also provide academic and career support through major advisement projects, classroom guidance, Career Fairs, and an enhanced use of the Georgia Career Information System which includes mandated BRIDGE Advisement requirements. Individual students who need additional support are provided with credit recovery opportunities, individual counseling sessions, and mentoring support. High school counselors implement the counseling program by providing classroom guidance which includes topics in academic skills support; organizational, study and test taking skills; career awareness and planning; and communication, problem solving, and decision making skills. In addition to classroom guidance, students are advised in individual student planning. Students along with parents/guardians have an opportunity to participate in annual major BRIDGE Advisement planning sessions. Additionally, students may meet with a counselor to implement goal setting and career plans. Counselors also provide "responsive services" support for non-academic needs through either individual or small group counseling. Also, high school counselors are intricately involved in the School Improvement Plans, sup-

port of testing, and the overall management of the counseling program. High school counselors work collaboratively with parents on academic planning and support, one-on-one parent conferencing, school-to-work transition programs, and post-secondary planning. Today's young people are living in an exciting time, with an increasingly diverse and mobile society, new technologies, and expanding opportunities. To help ensure that they are prepared to become the next generation of workers, leaders, citizens and parents, every student needs support and guidance while exploring opportunities during the middle and high school years, a time of rapid growth and change.

Today, young people face unique and diverse challenges, both personally and developmentally, that impact academic achievement. School counselors do not work in isolation; rather they are integral to the total educational program of all students. They provide proactive leadership that engages all stakeholders in the delivery of programs and services to help the student achieve success in school. Professional school counselors align and work with the school district's mission: **Prepare ALL students for success today and tomorrow.**



BRIDGE ADVISEMENT

The following is the BRIDGE Advisement Law that was signed into law on May 20, 2010 by the Georgia General Assembly. The major advisement projects in the Paulding County School District support the requirements of the BRIDGE Law.

BRIDGE ADVISEMENT- Section 20-2 327 Part (c) - Georgia General Assembly HB 400 (May 20, 2010) (c) Beginning with the 2010-2011 school year, students in the sixth, seventh, and eighth grades shall be provided counseling, advisement, career awareness, career interest inventories, and information to assist them in evaluating their academic skills and career interests. Before the end of the second semester of the eighth grade, students shall develop an individual graduation plan in consultation with their parents, guardians, or individuals appointed by the parents or guardians to serve as their designee. High school students shall be provided guidance, advisement, and counseling annually that will enable them to successfully complete their individual graduation plans, preparing them for a seamless transition to postsecondary study, further training, or employment. An individual graduation plan shall:

- (1) Include rigorous academic core subjects and focused course work in mathematics and science or in humanities, fine arts, and foreign language or sequenced career pathway course work (Federal Perkins Program of Study (POS))
- (2) Incorporate provisions of a student's Individualized Education Program (IE), where applicable;
- (3) Align educational and broad career goals and a student's course of study;
- (4) Be based on the student's selected academic and career focus area as approved by the student's parent or guardian;
- (5) Include experience based, career oriented learning experiences which may include, but not be limited to, internships, apprenticeships, mentoring, co-op education, and service learning;
- (6) Include opportunities for postsecondary studies through articulation, dual enrollment, and joint enrollment;
- (7) Be flexible to allow change in the course of study but be sufficiently structured to meet graduation requirements and qualify the student for admission to postsecondary education; and
- (8) Be approved by the student and the student's parent or guardian with guidance from the student's school counselor or teacher adviser.

An individual graduation plan shall be reviewed annually, and revised, if appropriate, upon approval by the student and the student's parent or guardian with guidance from the student's school counselor or teacher adviser. An individual graduation plan may be changed at any time throughout a student's high school career upon approval.

MIDDLE SCHOOL

The following BRIDGE Law Advisement tasks are required to be completed in middle school in the student's Georgia Career Information System portfolio:

- **Grade 6**
 - GCIS Account must be set up
 - Career Cluster Inventory
- **Grade 7**
 - Reality Check Inventory or Interest Profiler Inventors
 - 3 Career Concentrations/Clusters
- **Grade 8**
 - 3 Careers with Occupational Information
 - Individual Graduation Plan
 - Updated using BRIDGE Advisement Plan
 - Dual Enrollment MOWR Information

HIGH SCHOOL

The following BRIDGE Advisement tasks are required to be completed in high school in the student's Georgia Career Information System portfolio:

- **Grade 9**
 - BRIDGE Advisement Graduation Plan/IGP
 - 3 Careers/Occupations
 - Dual Enrollment MOWR Information
- **Grade 10**
 - BRIDGE Advisement Graduation Plan/IGP
 - Dual Enrollment MOWR Information
- **Grade 11**
 - 3 Postsecondary Institutions related to student's Program of Study
 - BRIDGE Advisement Graduation Plan/IGP
 - Dual Enrollment MOWR Information
- **Grade 12**
 - "Next Step" information: 4-year institute, 2-year institute, apprenticeship, military, technical college, special purpose school, or workforce in GCIS
 - Senior Letter-PCSD Requirement (not completed in GCIS portfolio)
 - Senior Capstone Project



COURSE REGISTRATION PROCEDURES

Registration for courses is finalized during the preceding spring. All grade levels including 8th grade students moving to 9th grade, select courses during the BRIDGE Law Advisement opportunity. Students interested in AP/Honors courses must meet specified criteria and complete the online application process.

ADVISEMENT PROCEDURES ARE AS FOLLOWS:

1. Orientation

Advisement and course request information is discussed in BRIDGE advisement where registration/advisement documents are reviewed. Student advisement is preceded by presentations from school counselors in all high schools and in 8th grade at each middle school. High school transcripts and career interest inventories are carefully analyzed. BRIDGE graduation documents are completed or reviewed and updated. The document information is completed in the student's IGP (Individual Graduation Plan) in the student's GAfutures portfolio account.

2. Academic Advisement

Students may discuss with their counselor, advisor, teachers, or parents/guardians course selections based on academic performance, future goals, career pathways, and graduation requirements. Advisement opportunities are held annually beginning in 8th grade and continuing through the senior year. These opportunities are required by law and must include parent/guardian and student.

GENERAL INFORMATION

Parents and guardians, as you read this career planner and study the course descriptions; you will see course sequences, grade level recommendations, and prerequisites. Also, the state CIP code or course number is listed with the course title. Teachers and counselors advise student course selection based upon the academic success students have experienced in content areas as well as career pathway information and interest area. BRIDGE (Building Resourceful Individuals to Develop Georgia's Economy) Law mandates that school counselors provide students and parents/guardians with career and academic advisement. This guide along with the student's information that he/she received in classroom guidance assists with making decisions that will aid each student in achieving academic success and making sound career choices.



GENERAL INFORMATION

3. Schedule Changes

A significant amount of time is spent advising district students beginning in the spring semester of the 8th grade year and continuing each year thereafter. Thus, student initiated schedule changes will be minimal and will only be completed during the first week of the semester (5 school days). After this time, no schedule changes will be made. Schedule changes made during the first through fifth days of a new semester are based on the following criteria ONLY:

- *A student has already taken and passed the class;*
- *There was a computer error;*
- *The course was selected due to an administrative change.*

4. Disclaimer

Only those courses for which there is adequate enrollment and/or faculty will be offered in the upcoming school year. Courses, numbers of sections, and staff assignments are determined on the basis of need in the previous spring term; it is imperative, therefore, that students determine which courses are required for graduation and record these courses on the BRIDGE Advisement document. Each high school reserves the right to cancel, *without prior notification*, any course listed in this guide and/or rearrange any prescribed course sequence, and make schedule changes for the purpose of leveling class size.

5. Attendance Policy

Please refer to the current Student Handbook for detailed attendance policy information.

6. Exceptional Students Education Program (ESEP)

IN-PAULDING COUNTY: In order to receive special education services from the ESEP program, students must meet Georgia eligibility requirements. Each disability under the Individuals with Disabilities Education Act (IDEA) has specific criteria that must be met for eligibility. Once a student is determined to be eligible under IDEA, an Individualized Education Plan (IEP) is created and special education services begin. Student IEPs transfer from other schools within the school district.

OUT-OF-COUNTY: Parents and/or guardians will have the IEP reviewed by a PCSD special education case manager or lead teacher in the ESEP department. Parents of the transferring student must provide a current IEP or sign a release of records form so that the current school may obtain information. To determine appropriate services, all records will be reviewed by district special education personnel and an IEP committee.

7. English Language Learners (ELL)

The English for Language Learners Program is provided for students whose primary or home language is not English. This program provides opportunities to acquire proficiency in English while continuing to learn content specific skills.

8. Gifted

Any student who qualifies for the gifted program in the district is eligible for gifted services. Any student who is in a gifted program at another public Georgia school is eligible to be served as soon as the high school receives the appropriate documentation from the student's former Georgia school and the gifted personnel review and approve the eligibility paperwork. If a gifted student transfers from an out-of-state school, they will need to be tested for eligibility.

ADVANCED COURSES AND COLLEGE CREDIT

9. Advanced Placement (AP)

Advanced Placement (AP) courses are postsecondary level classes which are provided at high schools in the course of a regular school day. Many colleges and universities award either course credit or possibly exemption from certain required coursework, depending upon AP exam scores. Not all postsecondary institutions honor AP exam credit, however, each college or university has its own standards by which it weights AP coursework taken in high school. Students are always advised to check with the respective institution for details on its AP course and exam policies. AP examinations are conducted in May of each year, and students who take AP exams may have to pay for these exams depending upon district guidelines at the time. It is important to note that the Georgia Student Finance Commission (GSFC) awards .5 credit on a 4.0 scale for Advanced Placement Courses, when determining HOPE Scholarship eligibility.

GENERAL INFORMATION

10. Dual Credit Enrollment Program/The Move On When Ready (MOWR)

MOWR program provides district students the opportunity to be "dual credit enrolled." This means a MOWR student is enrolled at both the high school and college or technical college. In this program a student may be part time or full time at the postsecondary school. The student receives credit for approved courses on the high school transcript as well as their college or technical college transcript. Thus, MOWR students take postsecondary coursework for credit towards both high school graduation and postsecondary requirements. Beginning with Fall term 2015 (FY 2016) the program is offered during all terms of the school year: fall, spring and summer semesters.

To be eligible for the MOWR program, a student must:

- *Be enrolled in the ninth, tenth, eleventh or twelfth grade in accordance with O.C.G.A. §20-2-690(c);*
- *Be admitted to an eligible, participating USG, TCSG or Private postsecondary institution as a dual credit enrollment student;*
- *Be enrolled in courses listed in the approved MOWR Course Directory;*
- *Maintain satisfactory academic progress as defined by the eligible postsecondary institution;*
- *Complete the MOWR online application which includes three parts: Student and Parent/Guardian, High School and Postsecondary Institution. All three sections are completed and submitted to Georgia Student Finance Commission;*

Complete required advisement conference with the school counselor along with parent/guardian prior to 1st, 2nd and/or summer semesters of each participating school year completing both MOWR program documents as well as the district MOWR document.

Students, who meet all eligibility requirements, receive a student specific award amount to be applied toward tuition, mandatory fees and books. In addition, postsecondary credit hours taken as a Dual Credit Enrollment student, for which MOWR payment is made are not counted as "attempted hours" nor are they included in the "combined paid hours" limit for the purposes of HOPE Scholarship or Zell Miller Scholarship eligibility.

Interested students must meet with the school counselor no later than the three district deadlines of the school year prior to entering an MOWR program. Each higher education institution has specific grade point average, SAT or ACT testing requirements, and deadlines that must be met. Once the student makes the decision to participate and is accepted, then, an advisement conference is held each semester term to complete MOWR documents as well as the board policy required Dual Credit Enrollment document. School counselors have MOWR information and this link is also helpful: https://www.GAfutures.org/Financial_Aid_Planning/Scholarships/Grants_and_Scholarships/Accel_Program.aspx

GENERAL INFORMATION

- 11. **Work-Based Learning** Note information on page 65.
- 12. **Online Opportunities** See Senate Bill 289 Online Learning Opportunities below.
- 13. **Paulding Virtual Academy** Note information on page 3.
- 14. **Earning Units of Credit by Testing-out** Note information on page 15.
- 15. **Graduation Chart** See Facts and Information You Need to Know page 16.

Senate Bill 289 General Information

Senate Bill 289 allows districts to provide students in grades 3 through 12 the option of participating in on-line learning programs. This option is provided with the understanding that requests are approved based upon the available infrastructure either physically or technologically available to the school.

REQUEST FOR ONLINE COURSES

Students have the option of requesting one online course during the school day as a regularly scheduled class, or outside of the school day working independently from home.

During School Hours: Requests are subject to counselor and administrative approval, school infrastructure, and supervision. There will be no cost incurred by the student for courses taken during any of the regular periods of the school day. Online course options may be accessed through our district online course catalog, Career Planner, Georgia Virtual School, or other vendors and local virtual schools that are on the state-approved list.

After School Hours: Requests are subject to counselor and administrative approval. There will be costs incurred by the student with courses taken outside of the regular school day. Online course options may be accessed through our district online course catalog, Career Planner, Georgia Virtual School, or other vendors and local virtual schools that are on the state-approved list.

To facilitate the process of registration, we will accept an electronic application beginning April 1, 2016 through July 11, 2016. This registration window will be for courses to be taken during the 2016-2017 school year. There will be an application window open each spring for each subsequent year.

ONLINE CLEARINGHOUSE

The Georgia Department of Education has developed an online clearinghouse of online courses and online course providers available for you. This clearinghouse provides parents and students the ability to search for available courses, online course providers, and guidelines for what constitutes high quality online courses. The clearinghouse may be accessed through the following link: http://www.gadoe.org/_layouts/GADOEPublic.SPApp/Clearinghouse.aspx

REQUEST ONLINE COURSES

<https://intranet.paulding.k12.ga.us/Forms/SB289/>

Georgia Department of Education



Attention Students and Parents

EARNING UNITS OF HIGH SCHOOL COURSE CREDIT BY TESTING-OUT

1. Beginning in school year 2013-2014, a student may demonstrate subject area competency by **testing-out** of any course that has an associated End of Course Test (EOCT).
2. A unit of course credit is awarded to students who reach the performance level of **Exceeds** on an EOCT prior to taking a specific EOCT course.
3. Students have only one opportunity per course to test-out.
4. At this time, a student may only earn up to three credits by testing-out.
5. Students must meet the following requirements for earning course credit through testing-out:
 - a) Not currently or previously enrolled in the course;
 - b) Have earned a grade of B or better in a content area course that is the same content area of the course for which the student is attempting the EOCT;
 - c) Received a teacher recommendation from a teacher in the same content area
 - d) Received parent/guardian permission as stated by the Local Board of Education
6. Students who do not reach the performance level of Exceeds when attempting to test-out must enroll in and complete the associated course and retake the EOCT even if the students makes a passing grade on the EOCT during the testing-out attempt.
7. Students who are currently enrolled, or who have previously been enrolled, in a higher-level course are not allowed to earn credit by later attempting to test-out of a lower level course. For example, a student already taking AP Physics may not earn credit for Physical Science by testing-out.
8. Course credit of students who test-out of a course is reported in the same way as the course credit earned through completing courses.
9. Local boards of education may develop policies relating to utilizing grade equivalent scores in the calculation of the student's Grade Point Average (GPA).
10. Under NCAA requirements, units of credit earned through testing-out using the EOCT **will not** count as a core course credit for athletic aid for any student seeking NCAA Division I or II athletic scholarships.

This document summarizes the highlights of State Board of Education Rule 160-5-1-.15 AWARDING UNITS OF CREDIT AND ACCEPTANCE OF TRANSFER CREDIT AND/OR GRADES and supporting Guidelines and is not inclusive of all requirements for testing-out.



WHAT DO I NEED TO GRADUATE?



FACTS AND INFORMATION YOU NEED TO KNOW

All information is subject to change. Please check the Georgia Department of Education website for current information www.doe.k12.ga.us. New academic requirements are included in the HOPE legislation. These changes impact students graduating with the Class of 2017 and beyond. Students must have completed courses to satisfy the rigor requirement. This requirement includes the completion of four rigorous courses. To determine which courses satisfy the HOPE Rigor Requirement, please contact your school counselor at your high school.

In the 2016-2017 school year I will be a	SENIOR	JUNIOR	SOPHOMORE	FRESHMAN
I will be graduating in	2017	2018	2019	2020
How many units do I need for Promotions?	23 to graduate Senior status, 17 units required	To earn Junior status, 11 units required	To earn Sophomore status 5 units required	To earn
What tests are required to Graduate?	NONE	NONE	NONE	NONE
What percentage of the EOCT* averages into my final course grade? <small>9th Grade Literature, American Literature, GSE Mathematics, Physical Science, Biology, US History, Economics</small>	20%	20%	20%	20%
How many credits do I need to Graduate?	23	23	23	23
What do I need to know about Math?	GSE 4 units required Support classes DO NOT COUNT for graduation	GSE 4 units required Support classes DO NOT COUNT for graduation	GSE 4 units required Support classes DO NOT COUNT for graduation	GSE 4 units required Support classes DO NOT COUNT for graduation

What about the HOPE scholarship?

Check GACollege411.org for updated legislative information.

What about NCAA?

Students must first register online at www.clearinghouse.com. Next, students must have a referral from a College Coach to be placed on the list.

* EOCT - End of Course Test

Changes are being made to the State Assessment System.

This may impact the above assessment requirements.

Updated information will be posted on the state & district website.

END-OF-COURSE 20% of grade

- 9th Grade Literature
- Physical Science
- Algebra I
- US History
- American Literature
- Biology
- Geometry
- Economics

HONORS/AP REQUIREMENTS

- Teacher Recommendation
- Signed Student/Parent Agreement
- Recommended Lexile of at least 1150

BOARD SCHOLAR

- 2 units from the same World Language
- 1 extra core class from Math, Science, Social Studies, English, or World Language
- 3.5 cumulative GPA; No F's

SEALS FOR DIPLOMAS

- **Fine Arts Seal** Complete 3 fine arts credits; 2 in the same area
- **CTAE Cord** Complete CTAE pathway and pass End of Pathway Exam
- **World Language Seal** Complete 3 units in the same World Language
- **Academic Seal** Complete 3 of any of the following: AP courses, college core MOWR courses, or technical college MOWR certification programs
- **International Baccalaureate** Complete the two year IB program and graduate in good standing as an IB diploma candidate
- **International Skills Diploma Seal** Coursework- 8 credits of courses. In today's global marketplace, it is important for students to acquire the interdisciplinary skills they need to be globally competent and competitive. The International Skills Diploma Seal is awarded to graduating high school students who complete an international education curriculum and engage in extracurricular activities and experiences that foster the achievement of global competencies. It is a signal to employers and higher education institutions that a student is prepared to participate in the global economy. Requirements for the Seal:
 - *At least three credits in the same world language and/or ESOL*
 - *At least four credits in courses determined to have an international focus, such as international economics, world/non-US history, world geography, etc.*
 - *At least four extracurricular activities and experiences with global themes and/or in global contexts (e.g., exchange programs, international and language clubs, travel abroad)*

INFORMATION FOR STUDENTS ENTERING HIGH SCHOOL

23 TOTAL NUMBER OF CREDITS REQUIRED FOR GRADUATION

English 4 credits

- 1 credit 9th Grade Literature
- 1 credit American Literature
- 1 credit World Literature/10th Literature
- 1 credit British Literature

Math 4 credits

- 1 credit Algebra
- 1 credit Geometry
- 1 credit Algebra II
- 1 additional Math credit

Science 4 credits

- 1 credit Biology
- 1 credit Physical Science or Physics
- 1 credit Chemistry, Earth Systems
- Environmental Science, or AP
- 1 Additional Science credit

Social Studies 4 credits

- 1 credit American Government
- 1 credit World History
- 1 credit United States History
- 1 credit Economics

CTAE, World Language or Fine Arts 3 credits

Health .5 credit

Personal Fitness .5 credit

Electives 3 credits

* Board of Regents requires 2 years of the same World Language for ALL 4 year colleges and universities.

PROMOTION REQUIREMENTS

- 9th to 10th Grade 5 credits
- 10th to 11th Grade 11 credits
- 11th to 12th Grade 18 credits

INFORMATION FOR STUDENTS

- *Twenty hours of community service involving a global/cross-cultural public service project*
- *Capstone presentation on the knowledge gained in the courses and activities listed above*

Additional information can be found at the Georgia Department of Education- World Language Division.

- **Georgia's Seal of Biliteracy** HB 879 was signed into law on May 3, 2016, establishing a Seal of Biliteracy for the state of Georgia. The Seal of Biliteracy will be available for graduating high school students starting in 2016/2017. Requirements for the Seal:
 - (1) *Completion of all English language arts requirements for graduation with an overall grade point average of 3.0 or above in those classes; and*
 - (2) *Proficiency in one or more languages other than English, demonstrated by passing a foreign language advanced placement examination with a score of 4 or higher or an international baccalaureate examination with a score of 5 or higher; provided, however, that for languages in which an advanced placement examination is not available, the Department of Education may provide a listing of equivalent summative examinations that local school systems may use in place of such an advanced placement examination.*

Additional information can be found at the Georgia Department of Education- World Language Division.

PARTICIPATION IN GRADUATION CEREMONY **Complete all 'GRADUATION COURSE REQUIREMENTS'**

Please note that Georgia no longer requires passing an assessment in order to earn a diploma.

HOPE Academic rigor requirement has been added for more info, see HOPE Program section @ GACollege411.org

College Prep

- 3.0 GPA in ALL core classes (E, M, Sc, SS, FL)
- Covers 90% previous year's tuition

Zell Miller Scholar Program

- 3.7 GPA in ALL core classes (E, M, Sc, SS, FL)
- 26 ACT or 1200 SAT (critical reading and math only)

ALTERNATE PROGRAMS

- Virtual Academy
- Performance Learning Center (PLC)
- Ombudsman Project Graduation
- Ombudsman Night School
- E2020 Credit Recovery

IMPORTANT WEB SITES

- **College Board** www.collegeboard.com
- **ACT** www.act.org
- **USA Test Prep** www.usatestprep.com
(user name: alexanderga; ask teacher password)
- **GCIS** www.gcis.gcic.edu



HOPE SCHOLARSHIP ELIGIBILITY

- 3.0 HOPE GPA
 - *Core curriculum courses*
 - *GSFC must receive a letter or numeric grade for each core course in order to calculate HOPE GPA*
- Rigor Requirements
 - *Credit Courses Needed*
 - *Class of 2017+ need 4 rigorous courses*

ZELL MILLER SCHOLARSHIP ELIGIBILITY

- Valedictorian or salutatorian must meet basic HOPE Scholarship eligibility requirements or
- HOPE GPA and test scores
 - *3.7 HOPE GPA*
 - *Core curriculum courses*
 - *Rigor requirements*
 - Test requirements
 - *1200 SAT combined score (critical reading and math)*
 - *26 ACT composite score*

HOPE GRANT

- Eligibility
 - *High school GPA and/or test scores not considered*
 - *Enrolled in a certificate or diploma program*
- Award Amount
 - *Portion of the 2016-2017 standard tuition*
 - *Award amount chart available on GAcollege411.org*
- Strategic Industries Workforce Development Grant (SIWDG)
 - *Created to help students enrolled in certain high-demand certificate and diploma programs at Technical College System of Georgia (TCSG) schools pay for their education*
 - *Eligibility requirements same as for HOPE Grant*

HOPE GED GRANT

- Eligibility and Award information including Award amount will be provided by professional school counselors.

THE HOPE PROGRAM

HOPE - HELPING OUTSTANDING PUPILS EDUCATIONALLY

HOPE is Georgia's unique scholarship and grant program that rewards students with financial assistance in degree, diploma, and certificate programs at eligible Georgia public and private colleges and universities, and public technical colleges.

HOPE is funded entirely by the Georgia Lottery for Education, which also funds Georgia's statewide prekindergarten program. Since the HOPE Program began in 1993, over \$5.8 billion in HOPE funds have been awarded to more than 1.4 million students attending Georgia's colleges, universities, and technical colleges.

