

Student Plan of Study – Therapeutic Services–Patient Care



Name _____ Date _____ School _____

Parent/Guardian Signature _____ Date _____

Advisor/Counselor Signature _____

Date _____

Current Area of Interest: Health Science/Therapeutic Services--Patient Care - This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.

Grade Level	I. English/Language Arts Total 4 credits	II. Math Total 4 credits	III. Science Total 4 credits	IV. Social Studies Total 3 credits	V. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives) Total 4 credits
9	9 th Literature & Composition or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	1 CCGPS Core Algebra 2 CCGPS Analytic Geom 3 CCGPS Accel Cord Algebra/Analytic Geom 4 CCGPS Accel Analytic Geom B/Adv. Algebra 1 credit * Credit Earned <input type="checkbox"/>	Biology or Approved Dual Enrollment Course 1 credit * Credit Earned <input type="checkbox"/>	American Government/Civics or AP Government/ Politics US or Approved Dual Enrollment Course ½ credit Credit Earned <input type="checkbox"/>	Health ½ credit Personal Fitness ½ credit Credit Earned <input type="checkbox"/>	Advanced Academic Pathways English/Language Arts, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one IB or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment and Georgia Virtual School courses may be available. World Language Pathways **Two credits are required for admissions to University System Institutions. For a listing of world language courses offered at your high school, please check with your advisor, counselor, or local course description catalog. A world language pathway may be followed in any of the world language areas included in the state list of approved courses. Upon graduation, students earn a world language pathway when they complete three credits in one language. The third course may reflect an AP, IB or Dual Enrollment designation. Georgia Virtual School and ACCEL courses may be available. Fine Arts/Performing Arts Pathways Visual Arts, Dance, Music, Journalism, Theatre A fine arts pathway may be followed in any one of the five areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the five areas. A student should consult a counselor or advisor for related coursework. AP, Dual Enrollment and Georgia Virtual School courses may be available.
10	10 th Literature & Composition or World Literature & Composition or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	1 CCGPS Analytic Geom 2 CCGPS Adv Algebra 3 CCGPS Accel Analytic Geometry/Adv. Algebra 4 CCGPS Pre-Calculus 1 credit * Credit Earned <input type="checkbox"/>	Physical Science or Physics or AP Physics or Approved Dual Enrollment Course 1 credit * Credit Earned <input type="checkbox"/>	World History or AP World History or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	25.52100 Intro to Healthcare Science or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	
11	American Literature/Composition or AP English Lang & Composition/American Lit or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	1 CCGPS Adv. Algebra 2 CCGPS Pre-Calculus 3 CCGPS Accel Pre-Cal 4 CCGPS Cal or AP Cal 1 credit * Credit Earned <input type="checkbox"/>	Chemistry or Environmental Sci or Earth Systems or AP/IB or Approved Dual Enrollment Course 1 credit * Credit Earned <input type="checkbox"/>	United States History or AP US History or IB History of the Americas or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	25.44000 Essentials of Healthcare or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	
At the end of the 11th grade, students planning to enter a University System of Georgia institution or Technical College System of Georgia Institution should take the appropriate admissions test (SAT, ACT, Compass).						
12	Advanced Composition or British Literature or AP/IB English Literature & Composition or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	CCGPS Pre-Calculus or Calculus or AP Calculus or AP Statistics or IB Math or Approved Dual Enrollment Course 1 credit * Credit Earned <input type="checkbox"/>	Any other of the previous courses or Human Anatomy & Physiology or Epidemiology or Approved Dual Enrollment Course 1 credit * Credit Earned <input type="checkbox"/>	Econ/Business/Free Enterprise or AP Macro Econ or AP Micro Econ or IB Econ or Approved Dual Enrollment Course ½ credit Credit Earned <input type="checkbox"/>	25.43600 Patient Care Fundamentals or Approved Dual Enrollment Course 1 credit Credit Earned <input type="checkbox"/>	
Sample Elective Courses	Other English Elective Courses: Literary Types/Composition Journalism Oral/Written Communication Speech	Other Math Elective Courses: Adv Math Decision Making Math of Industry & Govern Math of Finance	Other Science Elective Courses: Microbiology or AP/IB Science or Biochemistry or Organic Chemistry or Science Research III or IV	Other Social Studies Elective Courses: Humanities or AP/IB Soc Studies or Current Issues or Psychology or Sociology	Other CTAE Elective Courses: Other CTAE courses are available to complete a related pathway	Legend: *Science: Approved 4th Sciences may be used to meet both the required science and required elective in a Career, Technical and Agricultural Education (CTAE) sequence of courses; see Fourth Science Requirements for more information. Student may take science courses in any sequence. *Math: Select Math sequence 1, 2, 3, 4, based on 9 th grade entry course. **Students must complete two credits of the same world language for admission to University System of Georgia institutions. *** Students should complete a CTAE pathway and take the related end of pathway assessment. NOTE: Local systems may offer core courses in a different sequence; not all local systems offer every pathway. Students should explore all credit possibilities including Georgia's Virtual School Program , Dual Enrollment , Advanced Placement (AP) , International Baccalaureate (IB) and Work-Based Learning (WBL) to reach their educational and career goals.