THE HOPE PROGRAM BASIC ELIGIBILITY

- *U.S. citizen or eligible non-citizen*
- *Georgia resident*
- *Graduated from a HOPE eligible high school*
- *Graduated from a HOPE eligible home study program*
- *Attending a University System of Georgia or Technical College System of Georgia postsecondary institution*
- *Attending an eligible private non-profit postsecondary institution or an eligible private proprietary (for-profit) institution*





Nathan Deal
GOVERNOR



Georgia Student Finance Commission
Georgia Student Finance Authority Georgia
Higher Education Assistance Corporation
GAcollege411

Tracy A. Ireland
PRESIDENT

HOPE Rigor Requirements Pursuant to HB 326/O.C.G.A. Section 20-2-157 Graduating Classes of 2017 and thereafter

Georgia Code 20-2-157 requires that certain course credits must be earned in order for students to be eligible for a HOPE Scholarship. The requirements are as follows:

Beginning with students graduating from high school **on or after May 1, 2015**, in order to be eligible to receive the HOPE scholarship, a student must receive **at least two credits** in courses from the following categories, prior to graduating from high school:

1. Advanced math, such as advanced algebra and trigonometry, math III, or an equivalent or higher course taken at an eligible high school or taken for degree level credit at an eligible postsecondary institution;
2. Advanced science, such as chemistry, physics, biology II, or an equivalent or higher course taken at an eligible high school or taken for degree level credit at an eligible postsecondary institution;
3. Advanced foreign language courses taken at an eligible high school or taken for degree level credit at an eligible postsecondary institution;
4. Advanced Placement, International Baccalaureate, or dual credit enrollment courses in core subjects (English, math, science, social studies, or foreign language)

Students graduating from high school **on or after May 1, 2017**, must receive **at least four credits** in courses from the above categories, prior to graduating from high school. Students may earn one or more credits in each category; provided, however, an earned course credit may only be counted one time toward the credit requirement. If a course is assigned one-half credit, the student must take another half-credit course in the categories listed in order to satisfy the one credit requirement. Students should review the credits assigned to courses to determine satisfaction of the above requirements.

The attached "Listing of Courses Possessing Academic Rigor To Meet the HOPE Rigor Requirement" is the comprehensive list of all courses that meet the rigor requirements in 2017 and thereafter.

CTAE

The following courses are typically considered Career, Technical, Agricultural Education (CTAE) Courses. The State Department of Education along with the University System of Georgia have determined that these courses may also be used to fulfill certain graduation and college admission requirements. If you have any questions, please talk with your student's high school counselor.

CTAE FOURTH SCIENCES AND EMBEDDED COURSES

.....

COURSE NAME	Counts as 4th Science for Graduation	Counts as 4th Science to a 4 yr. College	Counts as 4th Math for Graduation	World Language Credit for Graduation Electives ONLY
Animal Science/Technology/Biotechnology	X	X		
Essentials of Healthcare	X	X		
Food for Life	X	X		
Food Science	X	X		
Food & Nutrition Through the Lifespan	X	X		
Forest Science	X	X		
General Horticulture and Plant Science	X	X		
Natural Resources Management	X	X		
Plant Science and Biotechnology	X	X		
Sports Medicine	X	X		
* Advanced Placement Computer Science	X	X	X	X
* Computer Science Principles	X	X	X	X
* Programming, Games, Apps and Society	X	X	X	X

* Two computer science sequenced courses will satisfy the two year foreign language requirement for graduation electives but may not be accepted for foreign language credit by the colleges and universities.

Certain CTAE courses have been identified by the State Department of Education as courses in which the standards of specific academic courses are also embedded. Since mastery of the standards in the CTAE course would also indicate mastery of the standards in the academic course, satisfactory completion of the CTAE courses will also earn credit for the student in the academic course. In short, the student earns two credits for one CTAE course. The following courses are included in this provision at this time:

Course Name	Essentials of Healthcare
Course Credits on your transcript	Essentials of Healthcare (1 CTAE Credit that meets the 4th Science graduation requirements) Human Anatomy and Physiology (1 Elective Credit)



I'M INTERESTED IN MOVE ON WHEN READY ... NOW WHAT???

1. Decide where you want to do MOWR (Dual Enrollment). Use this MOWR link to research postsecondary institution and course offerings:
https://secure.gacollege411.org/Financial_Aid_Planning/Scholarships/Grants_and_Scholarships/MOWR.aspx

Most of our students attend the following institutions, but you are not limited to these:

 - a. **Chattahoochee Technical College** –
www.chattahoocheetech.edu/enrollment-for-current-high-school-students
 - b. **Georgia Highlands College** –
www.highlands.edu/site/admissions-mowr
 - c. **Kennesaw State University** –
<http://admissions.kennesaw.edu/apply/dehp.php>
 - d. **University of West Georgia** –
www.westga.edu/dualenroll
2. It is important to research your program of interest to get all information regarding admission requirements, honors programs, living arrangements (UWG), etc.
3. **Take the SAT, ACT, Compass or Accuplacer (more information regarding Accuplacer coming Fall 2016).** Different programs require different tests for admissions. You must take the test and have the scores sent to the desired institution. They must be received by the college by the application deadline for MOWR program.
 - a. **SAT** – www.collegeboard.org
 - b. **ACT** – www.act.org
 - c. **Compass (CTC)** – www.chattahoocheetech.edu/enrollment/admissions/mowr-testing-requirements/

MOVE ON WHEN READY

.....

All students who wish to participate in Move on When Ready must have an advisement conference with the school counselor EACH SEMESTER (fall, spring, and/or summer). The law requires the advisement session is to take place with the high school counselor, parent and student. It is the responsibility of the school counselor to abide by PCSD board policy and to discuss applicable information from the following topics with the student and parent/guardian in a MOWR conference.

Visit PCSD Counselor web page for additional information.

www.paulding.k12.ga.us/Page/23177



MOWR

4. **Apply to your school of choice.** Once you know where you want to go, apply through that school's website.

- a. There may be an application fee.
- b. Often a counselor advisement conference and/or signature is required as part of the application process. Thus, please schedule an appointment with your high school counselor to complete necessary paperwork. **Please do not wait until the day before the deadline as you may not be able to see your counselor that quickly.**

5. Once you are accepted by your chosen institution, **meet with your counselor** to fill out necessary paperwork and to discuss courses for your upcoming semester at college. Be thinking about how many classes you would like to take in high school and how many you would like to take in college. If you want to be a full time college student you must take at least four (4) three hour college courses. Anything less, you will have to fill your remaining schedule with high school courses at your home high school. Your counselor will work with you on scheduling classes to meet your graduation requirements as well as determining the college courses to build your college transcript.

6. **Deadlines:** Please make sure you are aware of the college admission deadline as well as your high school deadline. Some college admission deadlines may come **before** while others may be **after** the high school (school district) deadline, but you must schedule an appointment with your counselor to review acceptance documents and procedures before the district high school deadline. If you do not, the counselor may not be able to complete your necessary paperwork in time. Deadlines for the **2016-2017** school year are:

- a. **Fall Semester:**
High School Deadline – July 22, 2016
- b. **Spring Semester:**
High School Deadline – December 9, 2016
- c. **Summer Term:**
High School Deadline – April 28, 2017

7. **A few more things to know ...**

- 1) You are responsible for all high school information (i.e. testing dates, class activities, etc). Check school website often.
- 2) Know your GAcollge411 (GAFutures) login information. This will be vital when applying for MOWR as there is a GAFutures online application process that is required.

IMPORTANT CONSIDERATIONS PRIOR TO BEGINNING THE MOWR PROGRAM...

- **Required SAT/ACT or other testing has been completed or is scheduled.**
- **Academic Rigor** - Understanding that MOWR courses will be rigorous courses.
- **Attendance** - Recognizing the importance of attending all classes.
- **Career Goal** - Selecting courses not only based on high school graduation requirements but also with career interests in mind.
- **Cell Phone Use** - Realizing that paying attention to the college professor during class is extremely important and to follow cell phone use policies set by the postsecondary school.
- **Communication Skills** - Knowing when to ask for the professor's help and learning early each semester how to contact each professor. Understanding that communication from the professor will be with the student and not the parent(s)/guardian(s).
- **Mandatory Student Events and Trainings** - Participating in mandatory orientations or other events set up the postsecondary school. Completing HAVEN training which is safety and wellness training provided by the postsecondary institution (federal requirement).
- **Maturity Level** - Making certain that the student's social and emotional maturity level is such that the student will be successful in the MOWR Dual Enrollment program.

MOWR

- **Organization and Study Skills** - Recognizing the importance of time management and being organized as well as having a plan to meet all course requirements on time.
- **Perfectionism** - Knowing that feeling overwhelmed requires being able to recognize when student needs to ask questions or seek help from the college professor and thus, asking for assistance is a life skill.
- **Procrastination** - Making certain that important projects and/or tests are prepared for well in advance.
- **Satisfactory Academic Progress** - Understanding what the postsecondary institution's SAP is as set by the institution.
- **Syllabus** - Being familiar with each college professor's syllabus which will be the road map for the course and include all important deadlines.
- **Transfer of Dual Enrollment Courses** - Talking with admissions representatives and understanding what the transfer policies are regarding completed MOWR courses and credit hours for a student who wants to transfer dual enrollment courses and grades to another institution after high school. Talking with admissions staff to determine what and how many dual enrollment credit hours will transfer.



Career Pathways are state-approved career enhancement programs defined as a coherent, articulated sequence of rigorous academic and career related courses starting in the ninth grade and leading to an associate degree, and/or an industry recognized certificate or licensure, and/or a baccalaureate degree and beyond.

Career, Technical, and Agricultural Education (CTAE) provides students with the opportunity to select at least three sequenced courses in a career pathway.

CTAE CONCENTRATOR: A concentrator is defined as a student who takes at least three sequential CTAE courses in a specific program area during their high school career.

PATHWAY COMPLETER: A pathway completer is a concentrator who completes the requirements for the Georgia High School Graduation Test (GHS GT) and also completes the requirements for CTAE pathway concentrators.

Selection of a pathway is based on self-awareness and the investigation of occupations plus related educational levels aligned with the pathway. Most high-demand, high-skilled, high-wage occupations in all concentrations still require education beyond high school.

Implementation of career pathways is a collaborative effort between the Paulding County School District, the Georgia Department of Education, the Technical College System of Georgia and the University System of Georgia.

WHAT ARE CAREER PATHWAYS?

CAREER PLANNING RESOURCES

www.GeorgiaCRN.org

Georgia Career Resource Network is a web site designed to assist counselors, instructors, and administrators with career-related programs, initiatives, and information.

www.GAfutures.org

GAfutures is an internet site for planning, paying, and applying for college.

www.careervoyages.gov

Career Voyage is a national website for emerging industries and high demand occupations.

www.bls.gov/oco/

The Occupational Outlook Handbook is a nationally recognized source of career information. It describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects. The handbook covers a wide range of occupations.



AGRICULTURE, FOOD AND NATURAL RESOURCES

Careers with common knowledge and skills related to production, processing, marketing, financing, distribution, and development of agricultural commodities and resources. These commodities include food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

ARCHITECTURE AND CONSTRUCTION

Careers with common knowledge and skills related to the designing, planning, managing, and building structures.

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS

Careers with common knowledge and skills related to designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

BUSINESS MANAGEMENT AND ADMINISTRATION

Careers with common knowledge and skills related to the preparation of students with computer skills for future college and career plans. Cluster skills mastered include planning, organizing, directing, and evaluating as well as owning and operating a successful business.

EDUCATION AND TRAINING

Careers with common knowledge and skills related to planning, managing, and providing education and training services as well as related learning support services.

FINANCE

Careers with common knowledge and skills related to money management, including planning, investing, and spending. Students will gain career development skills for the finance world with opportunities that expand beyond basic business skills into financial literacy, banking, investing, insurance, and risk management.

GOVERNMENT AND PUBLIC ADMINISTRATION

Careers with common knowledge and skills related to planning and performing of government management and administrative functions at local, state, and federal levels. Careers are available in national security, foreign service, revenue, and regulations.

HEALTH SCIENCE

Careers with common knowledge and skills related to planning, managing, and providing services in therapeutics, diagnostics, health informatics, support areas, and biotechnology research and development.

HOSPITALITY AND TOURISM

Careers with common knowledge and skills related to the management, marketing, and operations of restaurants, and other food services, lodging, attractions, recreation events, and travel related services.

HUMAN SERVICES

Careers with common knowledge and skills related to family and human needs such as nutrition and food science, counseling and mental health services, family and community services, personal care, and consumer services.

INFORMATION TECHNOLOGY

Careers with common knowledge and skills related to the preparation for careers that create, use, modify, and engage technology skills. Graphics, multimedia animation, web design, game and application development, networking, and computer repair are all possibilities.

LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

Careers with common knowledge and skills related to employment in emergency and fire services, legal services, protective services, and homeland security.

MARKETING

Careers with common knowledge and skills related to the process of anticipating, managing, and satisfying consumers' demand for products, services, and ideas. The Marketing career cluster generates the strategy that underlies advertising and promotional techniques, business communication, and business development.

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)

Careers with common knowledge and skills related to planning, managing, and providing scientific research and professional and technical services.

TRANSPORTATION DISTRIBUTION AND LOGISTICS

Careers with common knowledge and skills related to planning, managing, and moving people, materials, and goods by road, pipeline, air, rail, and water, and also includes other related professional and technical support services.

CAREER CLUSTERS

OVERVIEW OF CAREER CLUSTERS PATHWAYS

- Georgia's 17 Career Cluster/Pathways provide a structure for organizing and delivering quality Career, Technical and Agricultural Education (CTAE) programs.
- Modeled after the National Career Clusters configuration utilized by most of the United States, Georgia's 17 Career Cluster/Pathways Model represents approximately 96 career pathways to help students navigate their way to greater success in college and career.
- As an organizing tool for curriculum design and instruction, the 17 Career Clusters provide essential knowledge and skills for the students' career pathways.
- This model functions as a:
 - *Useful guide in developing programs of study that bridge secondary and postsecondary curriculum.*
 - *Indicator of a range of career options for students' graduation plans of study.*
 - *Method of allowing students to discover their interests and passions, empowering them to choose the educational pathway that may lead to success in high school, college and career.*
- The 17 Career Cluster/ Pathways encompass both secondary and postsecondary education and will strengthen and improve student transition from secondary to postsecondary education.
- The Paulding County School District offers 15 of the 17 Career Clusters.





EXPLANATION OF TERMS

CTAE Pathway

A series of 3 or 4 specified courses in a CTAE-approved pathway. Advanced Academic Pathway An advanced Academic Pathway may be followed in any of these four content areas: ELA, mathematics, science or social studies. A student has completed an Advanced Academic Pathway in ELA, mathematics, science, or social studies when the criteria described in A (page 21) have been met.

Fine Arts Pathway

A Fine Arts Pathway may be followed in any of these five areas of study: visual arts, theater, dance, music, or journalism. A student has completed a Fine Arts Pathway when three courses, from those identified in the five accompanying attachments (B-Visual Arts, C-Theater, D-Dance, E-Music, F-Journalism), have been successfully completed in any one of the five areas.

World Language Pathway

A World Language Pathway may be followed in any of the world language areas included in the state list of approved courses. A student has completed a World Language Pathway when the criteria described in G (page 90-91) have been met.

ADDITIONAL PATHWAYS

ADVANCED ACADEMIC PATHWAY

An Advanced Academic Pathway may be followed in any of these four content areas: ELA (English/Language Arts), mathematics, science or social studies.

A student has completed an Advanced Academic Pathway in ELA, mathematics, science, or social studies when the criteria described below have been met.



ADDITIONAL PATHWAYS

International Skills Diploma

In today's global marketplace, it is important for students to acquire the interdisciplinary skills they need to be globally competent and competitive. The International Skills Diploma Seal is awarded to graduating high school students who complete an international education curriculum and engage in extracurricular activities and experience that foster the achievement of global competencies. It is a signal to employers and higher education institutions that a student is prepared to participate in the global economy.

Requirements for the Seal

- *At least three credits in the same world language and/or ESOL*
- *At least four credits in courses determined to have an international focus, such as international economics, world/non-US history, world geography, etc.*
- *At least four extracurricular activities and experiences with global theses and/or in global contexts (e.g., exchange programs, international and language clubs, travel abroad)*
- *Twenty hours of community service involving a global/cross-cultural public service project*
- *Capstone presentation on the knowledge gained in the courses and activities listed above*

Additional information can be found at the Georgia Department of Education - World Language Division.

Georgia's Seal of Biliteracy

HB 879 was signed into law on May 3, 2016, establishing a Seal of Biliteracy for the state of Georgia. The Seal of Biliteracy will be available for graduating high school students starting in 2016-17.

Requirements for the Seal:

- *Completion of all English language arts requirements for graduation with an overall grade point average of 3.0 or above in those classes; and*
- *Proficiency in one or more languages other than English, demonstrated by passing a foreign language advanced placement examination with a score of 4 or higher or and international baccalaureate examination with a score of 5 or higher; provided, however, that for languages in which an advanced placement examination is not available, the Department of Education may provide a listing of equivalent summative examinations that local schools systems may use in place of such an advanced placement examination.*

Additional information can be found at the Georgia Department of Education - World Language Division.

ADDITIONAL PATHWAYS

ADVANCED ACADEMIC PATHWAY IN ELA (ENGLISH/LANGUAGE ARTS) CRITERIA:

1. Student graduated, thereby completing 4 required credits in ELA, AND
2. Student's course history in ELA (23 course codes) includes at least one AP* Course Code (23.043; 23.053; 23.065) or one IB* Course Code (23.06800; 23.06900; 23.06110; 23.06120; 23.06130) or one post secondary enrollment code in 23 that fulfills a core graduation requirement in ELA, AND
3. Student earned credits in two sequential courses in one world language.

ADVANCED ACADEMIC PATHWAY IN MATHEMATICS CRITERIA:

1. Student graduated, thereby completing 4 required credits in mathematics, AND
2. Student's course history in mathematics (27 course codes) includes at least one AP* Course Code (27.072; 27.073; 27.074) or one IB* Course Code (27.06120; 27.06130; 27.05220; 27.05240) or one post secondary enrollment code in 27 that fulfills a core graduation requirement in Mathematics, AND
3. Student earned credits in two sequential courses in one world language.

ADVANCED ACADEMIC PATHWAY IN SCIENCE CRITERIA:

1. Student graduated, thereby completing 4 required credits in science, AND
2. Student's course history in science (26 course codes and 40 course codes) includes at least one AP* Course Code (26.014; 26.062; 40.053; 40.083; 40.0841; 40.0842) or one IB* Course Code (26.01800; 26.01900; 26.06300; 40.08500; 40.08600) or one post secondary enrollment code in 26 or 40 that fulfills a core graduation requirement in Science, AND
3. Student earned credits in two sequential courses in one world language.

ADVANCED ACADEMIC PATHWAY IN SOCIAL STUDIES CRITERIA:

1. Student graduated, thereby completing 3 required credits in social studies, AND
2. Student's course history in social studies (45 course codes) includes at least one AP* Course Code (45.016; 45.052; 45.053; 45.062 45.063; 45.077; 45.0811; 45.082; 45.084) or one IB* Course Code (45.01310; 45.01320; 45.01700; 45.017100; 45.06500; 45.06600; 45.07800; 45.07900; 45.08700; 45.08800; 45.08900) or one post secondary enrollment code in 45 that fulfills a core graduation requirement in Social Studies, AND 3. Student earned credits in two sequential courses in one world language.

WORLD LANGUAGE PATHWAY GUIDELINES AND PATHWAY CRITERIA:

1. Student graduated, AND
2. Student's course history in one world language includes 3 distinct high school Course Codes OR includes at least 2 distinct Course Codes plus a third code reflecting an AP* course, where AP courses are offered (60.017, French; 60.077, Spanish; 60.078, Spanish Lit; 61.017, German; 61.047, Latin; 62.0196, Chinese; 63.039, Japanese); or a third code reflecting an IB* course, where courses are offered (French, 60.01120, 60.01130; Spanish, 60.07130, 60.07160; German, 61.01120, 61.01130; Latin, 61.04120, 61.04130; Chinese, 62.01900, 62.01910; Japanese, 62.03920, 62.03930; Arabic, 63.10700, 63.01800;) or one post secondary enrollment course code in the same World Language reflecting a third course at the college level.

*AP, IB and dual enrollment courses must have earned credit



CTAE INDUSTRY CERTIFICATION

(see *Therapeutic Science* pages 45-48 and *Marketing* pages 50 and 55 for classes and schools)

When a program becomes industry certified, it receives a "Stamp of Excellence", which represents the apex of program quality. Only those programs that have successfully undergone rigorous reviews by leaders from business and industry are recognized with this distinction.

This formal process strengthens all program components, including:

- *Classrooms and labs which are equipped with state-of-the-art equipment and technology;*
- *CTAE and academic performance standards that are aligned to national standards;*
- *In-depth, project-based instruction in all curriculum areas;*
- *Appropriate and varied Career Related Education (CRE) instruction, including school-based enterprises and entrepreneurial ventures;*
- *Career and Technical Student Organizations (CTSOs) which offer co-curricular competitive events on the local, state and national level and provide leadership development skills for personal and professional growth; and,*
- *Business, industry and community involvement in all aspects of the program. Industry certified programs not only offer outstanding opportunities to students who receive instruction through such programs; but they also offer positive benefits for schools as well as employers.*

CERTIFICATIONS, OPPORTUNITIES AND ADDITIONAL RESOURCES

CAREER PLANNING RESOURCES

<http://gacrn.gcic.edu/>

Georgia Career Resource Network is a web site designed to assist students, parents, and school personnel with career-related programs, initiatives and information.

www.GAfutures.org

GAfutures is an internet site to help students with high school, college and career planning, financial aid, and applying for college.

www.careeronestop.org

CareerOneStop, sponsored by the U.S. Department of Labor, provides opportunities for visitors to identify interests, explore careers, and find education options.

www.bls.gov/oco/

The Occupational Outlook Handbook is a nationally recognized source of career information. It describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects. The handbook covers a wide range of occupations.



ADDITIONAL RESOURCES

NONTRADITIONAL OCCUPATIONS

Nontraditional careers are those occupations or fields of work for which individuals from one gender comprise less than 25% of the individuals employed. Students are encouraged to enroll in courses that fit their career goals regardless of the gender make-up in the classroom.

Some examples of nontraditional careers are:

- *For females there's Agriculture Mechanics, Construction, Architectural Drawing & Design, Transportation Logistical Operations and Business & Technology.*
- *For males there's Early Childhood Education, Patient Care, Cosmetology and Nutrition & Foods Science.*

GEORGIA CAREER INFORMATION SYSTEM (GCIS)

The Georgia Career Information System (GCIS) is the center's primary initiative. Working with educational and labor market professionals, GCIS contains assessment, explorations, and search strategies as well as the most comprehensive and accurate state and national occupational and education information. The Georgia Career Information System Junior (GCIS Junior) and Georgia Career Information System for grades 6-12 provides prerequisite career development in a fun and rewarding structure. GCIS helps answer three basic questions: Who Am I?, Where Am I Going?, and How Do I Get There? The GCIS site is www.gcis.peachnet.edu.

Georgia's HOT Careers to 2022

The careers in this chart have it all!

Skills and Abilities

- advanced skills required ○ moderate skills required

Work Activities

- frequently found ○ occasionally found



Green jobs involve work that produces products or services that protect or restore the environment or conserve natural resources.

	Critical Thinking/Problem Solving skills	Judgement & Decision Making skills	Service Oriented/Instructing skills	Listening/Reading skills	Oral Expression skills	Deftness/Arm-Hand Steadiness	Reasoning ability	Written Expression/Comprehension	Assisting & Caring for Others	Coaching Training & Teaching Others	Communicating Outside Organization	Control Machines/Inspect Equipment	Interacting With Computers	Monitor Processes, Materials, Surroundings	Physical Acts/Handle-Move Objects	Schedule/Organize Data or Information	Thinking Creativity	2013 Annual Wage	2012-22 Annual Openings
Doctoral or professional degree																			
Business Teachers, Postsec	○	●	○	○	●	●	●	●	●	●	●	○	●	○	●	○	●	\$81,600	100
Clinical, Counseling, & School Psychologists	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	\$64,500	160
Dentists, General	●	●	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$194,500	260
Education Teachers, Postsec	●	○	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$56,000	190
Health Specialties Teachers, Postsec	○	○	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$99,000	390
Lawyers	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	\$139,500	680
Pharmacists	○	●	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$115,200	380
Physical Therapists	○	●	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$81,300	250
Surgeons	●	●	○	○	●	●	○	○	○	○	○	○	○	○	○	○	○	\$254,400	110
Master's degree																			
Art, Drama, & Music Teachers, Postsec	○	○	○	○	●	●	●	●	●	●	●	○	○	○	○	○	○	\$62,100	110
Education Administrators, Elem & Sec	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$85,600	370
Education Administrators, Postsec	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$97,800	210
Educational, Guidance, School, & Voc Counselors	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$56,900	320
Healthcare Social Workers	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$47,500	150
Instructional Coordinators	○	○	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$60,600	150
Nurse Practitioners	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$86,100	240
Nursing Instructors & Teachers, Postsec	○	○	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$61,200	100
Physician Assistants	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$93,400	240
Speech-Language Pathologists	○	○	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$70,100	100
Bachelor's degree																			
Accountants and Auditors	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$73,100	2,170
Administrative Services Managers	○	○	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$89,500	500
Architects, Exc Landscape & Naval	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$80,400	150
Civil Engineers	●	○	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$87,000	380
Computer & Information Systems Managers	●	●	○	○	●	●	●	●	○	○	○	○	○	○	○	○	○	\$122,800	370
Computer Systems Analysts	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$77,100	750
Construction Managers	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$86,400	440
Database Administrators	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$84,600	160
Electrical Engineers	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$85,400	150
Elementary School Teachers, Exc Spec Ed	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$54,000	2,320
Financial Analysts	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$79,900	340
General & Operations Managers	●	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$109,900	2,690
Human Resources Specialists	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	\$56,100	450

✓ Fast job growth ✓ Above average wages ✓ At least 100 expected annual job openings

<http://explorer.dol.state.ga.us/gsipub/index.asp?docid=356>












Georgia Department of Labor • Mark Butler, Commissioner

Equal Opportunity Employer/Program • Auxiliary Aids and Services Available upon Request to Individuals with Disabilities

Georgia's HOT Careers to 2022




























The careers in this chart have it all!

Skills and Abilities	Skills and Abilities										Work Activities										Occupational Characteristics	
	● advanced skills required ○ moderate skills required										● frequently found ○ occasionally found											
Work Activities	Critical Thinking/Problem Solving skills Judgment & Decision Making skills Service Oriented/Instructing skills Listening/Reading skills Oral Expression/Comprehension Dexterity/Arm-Hand Steadiness Reasoning ability Written Expression/Comprehension Assisting & Caring for Others Coaching/Training & Teaching Others Communicating Outside Organization Control Machines/Inspect Equipment Interacting With Computers Monitor Processes, Materials, Surroundings Physical Access/Handle-Move Objects Process/Analyze Data or Information Schedule/Organize Plan, & Prioritize Work Thinking Creatively 2013 Annual Wage 2012-22 Annual Openings																					
Green jobs involve work that produces products or services that protect or restore the environment or conserve natural resources.																						
Bachelor's degree (Continued)																						
Industrial Engineers 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$81,400	270
Kindergarten Teachers, Exc Spec Ed	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$51,300	390
Logisticians 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$71,000	150
Management Analysts	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$91,100	1,500
Market Research Analysts & Marketing Spec	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$64,800	560
Marketing Managers 	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$126,400	230
Mechanical Engineers 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$79,400	210
Medical & Health Services Managers	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$90,500	480
Meeting, Convention, & Event Planners	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$46,800	140
Middle Schl Teachers, Exc Spec & Career/Tech Ed	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$54,600	1,220
Network & Computer Systems Administrators	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$78,600	420
Personal Financial Advisors 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$105,100	300
Public Relations Specialists 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$58,400	190
Software Developers, Applications	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$87,100	490
Spec Ed Teachers, Middle School	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$53,000	190
Voc Ed Teachers, Postsec	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$48,900	200
Associate's degree																						
Dental Hygienists	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$67,600	370
Paralegals & Legal Assistants	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$51,200	380
Radiologic Technologists	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$50,400	200
Registered Nurses	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$61,600	2,300
Web Developers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$73,000	140
Some college, no degree																						
Computer User Support Specialists	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$47,900	870
Telecom Equip Installers & Repairers, Exc Line Installers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$52,500	330
High school diploma or equivalent																						
Electricians 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$45,300	710
Supvrs of Construction Trades & Extraction Workers	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$57,300	490
Supvrs of Helpers, Laborers, & Mat Movers, Hand 	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$47,900	310
Supvrs of Lndscpg, Lawn Svc, & Grndskpg Workers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$47,500	180
Supvrs of Office & Admin Support Workers	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$52,400	1,780
Plumbers, Pipefitters, & Steamfitters 	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$44,000	330
Property, Real Estate, & Community Assoc Mgrs	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$69,000	350
Real Estate Sales Agents	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$52,900	460
Sales Reps, Wholesale & Mfg, Exc Tech & Scientific Products	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$61,300	2,220

✓ Fast job growth ✓ Above average wages ✓ At least 100 expected annual job openings

GEORGIA'S STEM Careers to 2022

Science, Technology, Engineering, and Mathematics

Knowledge Understanding of principles and facts of subject matter ● full knowledge required ○ some knowledge required Education Typical education needed to enter an occupation  jobs involve work that produces products or services that protect or restore the environment or conserve natural resources.  jobs have faster than state average job growth, above state average wages, and have at least 100 annual openings.	Knowledge																Education				Occupational Characteristics				
	Administration and Management	Biology/Chemistry	Design/Bldg and Construction	Clerical/Customer and Personal Svc	Telecom/Communications and Media	Computers and Electronics	Economics and Accounting	Education and Training	Engineering and Technology	English Language	Law and Govt/Public Safety and Security	Mathematics	Mechanical/Production and Processing	Medicine and Dentistry	Personnel and Human Resources	Physics	Psychology/Sociology and Anthropology	Therapy/Counseling	Doctoral or Professional Degree	Master's Degree	Bachelor's Degree	HS Diploma/Assoc Degree/Some College	2013 Annual Wage	2012-22 Annual Openings	
Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations																									
Actuaries	●					●	●			●	○	●									✓		\$102,600	20	
Aerospace Engineers  	●		○	○		●			●		○	●	●			●					✓		\$108,300	100	
Biological Technicians		●								●		●									✓		\$42,000	20	
Civil Engineers  	●		●	○					●	●	○	●				●					✓		\$87,000	380	
Computer & Information Systems Managers 	●			○	○	●	●			●			○		●						✓		\$122,800	370	
Computer Hardware Engineers				○		●			●	●						●					✓		\$88,900	70	
Computer Network Architects	●		○	○	●	●		●	●	●	○										✓		\$92,400	120	
Computer Network Support Specialists	●			○	●	●			●	●											✓		\$63,900	150	
Computer Programmers	●			○		●				●		●									✓		\$87,100	520	
Computer Systems Analysts 	●			○		●			●	●											✓		\$77,100	750	
Computer User Support Specialists 	●			●	○	●			●	●											✓		\$47,900	870	
Database Administrators 				●						●		●									✓		\$84,600	160	
Electrical Engineers  	●		○	○		●			●	●	○	●	○			●					✓		\$85,400	150	
Electronics Engineers, Exc Computer 	●		○			●			●	●		●	●			●					✓		\$85,300	180	
Environmental Engineers 		●	○	○					●	●	●	●				●					✓		\$76,500	60	
Industrial Engineers  	●		○	○		●		●	●	●		●	●								✓		\$81,400	270	
Information Security Analysts 	●		○	○	●	●		●	●	●	○										✓		\$83,200	110	
Mathematical Science Teachers, Postsec				○		●		●		●		●							✓				\$59,800	60	
Mechanical Engineers  	●		○	○		●			●	●		●	●			●					✓		\$79,400	210	
Network & Computer Systems Administrators 	●					●				●		●									✓		\$78,600	420	
Operations Research Analysts	●					●			●	●		●	○								✓		\$76,900	90	
Sales Reps, Wholesale & Mfg, Tech & Sci Products  				○		●				●			○								✓		\$80,000	430	
Software Developers, Applications 						●			●	●		●									✓		\$87,100	490	
Software Developers, Systems Software 			○	○		●			●	●		●									✓		\$97,400	440	
Statisticians	●					●				●		●								✓			\$88,200	20	
Web Developers	●		○	○	●	●		●	●	●	○										✓		\$73,000	140	
Health Occupations																									
Dental Hygienists 				○				●		●				●		○					✓		\$67,600	370	
Dentists, General 	●	●	○	○		●							●	●		○		✓					\$194,500	260	
Diagnostic Medical Sonographers				●	●			●		●		●		●	●	○				✓			\$60,800	90	
Emergency Medical Techs & Paramedics				○				●		●	●			●	●	○	●				✓		\$30,800	550	
Family & General Practitioners		●	○					●		●		●		●		●	●	✓					\$192,900	80	
Health Specialties Teachers, Postsec 		○		○	○			●		●	○	●		●		○	●	✓					\$99,000	390	

<https://explorer.gdol.ga.gov/gspub/index.asp?docid=356>



Georgia Department of Labor • Mark Butler, Commissioner

Equal Opportunity Employer/Program • Auxiliary Aids and Services Available upon Request to Individuals with Disabilities

GEORGIA'S STEM Careers to 2022

Science, Technology, Engineering, and Mathematics

Knowledge Understanding of principles and facts of subject matter ● full knowledge required ○ some knowledge required Education Typical education needed to enter an occupation ● jobs involve work that produces products or services that protect or restore the environment or conserve natural resources. 🔥 jobs have faster than state average job growth, above state average wages, and have at least 100 annual openings.	Knowledge																Education				Occupational Characteristics				
	Administration and Management	Biology/Chemistry	Design/Bldg and Construction	Clerical/Customer and Personal Svc	Telecom/Communications and Media	Computers and Electronics	Economics and Accounting	Education and Training	Engineering and Technology	English Language	Law and Gov/Public Safety and Security	Mathematics	Mechanical/Production and Processing	Medicine and Dentistry	Personnel and Human Resources	Physics	Psychology/Sociology and Anthropology	Therapy/Counseling	Doctoral or Professional Degree	Master's Degree	Bachelor's Degree	HS Diploma/Assoc Degree/Some College	2013 Annual Wage	2012-22 Annual Openings	
Health Occupations (Continued)																									
Internists, General	●	●		○				●		●				●				●	●	✓				\$219,500	70
Licensed Practical & Licensed Vocational Nurses	●	○		○				●		●		●		●			○	●				✓		\$37,500	1,140
Med & Clinical Laboratory Technicians		●		○		●						●	○	●								✓		\$36,000	450
Med & Clinical Laboratory Technologists		●		●		●		●		●		●	○	●							✓			\$55,700	200
Med & Health Services Managers 🔥	●			○			●			●	●	●		●	●		○				✓			\$90,500	480
Med Records & Health Info Techs				●		●				●												✓		\$34,900	240
Nurse Practitioners 🔥		○		○		●				●		●		●			●	●		✓				\$86,100	240
Nursing Instructors & Teachers, Postsec 🔥	●	○		○				●		●				●			●	●		✓				\$61,200	100
Occupational Therapists		○		○				●	●					●			●	●		✓				\$75,700	90
Pharmacists 🔥		●		○		●		●		●		●		●			○	●	✓					\$115,200	380
Pharmacy Technicians				●		●				●		●		●								✓		\$27,600	420
Physical Therapists 🔥		○		○				●		●	●			●			○	●	✓					\$81,300	250
Physician Assistants 🔥		●		○						●				●			●	●		✓				\$93,400	240
Radiologic Technologists 🔥				●				●		●			●	●			●					✓		\$50,400	200
Registered Nurses 🔥		○		○				●		●	○	●		●			●	●				✓		\$61,600	2,300
Respiratory Therapists		●		○				●		●		●	○	●		●	○				✓			\$52,100	100
Speech-Language Pathologists 🔥				○				●		●							○	●		✓				\$70,100	100
Surgeons 🔥	●	○		○		●		●		●			●	●			○	●	✓					\$254,400	110
Surgical Technologists		○		○				●		●	○			●			○					✓		\$40,200	110
Veterinarians	○	●		○						●		●		●					✓					\$80,500	100
Architecture Occupations																									
Architects, Exc Landscape & Naval 🌿 🔥	●			●	○				●	●	●	●									✓			\$80,400	150
Architectural & Civil Drafters 🌿				●	○		●		●	●	○	●										✓		\$51,600	50
Architectural & Engineering Managers 🌿 🔥	●			○	○		●		●	●		●	○		●	●					✓			\$125,200	220
Landscape Architects 🌿	●	○		●	○		●			●	●	○									✓			\$66,500	20
Social Science Occupations																									
Clinical, Counseling, & School Psychologists 🔥	●			●		●	●	●		●	●	●					●	●	✓					\$64,500	160
Economics Teachers, Postsec						●	●	●		●	○	●							✓					\$94,700	10
Economists 🌿						●		●		●		●								✓				\$99,200	10
Political Science Teachers, Postsec					○	●		●		●	○						●		✓					\$68,800	30
Psychology Teachers, Postsec						●		●		●		●					●	●	✓					\$66,700	40
Social Science Research Assistants	●			●		●		●		●		●					○	○				✓		\$40,900	10
Sociology Teachers, Postsec				○		●		●		●	○	●					●		✓					\$62,500	30
Survey Researchers	●			○		●				●		●					●			✓				\$46,000	20
Urban & Regional Planners 🌿	●			○	○	○		○		●	○						○			✓				\$59,200	20

<https://explorer.gdol.ga.gov/gsipub/index.asp?docid=356>

For more information, contact Workforce Statistics & Economic Research (WS&ER) at (404) 232-3875 or at workforce_info@gdol.ga.gov



AGRICULTURE, FOOD AND NATURAL RESOURCES

FOOD ANIMAL SYSTEMS PATHWAY

TOP CAREERS CHOICES

Agricultural Inspector

Bachelor Degree needed
\$40,000 annual salary

Poultry Field Technician

Associate Degree needed
\$41,000 annual salary

Veterinarian

Doctorate needed
\$110,000 annual salary

Veterinarian Technician

Associate Degree needed
\$32,000 annual salary

ADDITIONAL CAREER CHOICES

Agriculture Teacher

Animal Reproduction

Domestic Animal Production

Research

Sales and Service

The Food Animal Systems pathway prepares students for a wide range of post secondary options such as beef/dairy production, poultry science, veterinary medicine, animal genetics and breeding, equine production, poultry production, aquaculture and fisheries science, etc., as well as the basic skills necessary to perform entry level tasks to enter the workforce or technical or certificate program such as a Veterinary technician.

PATHWAY CONCENTRATION COURSES

- 02.47100 • Basic Agricultural Science
- 02.42100 • Animal Science and Biotechnology
- 01.43200 • Agricultural Animal Production and Management

RECOMMENDED COURSES

- Equine Science
- Small Animal Production
- Veterinary Science

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Animal Science
- Equine Science
- Genetics
- Poultry Science
- Veterinary Medicine

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FFA



AGRICULTURE, FOOD AND NATURAL RESOURCES

PLANT AND LANDSCAPE SYSTEMS PATHWAY



Plant and Landscape Systems is designed to give student knowledge of scientific agricultural production and research. It introduces the major concepts of plant and horticulture science while utilizing the green industry in nursery production and landscape design and management. Occupations include plant biotechnology, commercial production of horticulture and agromonic crops.

PATHWAY CONCENTRATION COURSES

- 02.47100** • Basic Agricultural Science
- 01.46100** • General Horticulture and Plant Science
- 01.47000** • Nursery and Landscape

RECOMMENDED COURSES

- Biology
- Chemistry
- Computer Applications
- Entrepreneurship
- Statistics
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Horticulture
- Natural Resource and Environmental Science
- Plant Pathology

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FFA

TOP CAREERS CHOICES

Administrative Services Manager

Bachelor Degree needed
\$68,016 annual salary
420 annual average openings in Georgia

Executive Secretary and Administrative Assistant

Moderate On-the-Job Training needed

ADDITIONAL CAREER CHOICES

Administrative Assistant

Communications Equipment Operator

Computer Operator



AGRICULTURE, FOOD AND NATURAL RESOURCES

AGRICULTURAL MECHANICS SYSTEMS PATHWAY

TOP CAREERS CHOICES

Welder

\$22 per hour

20% growth rate over next 5 years

Electrician

\$43,650 annual salary

Small Engine Repair

Contractor

ADDITIONAL CAREER CHOICES

Agricultural Application Software
and Developer

Agricultural Engineer

Engineering Specialist

Machine Operators

Maintenance Technician

Systems Technicians

Agricultural Mechanics Systems is the selection, operation, maintenance, servicing, selling, and use of power unite, machinery, equipment, structures, and utilities used in agriculture. Although the class is titled Agricultural Mechanics, the knowledge gained from the class can transverse many career fields such as welding, wiring, construction, electrical, diesel and small engine repair. This pathway is well suited for a student seeking a career in any of these named fields, as well as for someone who would like have knowledge of the basics in this skill area.

PATHWAY CONCENTRATION COURSES

- 02.47100** • Basic Agricultural Science
- 01.42100** • Agricultural Mechanics Technology I
- 01.42200** • Agricultural Mechanics Technology II

RECOMMENDED COURSES

- Agricultural Mechanics III
- Agricultural Metal Fabrication
- Agricultural Power and Machinery
- Agricultural Electricity and Electrical Controls
- Agricultural Construction

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Small Engine Repair
- Welding and Metal Fabrication
- Industrial Maintenance
- Construction Technology
- Electrical Technology
- Diesel Repair

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FFA



AGRICULTURE, FOOD AND NATURAL RESOURCES

FORESTRY/ WILDLIFE SYSTEMS PATHWAY



The Forestry/Wildlife Systems Pathway covers establishing forests by natural and artificial means, maintaining and surveying forests, identifying and protecting trees, practicing silviculture, measuring trees and land, mapping, preparing for timber sales and harvest, employing multiple-use resource management, keeping records, and figuring taxes. It introduces students to the principles of wildlife management and conservation and to opportunities for further education and careers in the field of wildlife biology.

PATHWAY CONCENTRATION COURSES

- 02.47100 • Basic Agricultural Science
- 03.45100 • Forest Science
- 03.45300 • Wildlife Management

RECOMMENDED COURSES

- Forestry Technology
- Natural Resources
- Wildlife Technology

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Agricultural Managers and Ranchers
- Agriscience Educators
- Conservation Scientists and Foresters
- Veterinary Technicians
- Soil Scientists and Agronomists

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FFA

TOP CAREERS CHOICES

Forester

Bachelor Degree needed
\$57,900 annual salary

Soil/Plant Scientist

Bachelor Degree needed
\$66,170 annual salary

Veterinarian Technician

Associate Degree needed
\$32,000 annual salary

ADDITIONAL CAREER CHOICES

Agricultural Application Software
and Developer

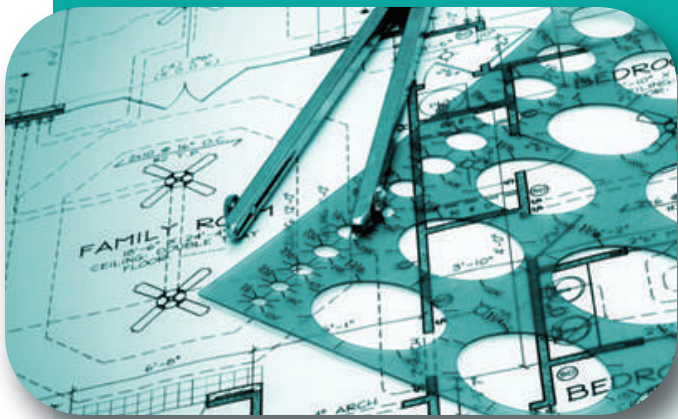
Agricultural Engineer

Engineering Specialist

Machine Operators

Maintenance Technician

Systems Technicians



People with careers in Architectural, Drawing and Design are people who solve problems and focus on making things work more efficiently and effectively. Engineers apply the theories and principles of science and mathematics to research and develop economical solutions to technical problems. Their work is the link between perceived social needs and commercial applications.

PATHWAY CONCENTRATION COURSES

- 48.54100 • Introduction to Drafting and Design
- 48.54500 • Architectural Drawing and Design I
- 48.54600 • Architectural Drawing and Design II

RECOMMENDED COURSES

- Advanced Algebra/Trigonometry
- Calculus
- Computer Applications
- Entrepreneurship
- World Language
- Introduction to Animation and 3D Design
- Physics
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- CAD Operator
- Land Development
- Project Management
- Specialty Construction

Colleges/Universities

- Architecture
- Civil Engineering Technology
- Construction Engineering
- Construction Management
- Surveying and Mapping

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

ARCHITECTURE AND CONSTRUCTION

ARCHITECTURAL DRAWING AND DESIGN PATHWAY

TOP CAREERS CHOICES

Architect

Moderate-Term On-the-Job Training needed
\$29,099 annual salary
110 annual average openings in Georgia

Architectural and Civil Drafter

Post-Secondary Vocational Training needed
\$42,078 annual salary
80 annual average openings in Georgia

Mechanical Drafter

Post-Secondary Vocational Training needed
\$42,141 annual salary
40 annual average openings in Georgia

Surveying and Mapping Technician

Moderate-Term On-the-Job Training needed
\$29,099 annual salary
110 annual average openings in Georgia

Surveyor

Bachelor Degree needed
\$42,349 annual salary
110 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Architectural Detailer
Architectural Engineer
Building Inspector
Civil Engineer
Designer
Drafter
Electrical Engineer
Environmental Engineer
Interior Designer
Landscape Designer
Structural Detailer
Structural Engineer Technician
Urban Planner



ARCHITECTURE AND CONSTRUCTION

CARPENTRY PATHWAYS

TOP CAREERS CHOICES

Construction and Building Inspector

Bachelor Degree
\$41,725 annual salary
50 annual average openings in Georgia

Construction Manager

Bachelor Degree
\$75,171 annual salary
100 annual average openings in Georgia

Electrician

Long-Term On-the-Job Training
\$39,458 annual salary
300 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Home Improvement Associate

Mason

Plumber and Pipefitter

Sheet Metal Worker

Construction is one of the nation's largest industries with over 7 million wage and salary jobs and 1.9 million self-employed workers. Construction includes the building of new structures as well as additions and modifications to existing ones. The construction industry also includes maintenance, repair and improvements on these structures.

PATHWAY CONCENTRATION COURSES

- 46.54500 • Industry Fundamentals and Occupational Safety
- 46.54600 • Introduction to Construction
- 46.55000 • Carpentry I

RECOMMENDED COURSES

- Calculus
- Current Issues
- Literary Types/Composition
- Macroeconomics
- Microeconomics
- Oral/Written Communication
- Sociology
- Statistics

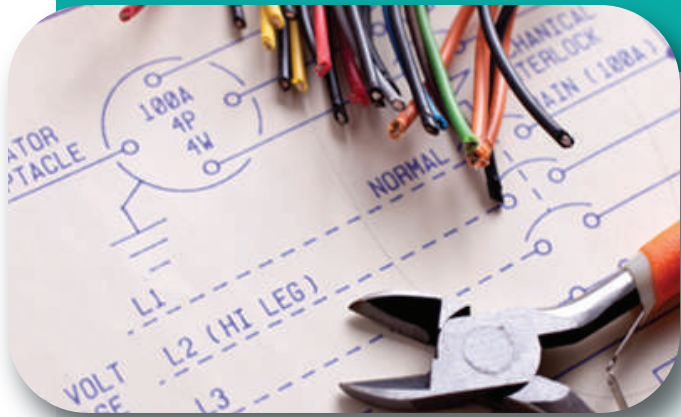
POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- On-the-Job Training
- Military
- Special Purpose Schools
- State Registered Apprenticeships

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA



ARCHITECTURE AND CONSTRUCTION

ELECTRICAL PATHWAY

TOP CAREERS CHOICES

Electricians

\$43,650 annual salary
Projected growth 23% from 2010-2020

Cost Estimator

\$58,460 annual salary

Electrical and Electronic Engineering Technician

\$56,040 annual salary

ADDITIONAL CAREER CHOICES

Engineering Technician

Civil Engineering Technician

Environmental Engineering Technician

The electrical pathway has workers that install and maintain electrical systems in homes, businesses, and factories. Electricians work indoors and out, in nearly every type of facility. Most states require licensure for electricians. Electricians typically do the following: read blueprints, install and maintain wiring and lighting systems, inspect electrical components, such as transformers and circuit breakers, etc., direct and train workers to install, maintain or repair electrical wiring or equipment.

PATHWAY CONCENTRATION COURSES

- 46.54500 • Industry Fundamentals and Occupational Safety
- 46.54600 • Introduction to Construction
- 46.56000 • Electrical 1

RECOMMENDED COURSES

- Energy and Power Technologies
- Appropriate and Alternative Energy Technologies

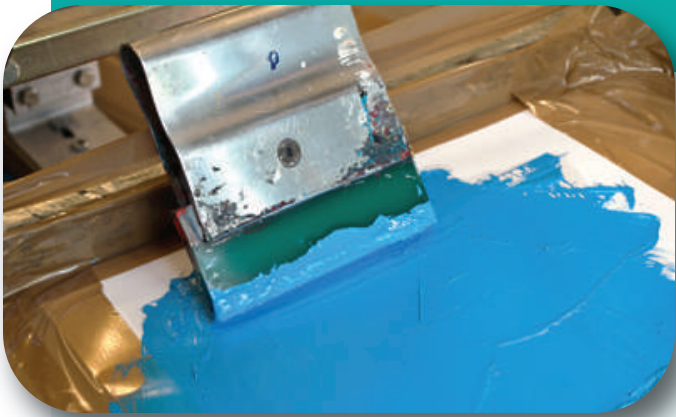
POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Cost Estimators
- Electricians
- Electrical and Electronic Engineering Techs
- Electrical and Power Transmission
- Electronic Systems Techs
- Linemen

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA



ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS

GRAPHIC DESIGN PATHWAYS

TOP CAREERS CHOICES

Art Director

College Degree needed plus
5-7 years experience
\$57,000 annual salary

Creative Designer

College Degree needed plus
10+ years experience
\$87,000 annual salary

Junior Designer

College Degree needed
\$31,000 annual salary

Senior Designer

College Degree needed plus
3 years experience
\$35,000 annual salary

ADDITIONAL CAREER CHOICES

Fashion Design

Illustration

Photography

3D Animation

Graphic Design is communication through visual means. This can be achieved either by Artistic or Printing means. The Graphic Design pathway starts with an introduction to the graphic design principals while exploring the techniques of creative problem solving. Graphic Design and Production explores the various printing techniques including screen-printing and offset printing. The third and final class Advance Graphic Design or Production the student will choose a to specialize in either Graphic Design or Graphic Production focusing on the demand and real world techniques of the specialty.

PATHWAY CONCENTRATION COURSES

- 48.56100 • Introduction to Graphics and Design
- 48.56200 • Graphic Design and Production
- 48.52800 • Advanced Graphic Design

RECOMMENDED COURSES

- Art
- Computer Applications
- Marketing

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Graphic Design
- Prepress and Production

Colleges/Universities

- Graphic Design
- Industrial Design
- Printmaking
- Product Design

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA



Graphic Communications allows the students to perform a variety of tasks. Students will experience basic introduction to graphic communications. Activities include making notepads, business cards, brochures, postcards, cover designs and promotional materials, invitations, and more. Many students will be a part of the ever increasing need for work used by local schools and businesses.

PATHWAY CONCENTRATION COURSES

- 48.56100** • Introduction to Graphics and Design
- 48.56200** • Graphic Design and Production
- 48.52800** • Advanced Graphic Design

RECOMMENDED COURSES

- Advanced Web Design
- Computing in the Modern World
- World Language
- Fundamentals of Web Design
- Introduction to Animation and 3D Design
- Legal Environment of Business
- Psychology
- Work-Based Learning
- Yearbook/Journalism

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- See www.GAfutures.org for additional information.

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS

GRAPHIC COMMUNICATIONS PATHWAY

TOP CAREERS CHOICES

Prepress Technicians and Workers

Post-Secondary Vocational Award needed
\$35,443 annual salary
40 annual average openings in Georgia

Printing Machine Operators

Moderate On-the-Job Training needed
\$33,509 annual salary
220 annual average openings in Georgia

Public Relations Specialist

Bachelor Degree needed
\$48,672 annual salary
120 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Bindery and Finishing Technician

Customer Service Representative

Graphic Designer

Prepress Imaging Specialist

Press Operator

Screen Printing

Shipping and Distribution Manager



BUSINESS MANAGEMENT AND ADMINISTRATION

BUSINESS AND TECHNOLOGY PATHWAY

The Business and Technology pathway provides an understanding of social, ethical, and human issues related to technology. Courses will provide an introduction to computer technology, decision-making, productivity, communications, and problem-solving skills. Areas of instruction include integration of word processing, desktop publishing, spreadsheet, database, and presentation software as well as the use of emerging technologies.

PATHWAY CONCENTRATION COURSES

- 07.44130 • Introduction to Business and Technology
- 07.44100 • Business and Technology
- 07.45100 • Business Communication

RECOMMENDED COURSES

- Any Business and Computer Science Course
- World Language
- Introduction to Graphics and Design
- Marketing Principles
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Administrative Support Assistant
- Business Administrative Assistant
- Business Administrative Technology
- Data Entry Clerk
- General Office Assistant
- Microsoft Excel Application User
- Microsoft Office Application Professional
- Microsoft Word Application Professional

Colleges/Universities

- Business
- Business Administration

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

TOP CAREERS CHOICES

Administrative Services Manager

Bachelor Degree needed
\$68,016 annual salary
420 annual average openings in Georgia

Executive Secretary and Administrative Assistant

Moderate On-the-Job Training needed
\$37,378 annual salary
1,620 annual average openings in Georgia

Legal Secretary

Post-Secondary Vocational Award needed
\$36,338 annual salary
270 annual average openings in Georgia

Medical Transcriptionist

Post-Secondary Vocational Award needed
\$30,514 annual salary
130 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Administrative Assistant Communications

Equipment Operator Computer Operator

Court Reporter

Customer Service Assistant

Data Entry Specialist

Desktop Publisher

Dispatcher

Executive Assistant

Information Assistant

Office Manager

Receptionist

Shipping and Receiving Personnel

Word Processors



Entrepreneurs, innovators, and small businesses play a key role in Georgia's economy. Business professionals may be managers, owners, accountants, economists, administrators, or analysts. These individuals must possess excellent communications skills and be able to establish working relationships with many different people.

PATHWAY CONCENTRATION COURSES

- 07.44130** • Introduction to Business and Technology
- 06.41500** • Legal Environment of Business
- 06.41600** • Entrepreneurship

RECOMMENDED COURSES

- Any Business and Computer Science Course
- World Language
- Marketing Principles
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Business Office Technology
- Entrepreneurship
- Management and Supervisory Development
- Office Administration

Colleges/Universities

- Business
- Business Administration

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

BUSINESS MANAGEMENT AND ADMINISTRATION

ENTREPRENEURSHIP PATHWAY

TOP CAREERS CHOICES

Advertising and Promotion Manager

Bachelor Degree needed
\$76,898 annual salary
60 annual average openings in Georgia

Chief Executive

Bachelor Degree plus work experience needed
\$155,168 annual salary
850 annual average openings in Georgia

Employment, Recruitment, and Placement Specialist

Bachelor Degree needed
\$50,877 annual salary
440 annual average openings in Georgia

Social and Community Service Manager

Bachelor Degree needed
\$59,904 annual salary
100 annual average openings in Georgia

Training and Development Manager

Bachelor Degree needed
\$79,498 annual salary
60 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Appraiser and Assessor of Real Estate
Accountant and Auditor Administrator
Bank Teller
Business Educator
Chief Executive Officer
Claims Adjuster
Claims Examiner
Computer Support Specialist
Computer Systems Analyst
Cost Estimator
Database Administrator Entrepreneur
Financial Analyst
Financial Manager
Investigator
Network and Computer System Paralegal and
Legal Assistant Personal Financial Advisor
Sales Manager
Tax Prepare



EDUCATION AND TRAINING

EARLY CHILDHOOD CARE AND EDUCATION I PATHWAY

Preschool, kindergarten and elementary school teachers play a vital role in the development of children. They introduce children to math, language, science and social studies. They use games, music, artwork, films, books, computers and other tools to teach basic skills. Teachers design classroom presentations to meet students' needs and abilities. They also work with students individually. They are responsible for planning, evaluating, and creating lesson plans.

PATHWAY CONCENTRATION COURSES

- 20.52810 • Early Childhood Education I
- 20.42400 • Early Childhood Education II
- 20.42600 • Early Childhood Education Practicum

RECOMMENDED COURSES

- Any Education Course
- World Language
- Psychology
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Child Care Assistant
- Child Care Manager
- Child Development Associate I and II
- Child Development Specialist
- Early Childhood Care and Education (Associate Degree)
- Early Childhood Care and Education Assistant
- Early Childhood Program Administration
- Infant-Toddler Childcare Specialist

Colleges/Universities

- Art Teacher
- Elementary Teacher
- Music Teacher
- Physical Education Teacher

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FCCLA

TOP CAREERS CHOICES

Elementary School Teacher

Bachelor Degree needed
\$46,888 annual salary
2,590 annual average openings in Georgia

Kindergarten Teacher

Bachelor Degree needed
\$45,969 annual salary
330 annual average openings in Georgia

Preschool Teacher

Post-Secondary Vocational Training needed
\$24,419 annual salary
500 annual average openings in Georgia

Special Education Teacher

Preschool, Kindergarten or Elementary

Bachelor Degree needed
\$46,358 annual salary
450 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

After-School Program Supervisor
Child Care Administrator
Child Care Director and Owner
Child Care Supervisor
Child Life Specialist
Education Administrator
Educational and Teacher Aide
Elementary School Teacher
Recreation Attendant
Special Education Teacher
Preschool Teacher
University Instructor and Professor



EDUCATION AND TRAINING

TEACHING AS A PROFESSION PATHWAY

ONLY 10, 11, 12

.....

Educational services is the second largest industry which includes a variety of institutions that offer academic education or career and technical instruction. This includes elementary, middle and secondary schools, universities, colleges, professional schools, community or junior colleges and career and technical institutes. The overall demand for educational services will increase as growing emphasis on improving education along with retirements will create large numbers of job openings.

PATHWAY CONCENTRATION COURSES

- 13.01100 • Examining the Teaching Profession
- 13.01200 • Contemporary Issues in Education
- 13.01300 • Teaching as a Profession Practicum

RECOMMENDED COURSES

- Any Education Course
- World Language
- Psychology
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Early Childhood Education or Exceptionalities
- Education of the Gifted

Colleges/Universities

- Adult or Special Education
- Art or Music Education
- Career and Technical Education
- Early Childhood Education
- English, Math, Science or Social Studies Education
- Education of the Gifted
- Family and Consumer Sciences Education
- World Language Education
- Health and Physical Education
- Human Resource and Organizational Development
- Middle School Education
- Professional School Counseling
- School Psychology
- Speech Communication

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FEA
- FCCLA

TOP CAREERS CHOICES

Middle School Special Education Teacher

Bachelor Degree needed
\$46,891 annual salary
230 annual average openings in Georgia

Post-Secondary Education Administrator

Bachelor Degree plus work experience needed
\$81,328 annual salary
160 annual average openings in Georgia

Post-Secondary Vocational Education Teacher

Bachelor Degree plus work experience needed
\$45,386 annual salary
370 annual average openings in Georgia

Secondary School Teacher

Bachelor Degree needed
\$49,956 annual salary
1,360 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Administration
Adult Educator
After-School Program Supervisor
Associate Teacher
Coach
County Extension Agent
Education Evaluator
Educational and Teacher Aide
Elementary School Teacher
High School Teacher
Media Specialist
Middle School Teacher
Post-Secondary Vocational Education
Recreation Attendant
School Administration
Social Services Aide
Special Education Teacher
Teacher



FINANCE

BUSINESS ACCOUNTING PATHWAY

Strong growth in accounting jobs throughout the next decade is expected to occur due to the increased growth in the number of new businesses and stricter accounting and auditing regulations.

PATHWAY CONCENTRATION COURSES

- 07.44130 • Introduction to Business and Technology
- 07.42600 • Financial Literacy
- 07.41100 • Principles of Accounting I

RECOMMENDED COURSES

- Any Business and Computer Science Course
- World Language
- Marketing Principles
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Accounting
- Medical Administrative Assistant
- Office Accounting Specialist

Colleges/Universities

- Accounting
- Business Education
- Business Management
- Economics
- Finance
- Marketing and Real Estate

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- DECA
- FBLA
- SkillsUSA

TOP CAREERS CHOICES

Accountants and Auditors

Bachelor Degree needed
\$54,330 annual salary
1,090 annual average openings in Georgia

Bookkeeping/Accounting/Auditing Clerks

Moderate-Term On-the-Job Training needed
\$29,619 annual salary
1,490 annual average openings in Georgia

Budget Analysts

Bachelor Degree needed
\$58,698 annual salary
30 annual average openings in Georgia

Tax Examiner, Collector and Revenue Agent

Bachelor Degree needed
\$43,909 annual salary
70 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Auditing Clerk
Auditor
Bookkeeper
Budget Analyst
Certified Public Accountant
Corporate Accountant
Entrepreneur
FBI Agent
Financial Advisor
Financial Analyst
Forensic Accountant
Government Accountant
Income Tax Professional
Managerial Accountant
Non-Profit Accountant
Teacher



FINANCE

FINANCIAL SERVICES PATHWAY

TOP CAREERS CHOICES

Auditor

Bachelor Degree needed
\$73,910 annual salary

Insurance Sales Agent

1-2 years Post-Secondary training needed
\$62,790 annual salary

Claims Adjuster

Post-Secondary training plus
on-the-job training needed
\$63,220 annual salary

Accountant

Bachelor Degree needed
\$73,910 annual salary

ADDITIONAL CAREER CHOICES

Business Teacher

Financial Project Specialist

Financial Planner

Research

Sales and Service

The Financial Service Pathway uses project-based instruction to introduce students to the basics of the banking system, bank operating procedures, negotiable instruments, and the deposit and credit functions of banks. Methods used for measuring the financial performance of banks are analyzed. Current issues and future trends in banking are examined. Students explore the major functions of bank employees by completing a flow-of-work simulation. Students formulate business and individual investment decisions by comparing and contrasting a variety of investment options.

PATHWAY CONCENTRATION COURSES

- 07.44130** • Introduction to Business and Technology
- 07.42600** • Financial Literacy
- 07.43100** • Banking, Investing and Insurance

RECOMMENDED COURSES

- Business Foundation and Business Management
- Desktop Publishing
- Financial Management
- Accounting 1 and 2
- Personal Financial Literacy
- Personal and Business Law 1 and 2
- Marketing 1 and 2
- Web Design

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges and Colleges/Universities

- Financial Planning
- Business Administration-Financial Analysis
- Accounting
- Consumer and Family Financial Services
- Disaster Relief Insurance Claim Adjuster

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA



GOVERNMENT AND PUBLIC ADMINISTRATION

JROTC AIR FORCE PATHWAY



The AFJROTC program provides citizenship training and an aerospace science program for high school youth. Enrollment in the AFJROTC program is open to all young people who are in grades 9-12, physically fit, and are United States citizens. The curriculum includes Aerospace Science (AS), Leadership Education (LE) and Wellness. All students will be given academic credit towards graduation for successful completion of the AFJROTC courses provided by the Air Force.

PATHWAY CONCENTRATION COURSES

- 28.01100** • Aerospace Science: A Journey Into Aviation History Leadership I
- 28.01200** • Aerospace Science: Science of Flight and Leadership II
- 28.01500** • Aerospace Science: Exploration of Space and Leadership III
- 28.01600** • Aerospace Science: Management of the Cadet Corps and/or Leadership IV

RECOMMENDED COURSES

- Any World Language Elective
- Any Math Elective
- Any Science Elective
- Computer Applications

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

- Academy Appointments
- Active Reserve and National Guard options available
- Armed Forces (Advanced Placement Enlistment Opportunities) Army, Air Force, Marines, Navy, Coast Guard
- ROTC (Scholarships Available)

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- Air Force JROTC Drill Team (Armed)
- Air Force JROTC Drill Team (Unarmed)
- Field Trips to Aviation Museums, National Drill Competitions, Quiz Bowl, etc.

TOP CAREERS CHOICES

Students enrolled in JROTC programs may find high-demand, high-wage, and high-skilled occupations in the public sector at www.occsupplydemand.org or if they plan on a career in the military they will find "Military Occupations" listed on GAFutures under the Career Planning Tab.

ADDITIONAL CAREER CHOICES

Air Traffic Controller
Aircraft Repairer
Animal Care Specialist
Broadcast Specialist
Calvary Scout
Chaplain
Computer and Detection Repairer
Construction Equipment Repairer
Criminal Investigation Special Agent
Dental Specialist
Equipment Repairer
Finance Officer
Health Care Specialist
Human Resource Specialist
Information Technology Specialist
Intelligence Analyst
Interpreter and Translator
Medical Laboratory Specialist
Military Police Officer
Missile Fire Control Operator
Missile Fire Control Maintainer
Multi Media Illustrator
Signal Intelligence Analyst
Special Force
Technical Engineer
Transportation Management Coordinator
Visual Information Equipment Operator



The program's focus is reflected in its mission statement, "To Motivate Young People to be Better Citizens." It prepares high school students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. Army JROTC is a stimulus for promoting graduation from high school, and it provides instruction and rewarding opportunities that will benefit the student, community, and nation.

PATHWAY CONCENTRATION COURSES

- 28.03100 • JROTC Army Leadership Education I
- 28.03200 • JROTC Army Leadership Education II
- 28.03300 • JROTC Army Leadership Education III
- 28.03400 • JROTC Army Leadership Education IV

RECOMMENDED COURSES

- Any CTAE Course
- World Language
- Modern US Military History

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

- ROTC (Scholarships Available)
- Academy Appointments
- Armed Forces (Advanced Placement Enlistment Opportunities) Army, Air Force, Marines, Navy, Coast Guard
- Active Reserve and National Guard options available

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- Academic Team
- Color Guard
- Drill Team
- Raiders
- Rifle Team

GOVERNMENT AND PUBLIC ADMINISTRATION

JROTC ARMY PATHWAY

TOP CAREERS CHOICES

Students enrolled in JROTC programs may find high-demand, high-wage, and high-skilled occupations in the public sector at www.occsupplydemand.org or if they plan on a career in the military they will find "Military Occupations" listed on GAFutures under the Career Planning Tab.

ADDITIONAL CAREER CHOICES

Air Traffic Controller
 Aircraft Repairer
 Animal Care Specialist
 Broadcast Specialist
 Calvary Scout
 Chaplain
 Computer and Detection Repairer
 Construction Equipment Repairer
 Criminal Investigation Special Agent
 Dental Specialist
 Equipment Repairer
 Finance Officer
 Health Care Specialist
 Human Resource Specialist
 Information Technology Specialist
 Intelligence Analyst
 Interpreter and Translator
 Medical Laboratory Specialist
 Military Police Officer
 Missile Fire Control Operator
 Missile Fire Control Maintainer
 Multi Media Illustrator
 Signal Intelligence Analyst
 Special Force
 Technical Engineer
 Transportation Management Coordinator
 Visual Information Equipment Operator



HEALTH SCIENCE

THERAPEUTIC SERVICES ALLIED HEALTH AND MEDICINE PATHWAY

.....

Employment is projected to increase 27% through 2014 - more than in any other industry. The healthcare industry offers jobs in a variety of establishments: hospitals, nursing and residential care facilities, physicians, dental, and other health practitioners offices, home health care services, outpatient care centers, ambulatory health care services and medical and diagnostic laboratories.

PATHWAY CONCENTRATION COURSES

- 25.52100** • Introduction to Healthcare Science
- 25.44000** • Essentials of Healthcare
Essentials of Healthcare is an embedded course. When 1 full credit is earned in this course, a second elective credit is recorded in transcript history. The second course recorded is Human Anatomy and Physiology.
- 25.43700** • Allied Health and Medicine

RECOMMENDED COURSES

- World Language
- Human Anatomy/Physiology
- Psychology
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Clinical Lab Technology
- Dental Assisting or Hygiene
- Medical Assisting
- Nurse Aid
- Pharmacy Technology
- Practical Nursing
- Radiologic Technology
- Registered Nursing
- Surgical Technology

Colleges/Universities

- Doctor
- Dentist
- Nurse Practitioner
- Physical Therapist
- Registered Nurse
- Surgeon

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- HOSA

TOP CAREERS CHOICES

Dental Hygienist

Associate Degree needed
\$55,390 annual salary
280 annual average openings in Georgia

Medical and Clinical Laboratory Technician

Associate Degree needed
\$30,846 annual salary
250 annual average openings in Georgia

Pediatrician

First Professional needed
\$139,298 annual salary
70 annual average openings in Georgia

Physical Therapist

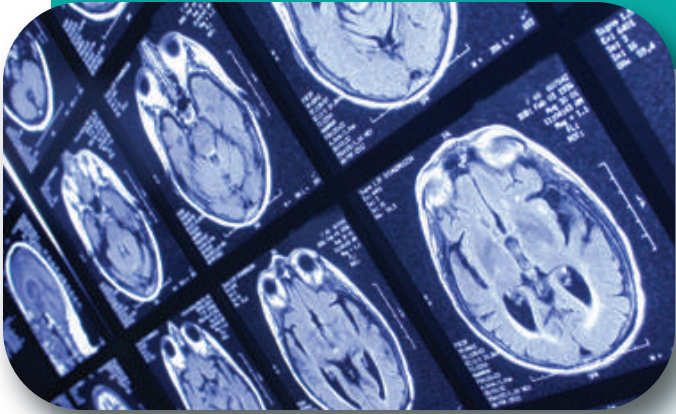
Master Degree needed
\$65,042 annual salary
120 annual average openings in Georgia

Surgical Technologist

Post-Secondary Vocational Training needed
\$32,157 annual salary
140 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Clinical Laboratory Technician
Dental Hygienist
EMT
Medical Doctor
Medical Laboratory Technician
Orthopedic Technologist
Paramedic
Pharmacist
Physical Therapist
Radiologic Technologist
Surgical Technologist
Veterinarian



HEALTH SCIENCE

BIOTECHNOLOGY RESEARCH AND DEVELOPMENT PATHWAY



The field of biotechnology combines knowledge from a number of other areas: engineering, biology, chemistry, and medicine. Workers in biotechnology create, design, develop, and evaluate systems and products such as artificial organs, medication information systems, prostheses (artificial devices replacing missing body parts), medical equipment and instrumentation, and health management and care systems.

PATHWAY CONCENTRATION COURSES

- 25.52100 • Introduction to Healthcare Science
- 25.57000 • Essentials of Biotechnology
- 25.56900 • Application of Biotechnology

RECOMMENDED COURSES

- Anatomy and Physiology
- Biology
- Calculus
- Chemistry
- Physics
- Statistics
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Biology / Biological Science
- Biomedical Technology / Technician
- Biotechnology
- Genetics

Colleges/Universities

- Biochemistry
- Biology / Biological Science
- Biotechnology
- Pharmacology

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- HOSA

TOP CAREERS CHOICES

Biological Technician

Associate Degree
\$35,506 annual salary
10 annual average openings in Georgia

Biomedical Engineer

Bachelor Degree
\$61,776 annual salary
10 annual average openings in Georgia

Engineering Technician

Associate Degree
\$47,362 annual salary
80 annual average openings in Georgia

Medical Appliance Technician

Long-Term On-the-Job Training
\$29,432 annual salary
10 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Bioinformatics Specialist

Microbiologist



AGRICULTURE, FOOD AND NATURAL RESOURCES

THERAPEUTIC SERVICES PATIENT CARE PATHWAY

TOP CAREERS CHOICES

Health Educator

Master Degree needed
\$53,290 annual salary
90 annual average openings in Georgia

Medical and Health Services Manager

Bachelor Degree needed
\$74,486 annual salary
330 annual average openings in Georgia

Occupational Therapist

Master Degree needed
\$58,427 annual salary
100 annual average openings in Georgia

Registered Nurse

Associate/ Bachelor Degree needed
\$53,893 annual salary
3,340 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Certified Nursing Assistant
Dental Assisting
Licensed Practical Nurse
Medical Assisting
Occupational Therapy Assistant
Physical Therapy Assistant
Respiratory Therapist
Surgical Technologist

The Patient Care pathway is appropriate for students wishing to pursue a career in the Healthcare Industry. The course will enable students to receive initial exposure to Healthcare Science skills and attitudes applicable to the healthcare industry. The concepts of health, wellness, and preventative care are evaluated, as well as, ethical and legal responsibilities of today's healthcare provider. Fundamental healthcare skills development is initiated including medical terminology, microbiology, and basic life support.

PATHWAY CONCENTRATION COURSES

- 25.52100** • Introduction to Healthcare Science
- 25.44000** • Essentials of Healthcare
Essentials of Healthcare is an embedded course. When 1 full credit is earned in this course, a second elective credit is recorded in transcript history. The second course recorded is Human Anatomy and Physiology.
- 25.43600** • Patient Care Fundamentals

RECOMMENDED COURSES

- World Language
- Human Anatomy/Physiology
- Physics
- Psychology
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Dental Hygiene
- Orthopedic Technology
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

Colleges/Universities

- Dentist
- Doctor
- Nurse Practitioner
- Physical Therapist
- Registered Nurse
- Surgeon

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- HOSA



HEALTH SCIENCE

THERAPEUTIC SERVICES SPORTS MEDICINE PATHWAY

TOP CAREERS CHOICES

Athletic Trainer

Bachelor Degree needed
\$35,917 annual salary
20 annual average openings in Georgia

Occupational Therapist Aide

Short-Term On-the-Job Training needed
\$20,259 annual salary
10 annual average openings in Georgia

Orthotist and Prosthetist

Bachelor Degree needed
\$35,464 annual salary
10 annual average openings in Georgia

Physical Therapist

Master Degree needed
\$65,042 annual salary
120 annual average openings in Georgia

Physical Therapist Assistant

Associate Degree needed
\$40,830 annual salary
90 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Chiropractor
Doctor of Osteopathic Medicine
Doctor of Podiatric Medicine
Massage Therapist
Occupational Therapist
Orthopedic Doctor
Physical Therapy Assistant
Physician's Assistant
Radiologist
Radiologist Technician

Sports Medicine is a branch of Health Science devoted to musculoskeletal disorders that alter the functional ability of the patient. Careers in this industry focus on improvement of ability to perform life tasks through the combined use of physical training (exercise, movement, and modification of activities), medications, adaptive equipment, orthotics (braces), and prosthesis devices. Careers in rehabilitation focus on helping people return to independence and self-reliance.

PATHWAY CONCENTRATION COURSES

- 25.52100** • Introduction to Healthcare Science
- 25.44000** • Essentials of Healthcare
Essentials of Healthcare is an embedded course. When 1 full credit is earned in this course, a second elective credit is recorded in transcript history. The second course recorded is Human Anatomy and Physiology.
- 25.44600** • Sports Medicine

RECOMMENDED COURSES

- World Language
- Human Anatomy/Physiology
- Internships
- Physics
- Psychology
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Dental Hygiene
- Orthopedic Technology
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

Colleges/Universities

- Dentist
- Doctor
- Nurse Practitioner
- Physical Therapist
- Registered Nurse
- Surgeon

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- HOSA



HOSPITALITY AND TOURISM

CULINARY ARTS PATHWAY

TOP CAREERS CHOICES

Chef and Head Cook

Work experience needed
\$31,304 annual salary
110 annual average openings in Georgia

Food Services Manager

Work experience needed
\$49,860 annual salary
400 annual average openings in Georgia

Pastry Chef

Work experience needed
\$34,890 annual salary
130 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Baker
Cake Designer
Caterer
Chocolatier
Culinary Arts Instructor
Dining Room Management
Dining Room Service
Food and Beverage Director
Food Stylist and Photographer
Food Writer and Critic
Hotel Manager
Kitchen Manager
Personal Chef
Research and Development Chef
Restaurant Entrepreneur

The Culinary Arts pathway introduces 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. Courses also provide an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway in culinary arts.

PATHWAY CONCENTRATION COURSES

- 20.53100 • Introduction to Culinary Arts
- 20.53210 • Culinary Arts I
- 20.53310 • Culinary Arts II

RECOMMENDED COURSES

- Algebra
- Any Science Elective
- Business Essentials
- Computer Applications
- Entrepreneurship
- World Language (Spanish and French)

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Culinary Arts (Standard Pathway or Baking and Pastry Pathway)
- Food and Beverage Management
- Hospitality Management

Colleges/Universities

- Culinary Arts (Standard Pathway or Baking and Pastry Pathway)
- Food and Beverage Management
- Food Science
- Hospitality Management

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FCCLA



The products and services offered to consumers and the impact of marketing on these products and services are examined. Topics will include: business fundamentals, product mix, product knowledge, product/service management, business regulations, interpersonal skills, selling, marketing-information management, economics, distribution, pricing, publicity/public relations, sales promotion, business risks, and organization skills as it relates to the sports and entertainment industry.

PATHWAY CONCENTRATION COURSES

- 08.47400** • Marketing Principles
- 08.47800** • Introduction to Sports and Entertainment Marketing
- 08.48500** • Advanced Sports and Entertainment Marketing

RECOMMENDED COURSES

- Advanced Marketing
- Entrepreneurship
- Any Business and Computer Science Course
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Business Administration
- Executive Coaching
- Expert Sales Management
- Project Management
- Visual Merchandising

Colleges/Universities

- Accounting
- Advertising
- Bridal Consultant
- Business Economics
- Communication
- Graphic Arts
- Hospitality Administration
- Management
- Marketing
- Professional Sales
- Sport Management
- Travel/Tourism

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

HOSPITALITY AND TOURISM

SPORTS AND ENTERTAINMENT MARKETING PATHWAY

TOP CAREERS CHOICES

Marketing Manager

Bachelor Degree needed
\$94,307 annual salary
310 annual average openings in Georgia

Marketing Research Analyst

Bachelor Degree needed
\$61,464 annual salary
210 annual average openings in Georgia

Public Relations Specialist

Bachelor Degree needed
\$48,672 annual salary
120 annual average openings in Georgia

Recreation Worker

Short-Term On-the-Job-Training needed
\$21,570 annual salary
260 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Advertising Account Executive
Agent
Brand Manager
Cashier
Communications Specialist
Customer Service Representative
Demonstrator and Product Promoter
Desktop Publisher
Entertainment Marketer
Entrepreneur
Fashion Retailer
Market Research Analyst
Marketing Specialist
Media Buyer
Product Development Management
Public Relations Specialist
Purchaser
Retail Buyer
Retail Salesperson
Sales
Sales Representative
Sign Maker
Sports Marketer
Website Designer
Web Developer
Webmaster



HUMAN SERVICES

PERSONAL CARE SERVICES COSMETOLOGY PATHWAY



The Cosmetology program is formulated for students who desire to become licensed cosmetologists. All participating students are required by the Georgia State Board of Cosmetology to obtain a total of 1500 unit hours to be eligible for both the written and practical state test. Students benefit from the program because it allows the student the opportunity to obtain at least half of the required state board hours.

PATHWAY CONCENTRATION COURSES

- 12.54400 • Introduction to Personal Care Services
- 12.41000 • Cosmetology Services II
- 12.41100 • Cosmetology Services III

RECOMMENDED COURSES

- Advanced Cosmetology Services
- Chemistry
- Cosmetology Services - Core IV
- World Language
- Internship I, II, III, IV, V
- Licensure and Employment Opportunities
- Science of Advanced Skincare
- Science and Art of Makeup
- Science of Cosmetology

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Cosmetology Instructor License
- Cosmetology License
- Master Cosmetology License

Colleges/Universities

- Cosmetology

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

TOP CAREERS CHOICES

Salary ranges from \$15,530 to \$42,460 per year. In order to obtain a license in cosmetology, nail technology, or skin care in the state of Georgia, students must complete the requirements listed below. Please contact the Georgia State Board of Cosmetology for more information. Requirements:

COSMETOLOGIST: 1500 Hours,
Apprenticeship 3000 Hours

HAIR DESIGN: 1325 Hours,
Apprenticeship 2650

ESTHETICIAN: 1000 Hours,
Apprenticeship 2000 Hours

NAIL TECHNICIAN: 525 Hours,
Apprenticeship 1050 Hours

ADDITIONAL CAREER CHOICES

Barber Stylist
Color Specialist Chemist
Cosmetologist
Esthetician
Hairstylist
Make-up Artist
Nail Care
Permanent Wave Technician
Platform Artist
Receptionist
Shampoo Tech
Wig Stylist



INFORMATION TECHNOLOGY

WEB AND DIGITAL DESIGN PATHWAY

TOP CAREERS CHOICES

Computer Specialist

Associate Degree needed
\$55,640 annual salary
80 annual average openings in Georgia

Desktop Publisher

Post-Secondary Vocational Training needed
\$30,680 annual salary
30 annual average openings in Georgia

Graphic Designer

Bachelor Degree needed
\$44,034 annual salary
160 annual average openings in Georgia

Multi-Media Artist and Animator

Bachelor Degree needed
\$44,554 annual salary
40 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Computer Service Technician
Database Developer
Graphic Designer
Help Desk Support
Illustrator
Internet Specialist
Multimedia Developer
Network Analyst
Network Engineer
Programmer
Project Manager
Video Game Developer
Web Developer
Webmaster
Website Designer
Software Trainer

The Web and Digital Design pathway instructs students on the basics of designing a web page and leads to advanced web design and 3D animation. Web design can be found in every area of business and industry, as well as in individuals' personal life. Students will have the opportunity to learn skills that will help them create web pages, gaming and other digital media features.

PATHWAY CONCENTRATION COURSES

- 11.41500 • Introduction to Digital Technology
- 11.45100 • Digital Design
- 11.45200 • Web Design

RECOMMENDED COURSES

- Any Business and Computer Science Course
- Art
- Broadcast/Video Production
- World Language
- Introduction to Graphics and Design
- Marketing Principles
- Work-Based Learning
- Yearbook/Journalism

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Computer Animation and Multimedia
- Computer Simulation
- Digital Media
- Internet Specialist - Web Site Design
- Printing and Graphics Technology
- Web Site Designer

Colleges/Universities

- Animation
- Computational Media
- Computer Science
- Graphic Designer

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA



LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

LAW ENFORCEMENT CRIMINAL INVESTIGATIONS PATHWAY

The Criminal Investigations Pathway is designed to provide students with career-focused educational opportunities in various public safety fields. Each course has elements which cover tactics, methods, and skills utilized in law enforcement and other public safety organizations.

PATHWAY CONCENTRATION COURSES

- 43.45000 • Introduction to Law, Public Safety, Corrections and Security
- 43.45100 • Criminal Justice Essentials
- 43.45300 • Criminal Investigations

RECOMMENDED COURSES

- Accounting
- Anatomy
- Any Health Care Science Course
- Computer Applications
- World Language
- Forensics Science Elective
- Legal Environment of Business
- Spanish
- Wildlife Management
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Criminal Justice Technology
- Law Enforcement Technician

Colleges/Universities

- Criminal Justice
- Criminology
- Pre-law

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

TOP CAREERS CHOICES

Corrections Officer

Moderate-Term On-the-Job Training needed
\$27,498 annual salary
470 annual average openings in Georgia

Forensic Science Technician

Associate Degree needed
\$35,818 annual salary
20 annual average openings in Georgia

Lawyer

First Professional Degree needed
\$115,960 annual salary
460 annual average openings in Georgia

Police and Sheriff's Patrol Officer

Long-Term On-the-Job Training needed
\$35,402 annual salary
910 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Attorney
Bailiff
Border Patrol
Correctional Officer/Jailer
Crime Scene Investigator
Detective
Dispatcher and Communications Officer
Forest Ranger
Game Warden
Judge
Paralegal
Parole Officer
Police Officer
Private Detective and Investigator
Private Security Guard
Probation Officer
Sheriff's Deputy
Special Agent
State Trooper



Students develop knowledge and skills in the foundational areas of marketing (economics, human relations and business basics) and the functional areas of marketing (product and service planning, marketing-information management, purchasing and pricing, selling and promotion, risk management, financing and distribution/logistics), as well as international marketing, management and entrepreneurship.

PATHWAY CONCENTRATION COURSES

- 08.47400** • Marketing Principles
- 08.44100** • Marketing and Entrepreneurship
- 08.44200** • Marketing and Management

RECOMMENDED COURSES

- Any Business and Computer Science Course
- World Language
- Sports and Entertainment Marketing
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- Business Administration
- Entrepreneurship
- Expert Sales Management
- Fashion Design and Marketing
- Retail and Merchandising

Colleges/Universities

- Accounting
- Advertising
- Business Economics
- Communication
- Graphic Arts
- Hospitality Administration
- International Business
- Management
- Marketing
- Professional Sales
- Real Estate
- Risk Management and Insurance

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- DECA

MARKETING

MARKETING AND MANAGEMENT PATHWAY

TOP CAREERS CHOICES

Chief Executive

Bachelor Degree plus experience needed
\$155,168 annual salary
850 annual average openings in Georgia

Human Resources, Training and Labor Relations Specialist

Bachelor Degree needed
\$53,061 annual salary
150 annual average openings in Georgia

Marketing Manager

Bachelor Degree plus experience needed
\$94,307 annual salary
310 annual average openings in Georgia

Marketing Research Analyst

Bachelor Degree needed
\$61,464 annual salary
210 annual average openings in Georgia

Personal Financial Advisor

Bachelor Degree needed
\$75,754 annual salary
470 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Advertising Account Executive
Airline Customer Service Agent
Art Dealer and Director
Automobile Salesperson
Barber and Salon Owner
Communications Specialist
Customer Service Representative
Demonstrator and Product Promoter
Entertainment Marketer
Entrepreneur
Fashion Retailer
Floral Designer
Funeral Director
Insurance Agent
Interior Designer
Logistics Specialist
Market Research Analyst and Specialist
Media Buyer
Mortgage Broker
Public Relations Specialist
Purchaser
Real Estate Agent
Retail Buyer and Salesperson
Sales Representative
Travel Agent
Website Designer, Developer or Webmaster



(STEM) SCIENCE, TECHNOLOGY,
ENGINEERING, AND MATHEMATICS

ENGINEERING DRAFTING AND DESIGN PATHWAY

TOP CAREERS CHOICES

Architectural and Civil Drafters

Post-Secondary Vocational Training needed
\$42,078 annual salary
80 annual average openings in Georgia

Commercial and Industrial Designers

Bachelor Degree needed
\$52,312 annual salary
30 annual average openings in Georgia

Graphic Designer

Bachelor Degree needed
\$44,034 annual salary
160 annual average openings in Georgia

Industrial Engineer

Bachelor Degree needed
\$67,600 annual salary
210 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Civil Engineer
Designer
Drafter
Electrical Engineer
Environmental Engineer
HVAC Designer
Industrial Engineer
Instrumentation Engineer
Manufacturing Manager
Materials Engineer
Mechanical Engineer
Nuclear Engineer
Power Engineer
Production Manager
Technician

Students are encouraged to have a solid background in mathematics, science, and technology. This pathway is enjoyed by students who have a mechanical nature. Employment opportunities continue to increase in engineering-related industries. There is an increasing need to explore new materials, manufacturing processes, and ways to protect the environment.

PATHWAY CONCENTRATION COURSES

- 48.54100 • Introduction to Drafting and Design
- 48.54200 • Survey of Engineering Drawing
- 48.54300 • 3D Modeling and Analysis

RECOMMENDED COURSES

- Advanced Algebra/Trigonometry (or math curriculum equivalent)
- Calculus (or math curriculum equivalent)
- Computer Applications
- Entrepreneurship
- World Language
- Introduction to Animation and 3D Design
- Physics
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- CAD Operator

Colleges/Universities

- Aerospace Engineer
- Apparel and Textile Engineer
- Designer
- Electrical Engineer
- Industrial Engineer
- Instrumentation Engineer
- Mechanical Engineer and Technician
- Nuclear Engineer
- Power Engineer
- Telecommunication Engineer

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA
- TSA



TRANSPORTATION, DISTRIBUTION AND LOGISTICS

AUTOMOBILE MAINTENANCE AND LIGHT REPAIR PATHWAY

The auto mechanics of the past were self-taught, learning from local auto shops or dealerships. Employers are now hiring employees with good people skills and backgrounds in electronics, computers and communications, along with math and problem-solving skills. This program will teach “head skills” and “hand skills” to prepare the student for the world of automotive technology careers and to meet the needs of prospective employers.

PATHWAY CONCENTRATION COURSES

- 4753100** • Basic Maintenance and Light Repair
- 4753210** • Maintenance and Light Repair 2
- 4753310** • Maintenance and Light Repair 3

RECOMMENDED COURSES

- Advanced Algebra/Trigonometry
- Business Essentials
- Computer Applications
- Engine Performance Concepts
- Entrepreneurship
- World Language
- Heating Ventilation and Air Conditioning Concepts
- Money Management
- Physics
- Preventative Maintenance Inspection
- Work-Based Learning

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Technical Colleges

- ASE
- Automotive Technology/Technician
- Welding

Colleges/Universities

- Education
- Business Management
- Automotive Engineering

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

TOP CAREERS CHOICES

Automotive Service Technician and Mechanics

Post-Secondary Vocational Award needed
\$34,549 annual salary
1,000 annual average openings in Georgia

Bus and Truck Mechanic/Diesel Engine Specialist

Post-Secondary Vocational Award needed
\$36,504 annual salary
380 annual average openings in Georgia

Electrical and Electronics Repairers, Commercial and Industrial Equipment

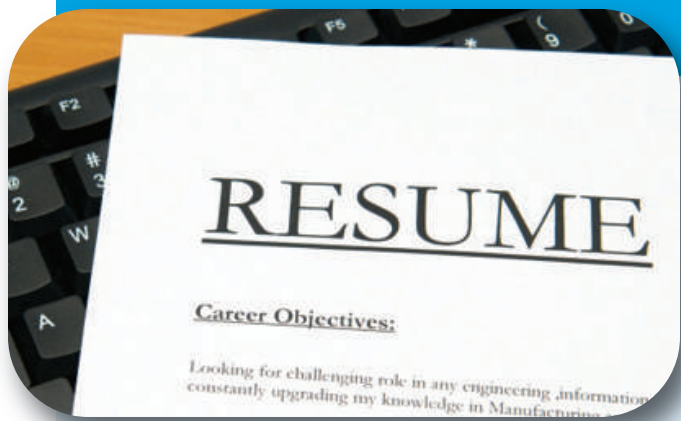
Post-Secondary Vocational Award needed
\$47,611 annual salary
130 annual average openings in Georgia

Vocational Teacher, Post-Secondary School

Bachelor Degree or higher plus work experience
\$44,637 annual salary
250 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Auto Manufacturer Sales
Auto Manufacturer Service
Auto or Body Technician
Automotive Engineer
Automotive Mechanist
Automotive Parts Sales
Automotive Sales
Body Shop Manager
Dealership or Shop Owner
DOT Salvage Inspector
Insurance Adjuster
Parts Professional
Quality Control Technician
Retail
Service Advisor
Service Director Dealership
Specialized Technician Teacher
Technician (ASE Certified)
Warranty Clerk
Waste Management (EPA)



SPECIALTIES

WORK-BASED LEARNING

The Work-Based Learning (WBL) program is designed to provide experiences and activities that support a school to career transition. This simply means that students are allowed to work off campus in the business community in order to learn more about a chosen career. Once a student has met all requirements for WBL, the WBL Coordinator will determine the correct WBL placement for the student. The students will earn one unit of credit for each completed WBL course.

WBL IS AVAILABLE THROUGH THE FOLLOWING PROGRAMS

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, A/V Technology, and Communications
- Business Management and Administration
- Education & Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Marketing
- JROTC
- Transportation Distribution and Logistics

REQUIREMENTS FOR WBL

- Students who are enrolled (or have completed) in a CTAE Pathway can apply for the Work-Based Learning Program.
- Students must be at least 16 years of age
- Students must have good attendance, discipline, and teachers recommendations
- Students must have a 75 Numeric GPA or higher

EMPLOYABILITY SKILL DEVELOPMENT (ESD)

- Paid entry level work
- Limited to one year
- May or may not be linked to a specific pathway
- Must have completed or be currently enrolled in a CTAE course

INTERNSHIP

- Can be paid or unpaid work experience
- Directly related to a student's career pathway
- Can occur in the school or the work place
- Must have earned one credit in a CTAE pathway or closely related academic course

COOPERATIVE EDUCATION (CO-OP)

- Paid work experience
- Directly related to student's career pathway
- Enrolled in a course that is directly related to job placement

YOUTH APPRENTICESHIP (YAP)

- Paid or unpaid work in a highly technical, highly skilled position
- Work in chosen career area
- Student must have post-secondary education plans in chosen career area (earning a degree, licensing, or certification depending on career requirement)
- For completion of YAP program students must have 720 hours of career related work in high school and post-secondary institutions

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- | | | |
|--------|-------------|---------|
| • DECA | • FBLA | • FCCLA |
| • HOSA | • SkillsUSA | • FEA |



Teamwork

Working together to get
Cooperative work done
process of working colla
ation by a team of



DECA

Distributive Education Clubs of America

DECA is a co-curricular organization for students who have a career interest in marketing, finance, hospitality and tourism, entrepreneurship, management, or business administration. DECA allows students to compete and learn about marketing skills needed to be successful in today's business world. DECA currently operates in the over 4,000 high schools in many different countries including Mexico, Germany, Puerto Rico, and Canada. As an organization, DECA holds an annual Fall Leadership Conference that sharpens the skills and techniques of the attendees. At the annual state conference, students are also allowed to compete in a range of areas including Sports and Entertainment Marketing, Apparel and Accessories, Automotive, Restaurant Management, Accounting and many more. There is over \$300,000 of scholarship money from DECA's corporate sponsors available to its members. DECA gives students the chance to work with real business partners and can open the door for future employment opportunities. DECA allows its members to grow as leaders who can positively impact their community.



FBLA

Future Business Leaders of America

Georgia FBLA is a nonprofit student organization committed to preparing today's students for success in business leadership. With over 50 years of experience, Georgia FBLA is the premiere organization for student leaders.

Georgia FBLA is an affiliate of Future Business Leaders of America-Phi Beta Lambda, Inc., the largest student business organization in the world with more than 250,000 members. Georgia is also the largest FBLA chapter in the nation with over 20,000 members.

FBLA is an important partner in the success of school-to-work programs, business education curriculums, and student leadership development. FBLA is recognized by the U.S. Department of Education and Labor as an integral part of a co-curricular approach to business and leadership education.

The FBLA mission is to bring business and education together in a positive working relationship through innovative leadership and career development programs. We bring our mission to life through the application of our motto: Service, Education, and Progress.

CLUBS AND ORGANIZATIONS

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

CTSO CORE VALUES

Career and Technical Student Organizations (CTSO) are designed to build character and develop leadership abilities of high school students. CTSO's promote active community involvement, providing service to others, and participation in competitive events with other high school students across the state. Involvement in CTSO's provide valuable life lessons and educational experiences to prepare students for success in today's society.

Commitment To create among members, educators and business and industry an adherence and appreciation for all Career, Technical and Agricultural Education Programs.

Conviction To develop patriotism through knowledge of our nation's heritage and practice of democracy.

Education To create enthusiasm and empower students to become lifelong learners.

Integrity To deal honestly and fairly with one another.

Leadership To develop leadership abilities through participation in educational, professional, community and social activities.

Professionalism To promote high standards in career ethics, workmanship, scholarship and safety.

Recognition Appreciation of the value of achievement.

Service To cultivate a desire to contribute to the benefit and welfare of others

Teamwork To enhance the ability of students to plan together, organize and carry out worthy activities and projects through the use of the democratic process.



CTSO CTAE

CLUBS AND ORGANIZATIONS



FCCLA

Family, Career, and Community Leaders of America

FCCLA is a national student organization that helps young men and women become leaders and address important personal, family, work, and social issues through family and consumer sciences education. Through cooperative and competitive programs, FCCLA members develop skills for life including character development, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation. Participation in national programs and co-curricular chapter activities enables FCCLA members to learn cooperation, take responsibility, develop leadership, and give service.



FEA

Future Educators Association

The Future Educators Association® assists high school students in exploring careers in education. The association is unique in its ability to offer students unparalleled, age-appropriate professional development opportunities, including an annual conference and access to a state-of-the-art FEA social networking website. Through hands-on career exploration opportunities, FEA allows members to assume leadership roles and develop professional skill sets that will serve them throughout their careers. The association also connects students with chances to earn scholarship grants through its sponsoring organization, PDK International. The FEA program not only benefits its members but also has a long-lasting, positive impact on our nation's school systems. By attracting exemplary candidates to the teaching profession, especially those from diverse cultural and ethnic backgrounds, FEA will directly influence an increase in qualified teachers. The work of FEA will elevate the image of teaching and promote it as a challenging and rewarding career.



FFA

An Association of Agricultural Students

FFA represents the relevancy to the core areas offering students opportunities that change lives and prepares students for premier leadership, personal growth and career success. Founded in 1928, the FFA organization represents a large diversity of over 300 careers in the food, fiber, and natural resources industry. FFA is an integral part of a school system. FFA uses agricultural education to create real-world success. Agriculture teachers become advisors to local FFA chapters, which students join. More than 7,000 FFA chapters are currently in existence; their programs are managed on a local, state and national level. Each chapter's Program of Activities is de-

signed with the needs of the students in mind. Activities vary greatly from school to school, but are based in a well integrated curriculum. Chapter activities and FFA programs concentrate on three areas of our mission: premier leadership, personal growth, and career success. The FFA motto gives members twelve short words to live by as they experience the opportunities in the organization. Learning to Do, Doing to Learn, Earning to Live, Living to Serve.



HOSA

Health Occupations Students of America

Health Science Technology Education (HSTE) is a national student organization that provides a unique program of leadership development, motivation, and recognition exclusively for secondary, post-secondary, collegiate, and adult students enrolled in health occupations education courses or instructional programs. HOSA is an integral part of approved health occupation programs. Health Science Technology Education (HSTE) students who become active members in a local HOSA chapter are eligible for membership in state and national HOSA. The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health occupations education students, therefore helping the students to meet the needs of the health care industry. For more information, go to www.hosa.org or www.georgiahosa.org.



SkillsUSA

Students Taking Action with Recognition

SkillsUSA is a partnership of students, teachers, and industry representatives working together to ensure America has a skilled work force. It helps each student excel. SkillsUSA serves teachers and high school students who are preparing or careers in trade, technical, and skilled service occupation, including health occupations. More than 300,000 students and instructors join SkillsUSA annually, organized into more than 17,000 sections and 54 state and territorial associations. SkillsUSA has served more than 9.9 million members since its founding. SkillsUSA is an applied method of instruction for preparing America's high performance workers enrolled in public career and technical programs. It provides quality educational experiences for students in leadership, teamwork, citizenship, and character development. It builds and reinforces self-confidence, work attitudes, and communications skill. It emphasizes total quality at work: high ethical standard, superior work skill, life-long education, and pride in the dignity of work. SkillsUSA also promotes understanding of the free enterprise system and involvement in community service.



ACADEMIC AND HONORS, AP CLASSES

ENGLISH

In grades 9-12, English is split into specific areas of study, with American and British Literature offered consistently at all high schools. During four years of required ELA study, students are engaged in analyzing a myriad of literature forms and in extending and polishing skills in writing, research, listening, speaking, and viewing.

NOTE: All students are required to take the End-of-Course Assessment for 9th grade Literature/Composition. All students are required to pass a full year of American Literature/Composition AND to take the End-of-Course Assessment for American Literature/Composition.

CLASS OF 2012 AND THEREAFTER

(4 UNITS REQUIRED)

GRADE 9	REQUIRED FOR GRADUATION 9th Literature/Composition 9th Literature/Composition - Honors
GRADE 10	World Literature World Literature - Honors
GRADE 11	REQUIRED FOR GRADUATION American Literature/Composition American Literature/Composition - Honors AP English Language/Composition
GRADE 12	British Literature/Composition British Literature/Composition - Honors AP English Literature/Composition

CLASS OF 2019 AND THEREAFTER

FOR ACCELERATED COURSE STUDY IN ENGLISH BEGIN 8TH GRADE

GRADE 8	REQUIRED FOR GRADUATION 9th Literature/Composition - Honors
GRADE 9	World Literature - Honors
GRADE 10	REQUIRED FOR GRADUATION American Literature/Composition - Honors AP English Language/Composition
GRADE 11	British Literature/Composition - Honors AP English Literature/Composition
GRADE 12	Additional English Course Dual Enrollment Course in English



ENGLISH

ACADEMIC AND HONORS, AP CLASSES



23.06100

9TH GRADE LITERATURE AND COMPOSITION - REQUIRED

This course integrates writing, grammar and usage, literature, speaking, listening, and critical thinking skills. In the course, the writing process is presented: planning, drafting, revising, editing, and proofing as well as the study of form in personal narratives, descriptions, and expository papers with an emphasis on persuasive writing. Also, this course includes reading a variety of multicultural literature: short stories, novels, tales, poetry, mythology, characteristics of various genres, literary elements, and vocabulary study. *A state mandated End of Course Assessment is required.*



23.061001

HONORS 9TH GRADE LITERATURE AND COMPOSITION

Course offered in 8th Grade.

This course integrates writing, grammar and usage, literature, speaking, listening, and critical thinking skills. In the course, the writing process is presented: planning, drafting, revising, editing, and proofing as well as the study of form in personal narratives, descriptions, and expository papers with an emphasis on persuasive writing. Also, this course includes reading a variety of multicultural literature: short stories, novels, tales, poetry, mythology, characteristics of various genres, literary elements, and vocabulary study. Other topics and instructional methods specific to preparing students for the rigors of future honors or AP English courses are also included. Summer assignments may be required. *A state mandated End of Course Assessment is required.*



WORLD LITERATURE/AND COMPOSITION

This course focuses on a study of literary genres; the student develops 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 persuasive writing in tenth grade literature, the student will also demonstrate competency in a variety of writing genres: narrative, expository, and technical. 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 listening, speaking, and viewing skills for a variety of purposes.



HONORS WORLD LITERATURE AND COMPOSITION

This course focuses on a study of literary genres; the student develops 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 persuasive writing in tenth grade literature, the student will also demonstrate competency in a variety of writing genres: narrative, expository, and technical. 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 listening, speaking, and viewing skills for a variety of purposes. Other topics and instructional methods specific to preparing students for the rigors of future honors or AP English courses are also included. Summer assignments may be required.



23.05100

AMERICAN LITERATURE AND COMPOSITION - REQUIRED

This course focuses on the study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological context and the relevance of period structures in American literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. 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 a variety of writing genres: narrative, persuasive, and technical. The student 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 listening, speaking, and viewing skills for a variety of purposes. *A state mandated End of Course Assessment is required.*

ENGLISH

ACADEMIC AND HONORS, AP CLASSES



23.051001

HONORS AMERICAN LITERATURE AND COMPOSITION

This course focuses on the study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological context and the relevance of period structures in American literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. 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 a variety of writing genres: narrative, persuasive, and technical. The student 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 listening, speaking, and viewing skills for a variety of purposes. Extensive reading, public speaking and presentations skills are also included in this course. Other topics and instructional methods specific to preparing students for the rigors of future honors or AP English courses are also included. Summer assignments may be required. *A state mandated End of Course Assessment is required.*



23.053000

AP LANGUAGE/COMPOSITION AMERICAN LITERATURE/COMPOSITION

This course focuses on the study of American literature, embracing its rhetorical nature and recognizing the literature as a platform for argument. It also emphasizes a variety of writing modes and genres and the essential conventions of reading, writing, and speaking. The students will develop an understanding of how historical context in American literature affect its structure, meaning, and rhetorical stance. The course will enable students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The students will encounter a variety of informational, literary, and non-print texts from across the curriculum and read texts in all genres and modes of discourse, as well as visual and graphic images. Instruction in language conventions and essential vocabulary will occur within the context of reading, writing, speaking, and listening. The students will demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. This course will focus on the consideration of subject, occasion, audience, purpose, speaker, and tone as the guide for effective writing, as well as the way generic conventions and resources of language contribute to writing effectiveness. The students will compose a variety of writing, including expository, analytical, and argumentative writings which support

the academic and professional communication required by colleges; and personal and reflective writings which support the development of writing facility in any context. The students will produce responses to timed writing assignments, as well as writing that proceeds through several stages or drafts, which include opportunities for revision guided by feedback from teacher and peers. Students will analyze primary and secondary sources and develop the research skills needed to effectively synthesize these sources for their writing. Summer assignments may be required. This course will fulfill the American Literature requirement for graduation. *A state mandated End of Course Assessment is required.*



23.05200

BRITISH LITERATURE/COMPOSITION

This course focuses on the study of British literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. Reading across the curriculum develops the students' academic and personal interests in different subjects. While the continued focus is expository writing in British literature, the student will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The students will engage in research, the impact that technology has on writing, timed writing, 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 listening, speaking, and viewing skills for a variety of purposes.



23.052001

HONORS BRITISH LITERATURE AND COMPOSITION

This course focuses on the study of British literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. Reading across the curriculum develops the students' academic and personal interests in different subjects. While the continued focus is expository writing in British literature, the student will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The students will

ENGLISH

ACADEMIC AND HONORS, AP CLASSES

engage in research, the impact that technology has on writing, timed writing, 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 listening, speaking, and viewing skills for a variety of purposes. Extensive reading, public speaking and presentations skills are also included in this course. Summer assignments may be required.



23.065000

12TH GRADE AP LITERATURE AND COMPOSITION

The course focuses on an intensive study of representative works from various literary genres and periods. The focus is on the complexity and thorough analysis of literary works. The students will explore the social and historical values that works reflect and embody. The textual detail and historical context provide the foundation for interpretation: the experience of literature, the interpretation of literature, and the evaluation of literature. Writing to evaluate a literary work involves making and explaining judgments about its artistry and exploring its underlying social and cultural values through analysis, interpretation, and argument (e.g. expository, analytical, and argumentative essays). The writers will develop stylistic maturity: strong vocabulary, sentence variety, and effective use of rhetoric to maintain voice. Summer assignments may be required.



23.021000

MYTHOLOGY- GREEK, ROMAN, NORSE

Elective Credit Only

This course introduces the importance of myths and tales of classical mythology, focusing on a comparative study of plot, characters, themes, and figurative devices. The course emphasizes the following: critical and analytical skills, vocabulary development, a study of the influences of Greek, Roman, and Norse word origins on the English language, and composition. The study of the relationship between people and their societies is a major emphasis, along with the impact of mythology on the literary world. Writing exploration through media literacy and viewing will be a focus in this course.



23.02300

SHAKESPEARE

Elective Credit Only

This course offers the skills students need to explore and study William Shakespeare's life and works. Through a survey of selected Shakespearean plays, students learn to read text accurately and imaginatively and to appreciate

Shakespeare's dramatic dimensions. The plays are reviewed via a range of media: text, film, audio recording, and live performance. Students develop the ability to interpret literature and complex ideas, recognize, discuss, and write about universal themes in literature, compare and contrast characters, and become familiar with Elizabethan English. Critical writing skills as well as speaking skills are components of the coursework.



23.034000

ADVANCED COMPOSITION

Core or Elective

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



23.042000

ORAL/WRITTEN COMMUNICATION SPEECH

Elective Credit Only

This course focuses on developing public speaking skills. The students will identify effective methods to arrange ideas and information in written form and then convert the written form into an effective oral delivery. The course focuses on critically thinking, organizing ideas, researching counter viewpoints, and communicating appropriately for different audiences and purposes. The students analyze professional speeches to enhance their knowledge of solid speech writing.



23.066000

CONTEMPORARY LITERATURE/COMPOSITION

The course focuses on the short story, nonfiction, drama, poetry, and the novel (novella) since 1960. The students explore writing by international authors, focusing on various cultures, genders, races, and writing styles. Students write expository, 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.

ENGLISH

ACADEMIC AND HONORS, AP CLASSES



23.06700

MULTICULTURAL LITERATURE/COMPOSITION

Can be an Honors Course

The course focuses on world literature 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 expository, 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.



23.03200

JOURNALISM I YEARBOOK

Elective Credit Only

This course focuses on journalistic writing through analysis of newspapers, yearbooks, literary magazines, and broadcast journalism publications. A concentration on the following components of journalistic writing is critical: influence, purpose, structure, and diction. Reading, writing, and critical thinking are key components as students explore the power and influence of journalism. Students will participate in news gathering, the study of ethics, and the aspects of copy writing, editing, and revising and will study the ethics of journalism. If a publication is produced, the students will learn the process of publishing.



23.03300

JOURNALISM II YEARBOOK

Elective Credit Only

The course offers an advanced study of journalistic writing. Skills from Journalism I are continued; the students focus on a more intense analysis of print and broadcast publications. Students read extensively to explore and analyze the influence of good journalistic writing. This course requires more critical thinking and more in-depth writing.



23.03500

JOURNALISM III YEARBOOK

Elective Credit Only

This course is an extension of Journalism I and II; the students will enhance and hone the skills in journalistic writing, with a main focus in analysis of print and broadcast publications. An in depth coverage of level-two topics will serve as the main premise. Students will evaluate and apply skills appropriately and efficiently to various publication opportunities and activities.



23.03600

JOURNALISM IV YEARBOOK

Elective Credit Only

This course is designed for students who have mastered skills in Journalism III. The students will publish journalistic articles either in a school newspaper or in the local newspaper. Research and interviews will be required when formulating ideas for writing. The range of opportunities to apply skills will be increased.



23.03100

WRITER'S WORKSHOP

Elective Credit Only

This course offers opportunities for students to explore different writing genres: narrative, descriptive, persuasive, and expository modes of discourse. The students will study different writers and their writing styles. The students will have opportunities to improve writing proficiency through a complete study of the components of solid writing: fluency, style, diction, mechanics, grammar, imaginative expressions, and details. The course allows students to utilize the writing process to write independently to improve their writing.



23.04600

SPEECH/FORENSICS I

This course is a detailed study of forensic speaking including extemporaneous speaking, oration, and interpretation of literature, and debate. There is an emphasis on understanding various forensic speaking formats and the importance of applying reasoning, research and delivery skills. Critical thinking is a major component of this course.

ENGLISH

ACADEMIC AND HONORS, AP CLASSES

FOR SPEAKERS OF OTHER LANGUAGES (ESOL)

COURSE NAME PREREQUISITES

9th Grade Literature and American Literature are required for all ESOL students.

- *English ESOL I Placement testing*
- *English ESOL II Placement testing or ESOL I*
- *English ESOL III Placement testing or ESOL II*
- *English ESOL IV Placement testing or ESOL III*



23.09100

ESOL I

This course offers basic English grammar and vocabulary practice for speakers of other languages; emphasizes comprehension and production of spoken and written English and focuses on interpersonal communication skills and United States culture. This course does not fulfill requirements for language arts credit.*



23.09200

ESOL II

This course integrates the four language skills – reading, writing, listening, speaking. The course especially focuses on comprehending high frequency works and basic phrases in physical surroundings, orally producing learned works and phrases, and using appropriate gestures to communicate basic needs. ESOL II is also designed for students to be able to read and comprehend literature at appropriate reading levels, as well as arranging sentences in paragraph form using appropriate formats.



23.09300

ESOL III

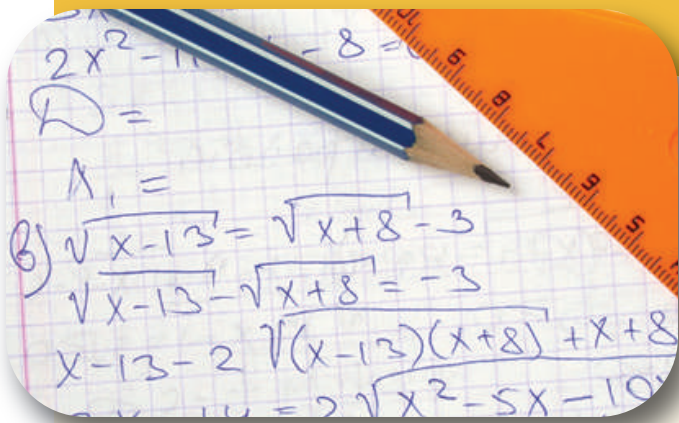
The four language skills (reading, writing, listening, speaking) are integrated in this course. It is designed for students to comprehend sequences of information on familiar topics as presented through stories, face-to-face conversations, and in contextualized settings. Students will also read, with a limited number of comprehension difficulties, grade-level materials. Students will be able to write reflective essays on their development as communicators in English and will write persuasively, showing an understanding of ideas, issues, and different points of view.*



23.09400

ESOL IV

Students in this course (which integrates the four language skills) will be able to comprehend detailed information with limited contextual clues on unfamiliar topics and comprehend concrete and abstract topics. Students will also recognize language subtleties in a variety of communicative settings. The course also focuses on sequencing, categorizing, and summarizing reading selections as well as writing compositions that have a clear beginning, middle, and ending.



The Georgia Mathematics curriculum focuses on actively engaging students in the development of mathematical understanding by using manipulatives and a variety of representations (e.g. concrete, symbolic, verbal, graphical), working independently and cooperatively to solve problems, estimating and computing efficiently, and conducting investigations and recording findings. There is a shift towards applying mathematical concepts and skills in the context of authentic problems and understanding concepts rather than merely following a sequence of procedures. In mathematics classrooms, students will learn to think critically in a mathematical way with an understanding that there are many different ways to a solution and sometimes more than one right answer in applied mathematics. Each mathematics course integrates concepts from algebra, geometry, and data analysis and probability in order to emphasize the natural connection among mathematical topics. As a result, implementation of the Georgia Performance Standards places a greater emphasis on the process standards from the National Council of Teachers of Mathematics: problem solving, reasoning, representation, connections, and communication.

ACADEMIC AND HONORS, AP CLASSES

MATHEMATICS

CALCULATOR USAGE: Calculator usage varies from one mathematics course to another, depending upon the course objectives and content. A substantial portion of the mathematics curriculum encourages and promotes the use of calculators to enhance understanding of the concepts. A scientific calculator is required in all math classes (TI-30XIIS recommended); a graphing calculator and a scientific calculator are required in all classes above Algebra II. The department recommends a TI-84 plus if the student is purchasing a graphing calculator.



MATHEMATICS

ACADEMIC AND HONORS, AP CLASSES

CLASS OF 2016 AND THEREAFTER (4 UNITS REQUIRED)

Students that have been identified as needing mathematics support at the end of 8th grade.

GRADE 9	GSE Foundations of Algebra
GRADE 10	GSE Algebra I
GRADE 11	GSE Geometry
GRADE 12	GSE Algebra II

CLASS OF 2016 AND THEREAFTER

(4 UNITS REQUIRED)

GRADE 9	GSE Algebra I
GRADE 10	GSE Geometry
GRADE 11	GSE Algebra II
GRADE 12	GSE Pre-Calculus

CLASS OF 2016 AND THEREAFTER (4 UNITS REQUIRED)

For accelerated course of study in mathematics in 8th grade:

GRADE 8	GSE Honors Algebra I
GRADE 9	GSE Honors Geometry
GRADE 10	GSE Honors Algebra II
GRADE 11	GSE Pre-Calculus, GSE Accelerated Pre-Calculus or Dual Enrollment (DE) courses
GRADE 12	AP Calculus, AP Statistics or Dual Enrollment (DE) courses

CLASS OF 2016 AND THEREAFTER (4 UNITS REQUIRED)

For accelerated course of study in mathematics in 9th grade:

GRADE 9	GSE Accelerated Algebra I/Geometry A
GRADE 10	GSE Accelerated Geometry B/Algebra II
GRADE 11	GSE Pre-Calculus
GRADE 12	AP Calculus, AP statistics or Dual Enrollment (DE) courses

NOTE: All mathematics courses are complete full credit/unit courses.



MATHEMATICS

ACADEMIC AND HONORS, AP CLASSES



27.04810, 27.14810, 27.94810

GSE FOUNDATIONS OF ALGEBRA

The Foundations of Algebra course is a first year high school mathematics course option for students who have completed mathematics in grades 6, 7, and 8 yet will need substantial support to bolster success in high school mathematics. The course is aimed at students who have reported low standardized test performance in prior grades and/or have demonstrated significant difficulties in previous mathematics classes. The Foundations of Algebra course is not a prerequisite for any math course.

Foundations of Algebra will provide opportunities to revisit and expand the understanding of foundational algebra concepts, will employ diagnostic means to offer focused interventions, and will incorporate varied instructional strategies to prepare students for required high school mathematics courses. The course will emphasize both algebra and numeracy in a variety of contexts, including number sense, proportional reasoning, quantitative reasoning with functions, and solving equations and inequalities.



27.09900, 27.99900, 27.89900

GSE ALGEBRA I

Algebra I is the first course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications.

The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including pre-calculus, calculus, advanced statistics discrete mathematics, and mathematics of finance course. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.

The high school standards for this course will allow students to gain a foundation in linear, quadratic, and exponential functions before they are brought together to be compared/contrasted at the end of this course. As key characteristics of functions are introduced, and revisited, students will gain a deeper understanding of such concepts as domain and range, intercepts, increasing/decreasing, relative maximum/minimum, symmetry, end behavior, and the effect of function parameters. The administration of the Georgia Milestones EOC Assessment is required. *A state mandated End of Course Assessment is required.*



27.09970, 27.99970, 27.89970, 27.19970

GSE ALGEBRA I SUPPORT

Algebra I Support is designed to build skills, confidence, and habits that will help students be successful in Algebra I. Everything that students do in class is linked directly to the Algebra I course, even if Algebra I topics are not addressed directly.



27.09940, 27.29940

GSE ACCELERATED ALGEBRA I/GEOMETRY A

Accelerated Algebra I/Geometry A is the first in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school career, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potential up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.



27.09910

GSE GEOMETRY

Geometry is the second course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of geometry with correlated statistics applications. The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including pre-calculus, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.

MATHEMATICS

ACADEMIC AND HONORS, AP CLASSES



GSE GEOMETRY I SUPPORT

Geometry I Support is designed to build skills, confidence, and habits that will help students be successful in Geometry I. Everything that students do in class is linked directly to the Geometry I course, even if Geometry I topics are not addressed directly.



27.09950

GSE ACCELERATED GEOMETRY B/ALGEBRA II

Accelerated Analytic Geometry B/Advanced Algebra is the second in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school career, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics. The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.



27.05100

AP STATISTICS

Enables students to apply statistical methods in problem solving using data collected through experimentation, computer simulations, and various sources. Provides opportunities to model statistical methods, derive probabilities, and make inferences. Presents applications of statistics in real-life situations and shows how misleading statistics could be better presented. Prerequisite: Algebra I, Geometry or Informal Geometry, and Algebra II.



27.09920, 27.99920, 27.89920

GSE ALGEBRA II

The high school standards specify the mathematics that all students should study in order to be college and career ready. The high school standards are listed in conceptual categories including Number and Quantity, Algebra, Functions, Modeling, Geometry, and Statistics and Probability.

Conceptual categories portray a coherent view of high school mathematics; a student's work with functions, for example, crosses a number of traditional course bound-

aries, potentially up through and including calculus. Modeling is best interpreted not as a collection of isolated topics but in relation to other standards.

The high school standards for this course will allow students to use complex numbers in polynomial identities and equations, interpret the structure of expressions, write expressions in equivalent forms to solve problems, perform arithmetic operations of polynomials, understand the relationship between zeros and factors of polynomials, use polynomial identities to solve problems, rewrite rational expressions, create equations that describe numbers or relationships, understand solving equations as a process of reasoning and explain the reasoning, solve systems of equations, represent and solve equations and inequalities graphically, interpret functions that arise in applications in terms of the context, analyze functions using different representations, build a function that models a relationship between two quantities, build new functions from existing functions, construct and compare linear, quadratic, and exponential models and solve problems, extend the domain of trigonometric functions using the unit circle, model periodic phenomena with trigonometric functions, prove and apply trigonometric identities, visualize relationships between two-dimensional and three-dimensional objects, apply geometric concepts in modeling situations, summarize, represent, and interpret data on a single count or measurement variable, understand and evaluate random processes underlying statistical experiments and make inferences and justify conclusions from sample surveys, experiments, and observational studies.



27.09990, 27.99990, 27.89990

GSE ALGEBRA II SUPPORT

Algebra II Support is designed to build skills, confidence, and habits that will help students be successful in Algebra II. Everything that students do in class is linked directly to the Algebra II course, even if Algebra II topics are not addressed directly.



27.09770, 27.29770

GSE ACCELERATED PRE-CALCULUS

This is a fast-paced, college-preparatory mathematics course that will prepare students to take Calculus or AP Calculus in the year following successful completion. Students will be challenged to use their writing, reading comprehension, and critical thinking skills as well as their mathematical skills in order to solve problems. Students will explore many new concepts. This is a course in pre-calculus and statistics, designed to prepare students to take Advanced Placement Calculus. It includes rational, circular trigonometric and inverse trigonometric functions; basic trigonometric identities and the laws of sines and cosines; sequences and series; polar and parametric equations; vectors; the central limit theorem and confidence intervals.

MATHEMATICS

ACADEMIC AND HONORS, AP CLASSES



27.99740, 27.89740

GSE PRE-CALCULUS

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; sequences and series; vectors; the central limit theorem and confidence intervals. Instruction and assessment should include the appropriate use of manipulatives and technology. Topics should be represented in multiple ways, such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts should be introduced and used, where appropriate, in the context of realistic phenomena.



AP CALCULUS

AP Calculus is a fourth mathematics course option for students who have completed Pre-Calculus or Accelerated Pre-Calculus. It includes problem solving, reasoning and estimation, functions, derivatives, application of the derivative, integrals, and application of the integral. Instruction and assessment should include the appropriate use of technology. Topics should be presented in multiple ways, such as verbal/written, numeric/data-based, algebraic, and graphical. Concepts should be introduced and used, where appropriate, in the context of realistic phenomena.



27.07800

STATISTICAL REASONING

Statistical Reasoning is a fourth mathematics course option for students who have completed Algebra II, Advanced Algebra, Accelerated Geometry B/Algebra II, or Accelerated Analytic Geometry B/Advanced Algebra. The course provides experiences in statistics beyond the CCGPS 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. The Standards for Mathematical Practice through a Statistical Lens will provide the foundation for instruction and assessment. Topics should be introduced and assessed using simulations and appropriate supporting technology.



27.08500

AMDM: ADVANCED MATH DECISION MAKING

Prerequisite: Algebra II, Advanced Algebra, Accelerated Geometry B/Algebra II or Accelerated Analytic Geometry B/Advanced Algebra)

This is a course designed to follow the completion of Algebra II, Advanced Algebra, Accelerated Geometry B/Algebra II or Accelerated Analytic Geometry B/Advanced Algebra. The course will give students further experiences with statistical information and summaries, methods of designing and conducting statistical studies, an opportunity to analyze various voting processes, modeling of data, basic financial decisions, and use network models for making informed decisions. Instruction and assessment should include the appropriate use of manipulatives and technology. Topics should be represented in multiple ways, such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts should be introduced and used, where appropriate, in the context of realistic phenomena.

ACADEMIC AND HONORS,
AP CLASSES

SCIENCE



CLASS OF 2012 AND THEREAFTER

(4 UNITS REQUIRED)

GRADE 9	REQUIRED FOR GRADUATION Biology, Honors Biology or AP Biology
GRADE 10	REQUIRED FOR GRADUATION Physical Science, Chemistry, Honors Chemistry
GRADE 11	REQUIRED FOR GRADUATION Chemistry, Physics, AP Biology, AP Chemistry, Environmental Science, AP Environmental Science, Earth Systems
GRADE 12	REQUIRED FOR GRADUATION Fourth year required elective Physics, Anatomy/Physiology, AP Biology, AP Chemistry, AP Environmental Science, AP Physics, Earth Systems, Forensic Science, Zoology Scientific Research I (for students who have completed the Biotechnology Pathway)

NOTE: All science courses are complete full credit/unit courses including the fourth science course.



SCIENCE

ACADEMIC AND HONORS, AP CLASSES



6.01200

BIOLOGY - REQUIRED

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. *A state mandated End of Course Assessment is required.*



26.012001

HONORS BIOLOGY

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 investigate biological concepts through experience in laboratories and field work using the processes of inquiry. Other topics and instructional methods specific to preparing students for the rigors of future honors science courses, Advanced Placement, and IB science courses are also included. Summer assignments may be required. *A state mandated End of Course Assessment is required.*



40.05100

CHEMISTRY

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, 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.



40.051001

HONORS CHEMISTRY

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, 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. Other topics specific to preparing students for the rigors of an Advanced Placement course will be integrated throughout the course. The rigor and instructional techniques will model the Advanced Placement course requirements. Summer assignments may be required.



40.01100

PHYSICAL SCIENCE

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. *A state mandated End of Course Assessment is required.*



40.08100

PHYSICS

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.

SCIENCE

ACADEMIC AND HONORS, AP CLASSES



40.081001

HONORS PHYSICS

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. Other topics specific to preparing students for the rigors of an Advanced Placement course will be integrated throughout the course. The rigor and instructional techniques will model the Advanced Placement course requirements. Summer assignments may be required.



26.07300

HUMAN ANATOMY/PHYSIOLOGY

The human anatomy and physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. This curriculum is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body, however rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.). Areas of study include organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry is integrated throughout anatomy and not necessarily taught as a stand-alone unit. Careers related to medicine, research, health-care and modern medical technology are emphasized throughout the curriculum. Also, case studies concerning diseases, disorders and ailments (i.e. real-life applications) are emphasized.



26.073001

HONORS HUMAN ANATOMY/PHYSIOLOGY

The human anatomy and physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. This curriculum is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body, however rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.).

Areas of study include organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry is integrated throughout anatomy and not necessarily taught as a stand-alone unit. Careers related to medicine, research, health-care and modern medical technology are emphasized throughout the curriculum. Also, case studies concerning diseases, disorders and ailments (i.e. real-life applications) are emphasized. The rigor and instructional techniques will model college course requirements. Summer assignments may be required.



26.06110

ENVIRONMENTAL SCIENCE

The Environmental Science curriculum is designed to extend student investigations that began in grades K-8. This 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 done. Resources on the Internet are utilized for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts are integrated throughout the course. Also, careers related to environmental science are emphasized.



26.061101

HONORS ENVIRONMENTAL SCIENCE

The Environmental Science curriculum is designed to extend student investigations that began in grades K-8. This 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 done. Resources on the Internet are utilized for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts are integrated throughout the course. Also, careers related to environmental science are emphasized. The rigor and instructional techniques will model college course requirements. Summer assignments may be required.

SCIENCE

ACADEMIC AND HONORS, AP CLASSES



40.06400

EARTH SYSTEMS

Earth Systems Science is designed to continue student investigations that began in K-8 Earth Science and Life Science curricula and investigate the connections among Earth's systems through Earth history. These systems – the atmosphere, hydrosphere, geosphere, and biosphere – interact through time to produce the Earth's landscapes, ecology, and resources. This course develops the explanations of phenomena fundamental to the sciences of geology and physical geography, including the early history of the Earth, plate tectonics, land form evolution, the Earth's geologic record, weather and climate, and the history of life on Earth. Instruction focuses on inquiry and development of scientific explanations, rather than mere descriptions of phenomena. Case studies, laboratory exercises, maps, and data analysis are integrated into the units. Also included are topics of current interest (e.g., recent earthquakes, tsunamis, global warming, price of resources) and to potential careers in the geosciences.



26.07100

ZOOLOGY

This is a laboratory based course that will survey the nine major phyla of the Kingdom Animalia. Morphology, taxonomy, anatomy, and physiology of poriferans, cnidarians, platyhelminthes, nematodes, rotifers, annelids, bryozoans, molluscs, arthropods, echinoderms, hemichordates, chordates, agnathans, chondrichthyes, osteichthyes, amphibians, reptilians, aves, and mammals will be investigated through comparative studies done during laboratory observations and dissections. Furthermore, students will compare and contrast methods used by organisms from different phyla to accomplish basic life processes.



40.09300

FORENSIC SCIENCE

In this course students will learn the scientific protocols for analyzing a crime scene, how to use chemical and physical separation methods to isolate and identify materials, how to analyze biological evidence and the criminal use of tools, including impressions from firearms, tool marks, arson, and explosive evidence.



40.09210

SCIENTIFIC RESEARCH I

Scientific Research I enhances the student's skills and further develops the concepts in science within research. This course is often paired with an AP Science course in order to assure students are ready for the rigor of an AP course.



26.013001

HONORS BIOLOGY II

Biology II enhances student's skills and further develops the concepts on interdependence of organisms, energy flow in living systems, and biological evolution that were studied in Biology I. This course is often paired with AP Biology in order to assure students are ready for the rigor of AP Biology. Summer assignments may be required.



26.01400

AP BIOLOGY

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Some AP students, as college freshmen, are permitted to undertake upper-level courses in biology or to register for courses for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory science course and will be able to undertake other courses to pursue their majors. AP Biology should include the topics regularly covered in a college biology course for majors. The textbooks used for AP Biology should be those used by college biology majors and the labs done by AP students must be the equivalent of those done by college students. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one 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 two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The ongoing information explosion in biology makes these goals even more challenging. Primary emphasis in an AP Biology course should be on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. This course conforms to the College Board topics for the Advanced Placement Biology Examination. The major themes of the course as indicated by the AP Biology course guide include molecules and cells, heredity and evolution, and organisms and populations. This course requires a rigorous college level lab component and utilizes a college text. Summer assignments may be required.

SCIENCE

ACADEMIC AND HONORS, AP CLASSES



40.05300

AP CHEMISTRY

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, as freshmen, second-year work in the chemistry sequence at their institution or to register for courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. AP Chemistry should meet the objectives of a good general chemistry course. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The college course in general chemistry differs qualitatively from the usual first secondary school course in chemistry with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated, the time spent on the course by students, and the nature and the variety of experiments done in the laboratory. Secondary schools that wish to offer an AP Chemistry course must be prepared to provide a laboratory experience equivalent to that of a typical college course. To develop the requisite intellectual and laboratory skills, AP Chemistry students need adequate classroom and laboratory time. It is expected that a minimum of 290 minutes per week will be allotted for an AP Chemistry course. Of that time, a minimum of 90 minutes per week, preferably in one session, should be spent in the lab. (Time devoted to class and laboratory demonstrations should not be counted as part of the laboratory period.) In addition, students will probably need to spend at least five hours a week studying outside of class. The AP Chemistry course is designed to be taken after the completion of a first course in high school chemistry. It is strongly recommended that credit in a first-year high school chemistry course be a prerequisite for enrollment in an AP Chemistry class. In addition, the recommended mathematics prerequisite for an AP Chemistry class is the successful completion of a second-year algebra course. The advanced work in chemistry should not displace any other part of the student's science curriculum. It is highly desirable that a student have a course in secondary school physics and a four-year college preparatory program in mathematics. Summer assignments may be required.



40.08310

AP PHYSICS 1

AP Physics 1: Algebra-based and AP Physics 2: Algebra-based are the equivalent of the first and second semesters of introductory, algebra-based college courses. Because these courses are intended to be yearlong courses, teachers have time to foster deeper conceptual understanding through student centered, inquiry-based instruction. Students have time to master foundational physics principles while engaging in science practices to earn credit or placement. Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.



40.08320

AP PHYSICS 2

Like AP Physics 1, Physics 2 is an Algebra-based college course. In both courses AP Physics 1 and 2, students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. AP Physics 1 and AP Physics 2 FAQs http://media.collegeboard.com/digital/services/pdf/ap/2013advances/Physics_FAQs



40.09210, 40.29210

SCIENTIFIC RESEARCH I - HONORS

In this course students learn and practice effective study skills, perform a variety of physical science, life science, math, and engineering labs to master various types of lab equipment and techniques in order to narrow down research interests, learn to evaluate results scientifically and mathematically, study a variety of science topics to further refine their choices, learn to use and incorporate technical literature and appropriate computer applications, design and original research project, and begin the writing and presentation process for a formal paper and poster session.

SCIENCE

ACADEMIC AND HONORS, AP CLASSES



40.08410

AP PHYSICS C: MECHANICS AND PHYSICS

This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by mathematics courses that include calculus. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. The sequence is more intensive and analytic than that in the B course. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. The subject matter of the C course is principally mechanics and electricity and magnetism, with approximately equal emphasis on these two areas. The C course is the first part of a sequence which in college is sometimes a very intensive one-year course but often extends over one and one-half to two years, with a laboratory component. Summer assignments may be required.



40.08420

AP PHYSICS C: ELECTRICITY AND MAGNETISM

This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by mathematics courses that include calculus. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. The sequence is more intensive and analytic than that in the B course. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. The subject matter of the C course is principally mechanics and electricity and magnetism, with approximately equal emphasis on these two areas. The C course is the first part of a sequence which in college is sometimes a very intensive one-year course but often extends over one and one-half to two years, with a laboratory component. Summer assignments may be required.



26.06200

AP ENVIRONMENTAL SCIENCE

The goal of the AP Environmental Science course is 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. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. The following themes provide a foundation for the structure of the AP Environmental Science course.

1. Science is a process.

- *Science is a method of learning more about the world.*
- *Science constantly changes the way we understand the world.*

2. Energy conversions underlie all ecological processes.

- *Energy cannot be created; it must come from some where.*
- *As energy flows through systems, at each step more of it becomes unusable.*

3. The Earth itself is one interconnected system.

- *Natural systems change over time and space.*
- *Biogeochemical systems vary in ability to recover from disturbances.*

4. Humans alter natural systems.

- *Humans have had an impact on the environment for millions of years.*
- *Technology and population growth have enabled human to increase both the rate and scale of their impact on the environment.*

5. Environmental problems have a cultural and social context.

- *Understanding the role of cultural, social and economic factors is vital to the development of solutions.*

6. Human survival depends on developing practices that will achieve sustainable systems.

- *A suitable combination of conservation and development is required.*
- *Management of common resources is essential.*



ACADEMIC AND HONORS,
AP CLASSES

SOCIAL STUDIES



CLASS OF 2012 AND THEREAFTER

(4 UNITS REQUIRED)

GRADE 9	ALL 3 COURSES ARE ELECTIVE COURSES World Geography, World Geography-Honors, AP Human Geography
GRADE 10	REQUIRED FOR GRADUATION World History or World History-Honors or AP World History
GRADE 11	REQUIRED FOR GRADUATION U.S. History or U.S. History-Honors or AP U.S. History
GRADE 12	REQUIRED FOR GRADUATION Government (1 semester) or Government Honors or AP Government Economics (1 semester) or Economic Honors or AP Macro Economics



SOCIAL STUDIES

ACADEMIC AND HONORS, AP CLASSES



45.07110

WORLD GEOGRAPHY

Elective Credit Only

This course investigates regions of the world and how these regions influence the historical, economical, political and cultural development in an interdependent world. Included are geographic concepts, physical phenomena and the relationship of people to their environment. Also includes environmental issues and decision-making skills. The course covers regions, location (position on earth's surface), place (physical and human characteristics), relationships within places and movement (human interaction on the earth).



45.071101

HONORS WORLD GEOGRAPHY

Elective Credit Only

This is an academic elective course that serves as an introduction to both physical and cultural geography. After an introduction to geographic themes and concepts, students study each major regions of the world, focusing on the importance of physical geography and its impact on the region's historical, cultural, economic, and political development. For each region, students learn about the importance of the physical geography and Study includes topics such as population, energy sources, urbanization, technology, environment and food supply. Special attention is given to developing the critical thinking, test-taking, and writing skills needed to succeed in future Advanced Placement classes. Additional outside reading and document analysis are also incorporated into this course as part of the accelerated curriculum. Summer assignments may be required.



45.07700

AP HUMAN GEOGRAPHY

Elective Credit Only

This course conforms to the College Board topics for the Advanced Placement Human Geography examination. The purpose of the AP course in 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. The particular topics studied

in an AP Human Geography course should be judged in light of the following five college-level goals that build on the National Geography Standards developed in 1994. On successful completion of the course, the student should be able to:

- *Use and think about maps and spatial data*
- *Understand and interpret the implications of associations among phenomena in places*
- *Recognize and interpret at different scales the relationships among patterns and processes*
- *Define regions and evaluate the regionalization process*
- *Characterize and analyze changing interconnections among places*

Significant outside reading and assignments should be anticipated as part of the course. Summer assignments may be required.



45.08300

WORLD HISTORY - REQUIRED

World History is a 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.



45.083001

HONORS WORLD HISTORY

This course is a comprehensive, intensive study of major events and themes in world history. The course examines the political, cultural, economics and social development and growth of civilizations. The course curriculum covers the growth and development of ancient civilizations, the emergence of nations through trade/communications, intellectual development, scientific/technological development, emergence of nation-states, nations in conflict, the merging interdependence of nations in the 20th century, and the study of change, continuity, and globalization at the beginning of the 21st century. Special attention is given to developing the critical thinking, test-taking, and writing skills needed to succeed in future Advanced Placement classes. Additional outside reading and document analysis are also incorporated into this course as part of the accelerated curriculum. Summer assignments may be required.

SOCIAL STUDIES

ACADEMIC AND HONORS, AP CLASSES



45.08110

AP WORLD HISTORY

This course conforms to the College Board topics for the Advanced Placement World History examination. The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Periodization, explicitly discussed, forms an organizing principle for dealing with change and continuity throughout the course. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. Significant outside reading and assignments should be anticipated as part of the course. Summer assignments may be required.



45.01100

COMPARATIVE RELIGIONS

Compares major religions of the world; covers ethical-philosophical teachings, historical development, social and cultural impact on various societies and commonalities found in all religions. Integrates and reinforces social studies skills.



45.08100

UNITED STATES HISTORY - REQUIRED

This course serves as a comprehensive, intensive study of major events and themes in United States History. Students will examine 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. *A state mandated End of Course Assessment is required.*



45.081001

HONORS UNITED STATES HISTORY

This course serves as a comprehensive, intensive study of major events and themes in United States History. Students will examine 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. Special attention is given to developing the critical thinking, test-taking, and writing skills needed to succeed in future Advanced Placement classes. Additional outside reading and document analysis are also incorporated into this course as part of the accelerated curriculum. *A state mandated End of Course Assessment is required.*



45.08200

AP UNITED STATES HISTORY

The AP program in United States History is designed to provide students with the analytical skills and enduring understandings necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year introductory college courses. Students should learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format. This college-level course is organized around the themes of American diversity, American identity, culture, demographic change, economics transformations, environment, globalization, politics and citizenship, reform, religion, slavery and its legacy, and war and diplomacy. Significant outside reading and assignments should be anticipated as a part of the course. Summer assignments may be required. *A state mandated End of Course Assessment is required.*

SOCIAL STUDIES

ACADEMIC AND HONORS, AP CLASSES



45.05700

AMERICAN GOVERNMENT/CIVICS - REQUIRED

This required course (1/2 credit) provides a background in the philosophy, functions, and structure of the United States government. The course curriculum focuses on the philosophical foundations of the United States government, basic concepts and principles of the American system of government, the relationship of the national government to state governments and citizens, the roles and responsibilities of citizenship, participation in the political process, and the relationship of the individual to the law and legal system. This course stresses critical analysis of public issues while integrating and reinforcing social studies skills.



45.057001

HONORS AMERICAN GOVERNMENT

This required course (1/2 credit) provides a background in the philosophy, functions, and structure of the United States government. The course curriculum focuses on the philosophical foundations of the United States government, basic concepts and principles of the American system of government, the relationship of the national government to state governments and citizens, the roles and responsibilities of citizenship, participation in the political process, and the relationship of the individual to the law and legal system. This course stresses critical analysis of public issues while integrating and reinforcing social studies skills. Special attention is given to developing the critical thinking, test-taking, and writing skills needed to succeed in future Advanced Placement classes. Additional outside reading and document analysis are also incorporated into this course as part of the accelerated curriculum. Summer assignments may be required.



45.05200

AP GOVERNMENT AND POLITICS: UNITED STATES AP AMERICAN GOVERNMENT

This course conforms to the College Board topics for the Advanced Placement Government and Politics: United States examination. This college-level curriculum covers the concepts of federalism, separation of powers, influences on the formulation and adoption of the Constitution, political parties and elections, interest groups, institutions and policy processes, civil liberties, and civil rights. Students are strongly encouraged to take the College Board AP American Government examination at the completion of this course in May. Significant outside reading and assignments should be anticipated as a part of the course.



45.06100

ECONOMICS/BUSINESS/FREE ENTERPRISE

This one semester, 1/2 credit required course provides a basic foundation in the field of economics by focusing on the American economic system. The course curriculum covers fundamental economic concepts, comparative economic systems, microeconomics, international economic interdependence, and personal finance. Emphasis is placed upon the student's ability to analyze economic information critically and to make decisions concerning public issues. *A state mandated End of Course Assessment is required.*



45.06100

HONORS ECONOMICS/BUSINESS/FREE ENTERPRISE

This one semester, 1/2 credit required course provides a basic foundation in the field of economics by focusing on the American economic system. The course curriculum covers fundamental economic concepts, comparative economic systems, microeconomics, international economic interdependence, and personal finance. Emphasis is placed upon the student's ability to analyze economic information critically and to make decisions concerning public issues. Special attention is given to developing the critical thinking, test-taking, and writing skills needed to succeed in future Advanced Placement classes. Additional outside reading and document analysis are also incorporated into this course as part of the accelerated curriculum. *A state mandated End of Course Assessment is required.*



45.06300

AP MACROECONOMICS

This one credit course conforms to the College Board topics for the Advanced Placement Macroeconomics examination. Students will receive a thorough examination of the principles of economics that apply to the functions of individual decision-makers (both consumers and producers) within the economic system. The course will emphasize the nature and functions of product markets, the study of factor markets, and the role of government in promoting greater efficiency and equity in the economy. The course curriculum will cover the topics of basic economic concepts; measurement of economic performance; national income and price determination; the financial sector; inflation, unemployment and stabilization policies; economic growth and productivity; and international trade and finance. *A state mandated End of Course Assessment is required.*

Students are strongly encouraged to take the College Board AP Macroeconomics examination at the completion of this course in May. Significant outside reading and assignments should be anticipated as a part of the course.

SOCIAL STUDIES

ACADEMIC AND HONORS, AP CLASSES



45.01200

CURRENT ISSUES

This 1/2 credit elective course addresses the major socioeconomic and political events of the Post World War II era. Students will study the following: current social, economic and political issues; sources of information; the interaction of technology and society; the relationship between the environment and energy; criminal behavior; health and social welfare programs; education; immigration; human rights; issues surrounding the development and use of weapons of mass destruction; ideological and political conflict; world economic issues and international trade. A good historical understanding of these topics and well developed communication skills (both oral and written) are strongly recommended for this course.



45.0150001

PSYCHOLOGY

This one semester, 1/2 credit elective course investigates the relationship of psychology to other sciences, the principles of psychology, contributions of major psychologists, the scientific method, uniqueness, experimental ethics, developmental psychology, heredity and environmental aspects of psychology, learning theory, memory and thinking types, biological bases of behavior, personality, intelligence, social disorders, awareness, emotion, motivation, conflict resolution, and research methods used in the study of psychology.



45.01600

AP PSYCHOLOGY

This course conforms to the College Board topics for the Advanced Placement Psychology examination. This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Course topics include: Psychological History and Approaches; Research Methods; Biological Bases of Behavior; Sensation and Perception; States of Consciousness; Learning; Cognition; Motivation and Emotion; Developmental Psychology; Testing and Individual Differences; Abnormal Psychology; Treatment of Psychological Disorders; and Social Psychology. Students are strongly encouraged to take the College Board AP Comparative Government and Politics examination at the completion of this course in May. Significant outside reading and assignments should be anticipated as a part of the course.



45.03100

SOCIOLOGY

This one semester, 1/2 credit elective course serves as an introduction to the field of sociology. After an introduction to classic sociologists and theory, students will study the following topics: society and its five basic social institutions; cultural and structural influences on human belief and behavior; research and methods of sociology; population demographics, culture and its elements; the roles of sub-cultures in society; socialization; the social order and deviation; inequality in societies; race relations and civil rights; group conflicts in society; geriatrics; criminal behavior; poverty; domestic violence; public health issues; pluralistic vs. homogeneous societies; ethnocentrism; and the impact of urbanization industrialization on society.



45.08400

AP EUROPEAN HISTORY

This year-long, one credit elective course conforms to the College Board topics for the Advanced Placement European History examination. Students will acquire a knowledge of the events and movements that occurred in Europe during the time period from 1450 AD to the present. These events and movements are explored through three themes: intellectual and cultural history, political and diplomatic history, and social and economic history. In addition, students learn the skills of document analysis, historiography, and analytical essay composition. Students are strongly encouraged to take the College Board AP European History examination at the completion of this course in May. Significant outside reading and assignments should be anticipated as a part of the course.



ELECTIVES

WORLD LANGUAGE

PREPARING OUR STUDENTS FOR TOMORROW'S WORKPLACE

Second language skills are needed by students for the new global economy for the following reasons:

- Students interested in attending a 4 year college/university must have at least 2 years in a consecutive language.
- The workplace of tomorrow is a world of many cultures and languages. With new forms of global commerce we can't even imagine today.
- 200,000 Americans annually lose out to jobs with business because they cannot communicate in another language.
- Monolingual speakers will be at a disadvantage in employment and political life.
- Managers who know how to deal with a diverse workforce will have an edge.
- 4 of 5 new jobs in the US are created as a result of foreign trade.
- 1/3 of all corporations in the US are either owned or based abroad.
- Georgia ranks 15th in the US in export sales.



60.01100 FRENCH I

This course allows students to begin to develop communication skills on a variety of common topics, such as friends, family, school, and leisure activities. Classwork and homework introduce listening, speaking, reading, and writing functions in the target language, as well as the cultures of regions where French is spoken. The course is designed for students who did not take the two-year French sequence in middle school.



60.01200 FRENCH II

Prerequisite French I

This course builds on and expands the skills students acquired in French I class. Students communicate in more detail about a broader range of topics and can ask about, narrate and discuss past, present, and future events and plans. Students who have passed the two-year middle school French sequence or one unit of French I at the high school level should enroll in this class.



60.01300 FRENCH III

Prerequisite French II or Native Speakers

This course allows students to extend the skills and content taught at the French II level in order to participate in more complicated situations, to communicate in extended conversations, to respond to authentic print, audio, and visual media in the target language, to react to current events and cultural patterns in the francophone world, and to develop organized composition and reporting skills in French.



WORLD LANGUAGE

ELECTIVES



60.01400 FRENCH IV

Prerequisite French III

As a continuation of French III, this course develops students' proficiency in using oral and written language to inquire, narrate, and describe in a variety of tenses and situations. Students summarize and respond to authentic materials and media in the target language.



60.07100 SPANISH I

This course allows students to begin to develop communication skills on a variety of common topics, such as friends, family, school, and leisure activities. Classwork and homework introduce listening, speaking, reading, and writing functions in the target language, as well as the cultures of regions where Spanish is spoken. The course is designed for students who did not take the two-year Spanish sequence in middle school.



60.07200 SPANISH II

Prerequisite Spanish I

This course builds on and expands the skills students acquired in Spanish I class. Students learn to communicate in more detail about a broader range of topics and can ask about, narrate and discuss past, present, and future events and plans. Students who have passed the two-year middle school Spanish sequence or one unit of Spanish I at the high school level should enroll in this class.



60.07300 SPANISH III

Prerequisite Spanish II or Native Speakers

This course allows students to extend the skills and content taught at the Spanish II level to participate in more complicated situations, to participate in extended conversations, to respond to authentic print, audio, and visual media in the target language, to react to current events and cultural patterns, and to develop organized composition and reporting skills in Spanish.



60.07400 HONORS SPANISH IV

Prerequisite Spanish III

As a continuation of Spanish III, this course develops students' proficiency in using oral and written language to inquire, narrate, and describe in a variety of tenses and situations. Students summarize and respond to authentic materials and media in the target language. Students read and discuss appropriate literary selections and use oral and written skills to respond to the visual art, music, and drama of the target cultures.



60.07700 ADVANCED PLACEMENT SPANISH

Prerequisite Spanish IV

Students who enroll in Honors/AP Spanish Language should already have a good command of Spanish grammar and vocabulary and have competence in listening, reading, speaking, and writing. The course will emphasize the students' ability to understand spoken Spanish in various contexts and develop a vocabulary ample for reading a variety of writings, and their ability to express themselves with reasonable fluency and accuracy in both written and spoken Spanish.

60.07900 SPANISH FOR NATIVE SPEAKERS

For students who have been educated in Spanish through fifth grade and provide documentation, two units of native language credit are awarded on the transcript with a grade of P for "Pass".



ELECTIVES

FINE ARTS

**53.03610 LEVEL I, 53.03620 LEVEL II, 53.03630 LEVEL III, 53.03640 LEVEL IV
BEGINNING BAND**

Prerequisite Band in Grades 6-8 or Audition with Director

This course provides opportunities to develop performance skills on a wind or percussion instrument (preferably wind). It emphasizes performance and production; may include analysis, historical and cultural influences, improvisation and appreciation of music.

**T53.03710 LEVEL I, 53.03720 LEVEL II, 53.03730 LEVEL III, 53.03740 LEVEL IV
INTERMEDIATE BAND**

Prerequisite Beginning Band or Audition with Director

This course provides opportunities for intermediate level 50 performers to increase, refine and develop performance and precision skills on a wind or percussion instrument (preferably wind). It emphasizes performance and production; may include analysis, historical and cultural influences, improvisation and appreciation of music at intermediate levels of understanding.

**53.03810 LEVEL I, 53.03820 LEVEL II, 53.03830 LEVEL III, 53.03840 LEVEL IV
ADVANCED BAND**

Prerequisite Band

This course provides opportunities for advanced-level performers to increase, refine and develop performance and precision skills on a wind or percussion instrument (preferably wind). It emphasizes performance and production; may include analysis, historical and cultural influences, improvisation and appreciation of music at advanced levels of understanding.



FINE ARTS

ELECTIVES



53.03910 LEVEL I, 53.03920 LEVEL II, 53.03930 LEVEL III, 53.03940 LEVEL IV
MASTERY BAND

Prerequisite Band

This class does not have a Georgia Department of Education course description at this time.



53.09410
BEGINNING KEYBOARD TECHNIQUES I

This course introduces basic piano keyboard techniques. It covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. This course provides an individualized setting.



54.02110
BEGINNING CHORUS I

Beginning Chorus is offered to students who would like to sing for enjoyment while developing their musical knowledge and vocal skills. Emphasis is placed on increasing music reading skills diction, intonation, and vocal technique. Attention is given to all the areas that are essential to membership in a music performance.



53.02210 LEVEL I, 53.02220 LEVEL II, 53.02230 LEVEL III, 53.02240 LEVEL IV
INTERMEDIATE CHORUS

This is a performance based class. It provides opportunities for intermediate-level performers to increase, develop, and refine performance skills and precision vocally. Students are required to attend after school events such as concerts and other performances. Students are REQUIRED to purchase a chorus uniform. Some uniforms are available for rental. Grades are largely based on daily class participation, basic skills tests, class work, and performance participation. Extra credit is available.



54.02310 LEVEL I, 54.02320 LEVEL II, 54.02330 LEVEL III, 54.02340 LEVEL IV
ADVANCED CHORUS

Prerequisite Director's Approval

This is an advanced level performance based class. It provides opportunities for advanced-level performers to increase, develop, and refine performance skills and precision vocally. Students are required to attend after school events such as concerts and other performances. Students are REQUIRED to purchase a chorus uniform. Some uniforms are available for rental. Grades are largely based on daily class participation, basic skills s, class work, and performance participation. Extra credit is available.



54.02610 LEVEL I, 54.02620 LEVEL II, 54.02630 LEVEL III, 54.02640 LEVEL IV
ADVANCED WOMEN'S CHORUS

Prerequisite Director's Approval

This course provides opportunities for advanced-level female performers to increase performance skills and knowledge in all-female choral singing. It covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Stresses self-paced progress and group experiences.



54.02910 LEVEL I, 54.02920 LEVEL II, 54.02930 LEVEL III, 54.02940 LEVEL IV
ADVANCED MEN'S CHORUS

Prerequisite Director's Approval

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



52.02100
THEATRE ARTS/FUNDAMENTALS I

This is an introductory level class designed to teach basic acting skills as well as introduce the style and characteristic elements of modern musical theater. Drama will focus on the genre of dramatic literature with emphasis on universal meanings and the elements of drama. Students will gain a better understanding of the history of drama along with the basic fundamentals of performance. Grades are based on class work, quizzes, daily participation, and class performances.

FINE ARTS

ELECTIVES

**52.02200****THEATRE ARTS/FUNDAMENTALS II**

Prerequisite Theatre Arts I

This is an intermediate level class designed to teach basic acting skills as well as introduce the style and characteristic elements of modern musical theater. Drama will focus on the genre of dramatic literature with emphasis on universal meanings and the elements of drama. Students will gain a better understanding of the history of drama along with the basic fundamentals of performance. Grades are based on class work, quizzes, daily participation, and class performances. Drama I must be taken and passed prior to taking Drama II.

**52.02300 LEVEL III, 52.02400 LEVEL IV
DRAMATIC ARTS/FUNDAMENTALS**

Prerequisite Theatre Arts II

This is an advanced level class designed to teach basic acting skills as well as introduce the style and characteristic elements of modern musical theater. Drama will focus on the genre of dramatic literature with emphasis on universal meanings and the elements of drama. Students will gain a better understanding of the history of drama along with the basic fundamentals of performance. Grades are based on class work, quizzes, daily participation, and class performances. Drama I and II must be taken and passed prior to taking Drama III/IV.

**52.04100 LEVEL I, 52.04200 LEVEL II,****52.04300 LEVEL III, 52.04400 LEVEL IV
THEATRE TECH**

Prerequisite Teacher's Approval

This is an elective Fine Arts class offering beginning instruction for technical elements of theatre. Students will learn about sound, lighting, set design/building, back stage assistance, and house management. This course will offer hands on experience and require students to work several shows after school. Grades are largely based on daily class participation and performance participation.

**50.02110****VISUAL ARTS/COMPREHENSIVE I (VACI)**

Introduces art history, art criticism, aesthetic judgment and studio production. Emphasizes the ability to understand and use elements and principles of art through a variety of media, processes and visual recourses. Explores masters' artworks for historical and cultural significance.

**50.02120****VISUAL ARTS/COMPREHENSIVE II (VACII)**

Prerequisite Visual Comp I

Enhances level-one skills in art history, art criticism, aesthetic judgment and studio production. Emphasizes and reinforces knowledge and application of the design elements and their relationship to the principles of design. Explores different two-and three-dimensional art media and processes. Investigates master artworks to increase awareness and to examine the role of art and the artist in past and contemporary societies.

**50.02130****VISUAL ARTS/COMPREHENSIVE III (VACIII)**

Prerequisite Visual Comp I and II

Enhances level-two skills in art history, art criticism, aesthetic judgment and studio production. Provides practice in applying the elements and principles of art through a variety of media, processes and visual recourses. Provides focus on different two and three dimensional art media and processes and master artworks. Stresses ideas development through production and creativity through the study of the master artist.

**50.2140****VISUAL ARTS/COMPREHENSIVE IV (VACIV)**

Prerequisite Visual Comp I, II and III

Enhances level-three skills in art history, art criticism, aesthetic judgment and studio production. Provides opportunity for in-depth application of the elements and principles of art through a variety of media, processes and visual recourses. Provides focus on different two and three dimensional art media and processes and master artworks. Stresses creative problem solving through art production and the study of master artists and their works.

**50.03110****VISUAL ARTS/DRAWING I (VADI)**

Prerequisite Visual Comp I

Explores a variety of drawing techniques and media, emphasizing basic drawing skills and critical analysis skills for responding to master drawings of different historical styles and periods. Examines solutions to drawing problems through student drawings and those of other artists. Covers Western and non-Western cultures.

FINE ARTS

ELECTIVES

**50.03120****VISUAL ARTS/DRAWING II (VADII)**

Prerequisite Visual Comp I and Drawing I

Enhances level-one skills in techniques and provides further exploration of drawing media; reinforces basic drawing skills and critical analysis skills for responding to master drawings of different historical styles and periods. Examines solutions to drawing problems through student drawings and those of other artists.

**50.03210****VISUAL ARTS/PAINTING I (VAPII)**

Prerequisite Visual Comp I and Drawing I

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.

**50.03220****VISUAL ARTS PAINTING II (VAPII)**

Prerequisite Visual Comp I, Drawing I, and Painting I

Enhances level-one drawing and painting skills and provides opportunities to apply drawing and painting techniques in a variety of media. Stresses critical analysis of master paintings and drawings of different styles and historical periods; emphasizes problem-solving techniques to improve techniques and mastery of materials.

**50.08130****VISUAL ARTS/ADVANCED PLACEMENT STUDIO: GENERAL PORTFOLIO (VAAPSGP)/V ART/AP ST**

Prerequisite Visual Comp I and Any Two Art Courses

Conforms to College Board topics for the Advance Placement Studio Art Portfolio Examination. Requires submission of original works and slides to be evaluated on quality. Provides opportunity to work in one or more media such as drawing, painting, graphics, photography, animation cells, and sculpture. Designed for students interested in the practical experiences of art.

**50.04110****VISUAL ART/CERAMICS/POTTERY I (VACI)**

Prerequisite Visual Arts I

Beginning pottery course exploring hand-building techniques along with an introduction to the wheel. History of clay and art criticism taught in this course.

**50.04120****VISUAL ART/CERAMICS/POTTERY II (VACII)**

Prerequisite Ceramics I, Visual Arts I

Advanced pottery course using hand building and wheel throwing techniques to create utilitarian and aesthetic works.

**50.06110****VISUAL ART/SCULPTURE I (VASI)**

Prerequisite Visual Arts I, and Ceramics I

Beginning sculpture course that explores three-dimensional media such as wire, clay, plaster, woodcarving, assemblage, etc.

**50.06120****VISUAL ART/SCULPTURE II (VASII)**

Prerequisite Ceramics I, Visual Arts I

Advanced sculpture course using three-dimensional media and producing high quality works of art.

**50.07110****VISUAL ARTS/PHOTOGRAPHY I (VAPI)**

Prerequisite Visual Arts I

This is a beginning photography course exploring the history and development of photography, making pin-hole cameras, the basic camera types, basics of dark-room processes and film development, fundamentals of digital photography and beginning editing using Adobe Photoshop. Students work to create a portfolio of photos showing competency in basic photographic processes.

**50.07120****VISUAL ARTS/PHOTOGRAPHY II (VAPII)**

Prerequisite Visual Arts I and Photography I

This class build on skills acquired in Photography I. Digital Photo editing using Photoshop is pursued on a more advanced level. The role of photojournalism and documentary photography as well as photo careers are explored. Students explore different camera types and film formats as well as some alternative and historical photo processes. Students work to develop a portfolio of photographic images stressing excellence and personal vision.

FINE ARTS

ELECTIVES

**50.07130****VISUAL ARTS/PHOTOGRAPHY III (VAPIII)**

Prerequisite Visual Art I, Photography I, and Photography II

Students work on a somewhat independent basis to assemble a portfolio of high competency and professionalism. Students may weight the majority of the portfolio toward digital or film based images based on their preference but are expected to be competent in all. The students develop a digital portfolio that can be used in seeking post-secondary opportunities and they do research into cutting edge trends in photography and photo journalism.

**50.09210****AP HISTORY OF ART**

Conforms to College Board topics for the Advanced Placement History of Art Examination. Covers prehistory to Egyptian, Greek and Roman, Early Christian, Byzantine, Early Medieval, Romanesque, Gothic, Renaissance and Mannerist, 17th and 18th century, 19th century, 20th century and non-Western art.



ELECTIVES

PHYSICAL EDUCATION

.....

**17.01100 HEALTH - REQUIRED****36.05100 PERSONAL FITNESS - REQUIRED**

HEALTH-This course is designed to give students the opportunity to learn practical skills necessary to implement healthy life choices. The course includes learning activities designed to include students in classroom study, discussions, health labs, Internet activities via health web sites and constantly changing current events. Students are called on to evaluate their current health habits on personal, interpersonal and community levels. A passing grade in this course meets the high school graduation requirements in the area of health and safety. This course is a Paulding County School District graduation requirement.

PERSONAL FITNESS-The primary goal of this course is to help students help themselves. This course shows students that everyone can be healthy and physically fit. It encourages the development and maintenance of personal fitness throughout the life cycle. It is a "personal" course. Students are presented a wide variety of fitness topics. They learn to assess their own personal fitness levels and based on that knowledge, learn to design their own personal fitness programs. Consumer issues related to health and fitness are discussed along with principles of training, nutrition and stress management. This unit course meets the state requirement for Physical Education. This course is a Paulding County School District graduation requirement.

**36.05600****BODY SCULPTING/ADVANCED BODY SCULPTING**

This course provides methods to redefine body shape through specific exercises. Covers weight training, conditioning exercises and proper nutrition to improve muscle tone, muscle definition, posture, bodily proportions, overall condition of the body and increase energy levels. Based on the American College of Sports Medicine guidelines for fitness and conditioning programs.



PHYSICAL EDUCATION

ELECTIVES



36.02100

INTRODUCTORY TEAM SPORTS

This elective course is designed to provide students with the opportunity to improve skills in each sport encountered. The emphasis is placed on teaching and improving motor skills unique to each team sport rather than merely playing them. This course will offer the student an opportunity to learn the history, rules, and strategies of specific team sports as well as the opportunity to develop attitudes necessary to play the sport safely and display good sportsmanship. Team Sports is an elective physical education course.



36.03100

INTERMEDIATE TEAM SPORTS

Team Sports introduces skills, strategies and rules associated with team sports such as basketball, volleyball, soccer, softball, and team handball and flag football. Intermediate Team Sports enhances skills and strategies in team sports such as basketball, volleyball, soccer, softball, team handball and flag football.



36.04100

ADVANCED TEAM SPORTS

Team Sports introduces skills, strategies and rules associated with team sports such as basketball, volleyball, soccer, softball, and team handball and flag football. Intermediate Team Sports enhances skills and strategies in team sports such as basketball, volleyball, soccer, softball, team handball and flag football. Advanced Team Sports provides opportunities to officiate and to enhance skills in team sports strategies.



36.05400

WEIGHT TRAINING

This course is designed to allow students to participate in a program of activities, which promote the development of health-related fitness. Activities/workouts may include but not be limited to: weight training (free weights and machines), run/walk activities, flexibility exercises, speed training and relation techniques.



36.06400

ADVANCED WEIGHT TRAINING

Prerequisite Weight Training

This elective course increases strength and cardiovascular fitness through an individualized weight training program. It emphasizes self-management and adherence strategies.



36.02200

INTRODUCTORY LIFETIME SPORTS

This elective course is designed to provide students with the opportunity to improve skills in each sport taught. The emphasis is placed on teaching and improving motor skills unique to each individual or dual sport rather than merely playing them. This course will offer the student an opportunity to learn dual sports as well as the opportunity to develop attitudes and judgment necessary to play the sport safely and display good sportsmanship. It is the goal of this course to instill the necessary skills and favorable attitudes to foster lifetime participation. Lifetime Sports is an elective physical education course.



36.01100

GENERAL PHYSICAL EDUCATION I

Focuses on any combination or variety of team sports, lifetime sports, track and field events, aquatics/water sports, outdoor education experiences, rhythmic/dance, recreational games, gymnastics, and self-defense. Provides basic methods to attain a healthy and active lifestyle.



36.01200

GENERAL PHYSICAL EDUCATION II

Enhances level-one skills in any different combination or variety of team sports, lifetime sports, track and field events, aquatics/water sports, outdoor education experiences, rhythmic/dance, recreational games, gymnastics, and self-defense. Further promotes methods to attain a healthy and active lifestyle.



36.01300

GENERAL PHYSICAL EDUCATION III

Enhances level-two skills in any different combination or variety of team sports, lifetime sports, track and field events, aquatics/water sports, outdoor education experiences, rhythmic/dance, recreational games, gymnastics, and self-defense. Further promotes methods to attain a healthy and active lifestyle.

PHYSICAL EDUCATION

ELECTIVES



36.03200

INTERMEDIATE LIFETIME SPORTS

Prerequisite Lifetime Sports

This elective course is designed to provide students with the opportunity to improve skills in each sport taught. The emphasis is placed on teaching and improving motor skills unique to each individual or dual sport rather than merely playing them. This course will offer the student an opportunity to learn dual sports as well as the opportunity to develop attitudes and judgment necessary to play the sport safely and display good sportsmanship. It is the goal of this course to instill the necessary skills and favorable attitudes to foster lifetime participation. Intermediate Lifetime Sports is an elective physical education course.



36.06200

ADVANCED PHYSICAL CONDITIONING

Prerequisite Personal Fitness

This elective course is designed to be a continuation of the course required for graduation, Personal Fitness. Several ideas are revisited but many new concepts are introduced. The course is designed to educate the novice and enhance the performance levels of the athlete by covering principles of movement science. Psychological issues are discussed as they relate to physical performance as well. Developing a pattern of involvement in lifetime activity is the desired goal of this course.



17.01300

FIRST AID AND SAFETY

Prerequisite Sports Medicine I

This elective course focuses on developing safety habits. It stresses prevention of accidents and injuries, basic life-saving, and first aid techniques.



36.05200

PHYSICAL CONDITIONING

Physical conditioning refers to the development of physical fitness through the adaptation of the body and its various systems to an exercise program. Physical fitness is a general state of health and well-being and, more specifically, the ability to perform aspects of sports or occupations. Physical fitness is generally achieved through correct nutrition, moderate-vigorous physical activity, exercise and rest.



36.01500

SPORTS MEDICINE I

This course provides an opportunity for the study and application of the components of sports medicine including but not limited to: sports medicine related careers, organizational and administrative considerations, prevention of athletic injuries, recognition, evaluation, and immediate care of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, first aid/CPR/AED, emergency procedures, nutrition, sports psychology, human anatomy and physiology, therapeutic modalities, and therapeutic exercise.



36.02700

INTRODUCTION TO RECREATIONAL GAMES

History and development of recreation in public, private and commercial settings; backgrounds and theories; objectives and principles; job opportunities and demands. This elective course provides an Introduction to recreational games such as bowling, badminton, table tennis, golf, horseshoes, Frisbee games, shuffleboard.