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Registered Nurses	Associate's Degree	\$63,200	3,300
*Medical and Health Services Managers	Bachelor's Degree	\$87,000	510
*Healthcare Social Workers	Advanced Degree	\$46,800	220

Source: Georgia Department of Labor/ONET

Go to GACollege411 at <http://www.GACollege411.org> for more information about your education and career planning, including valuable financial aid information that includes grants and scholarships.

**** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or ***World Languages, and or Fine Arts	3
III. *Science	4	VII. Electives	4
IV. Social Studies	3	TOTAL	23

*Selected [4th Science](#) courses may be used to meet both the required science and required elective in CTAE sequence of courses.
 **Students must complete 3 credits to complete CTAE pathway and take the end of pathway assessment.
 ***Students must complete 2 years of the same world language for admission to Georgia Board of Regents colleges/universities.
 **** Current graduation requirements should be met in all content areas.
 NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Admission's testing varies from institution to institution. Students should contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf). (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)
- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the U.S. Military should take the ASVAB assessment.
- Students should utilize [GACollege411](#) to select the most appropriate postsecondary opportunities to match their selected career field, including state registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:

Certified Nursing Assistant (CNA)
 National Healthcare Association-Certified Patient Care Technician (NHA-CPT)-Students may sit for this exam if they take an additional 4th course, 25:52600 Allied Health & Medicine
 American Red Cross CPR and First Aid Certification

*Related Pathway Occupations:	Other Related Health Science Occupations:
Certified Nursing Assistants (CNA) Licensed Practical Nurses (LPN) Registered Nurses (RN) Specialized Nursing Athletic Trainers Home Health Aides Anesthesiologist Assistants Athletic Trainers	Medical Assistant Occupational Therapist / Assistants Physician's Assistants Recreation Therapists Respiratory Therapists Surgical Technicians *ONET Online

Therapeutic Services/Patient Care

Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients and may provide care, treatment, counseling and health education information. National labor market information indicates that eight out of the top twenty fastest-growing occupations are in the Health Science industry. (OOH)

Based on an aging population and a retiring workforce, the demand for health care workers will remain high through 2020. As roles of careers in Therapeutic Services change, professionals in this pathway will find increased opportunities to work independently. Additionally, an increasing number of career opportunities are becoming available outside of the traditional hospital setting.

Educational levels vary from occupation to occupation. Most Health Science occupations require additional education after high school and require that potential employees acquire the appropriate certification and/or licensing.

Workers in the Health Science industry must have a solid background in math, science, communications, and technical skills, be knowledgeable in their subject area, have the ability to communicate with others, and inspire trust and confidence.

Occupations in the Health Sciences represent the largest and fastest-growing industry in the United States employing over 10 million workers in more than 200 careers. Those considering a nursing career should have a strong desire to help others, a genuine concern for the welfare of patients and clients, and an ability to deal with people of diverse backgrounds in stressful situations.

Rapid job growth is expected in hospital outpatient facilities, such as same-day surgery, rehabilitations, and chemotherapy. Growth is also expected in nursing care facilities and in home health care. RNs with a bachelor's degree will have better job prospects in supervisory and managerial positions than those with either an associate's degree or a diploma. The pay scale will increase as students specialize to nurse practitioner, nurse anesthetist and clinical nurse specialist.

Architecture & Construction Cluster

Educational programs in this cluster prepare students for careers in designing, planning, managing, building, and maintaining the built environment.

Architectural Drawing and Design Pathway

Students will learn drafting techniques through the study of geometric construction; as well as, an introduction to computer-aided drafting and design.

Carpentry Pathway

Students will first master basic safety skills, including ladders, scaffolding, trenching, and safety harnesses. In addition, students will be introduced to the State of Georgia Building Codes; as well as, skills needed to lay rafters, stairs and walls, and properly frame doors and windows.

Electrical Pathway

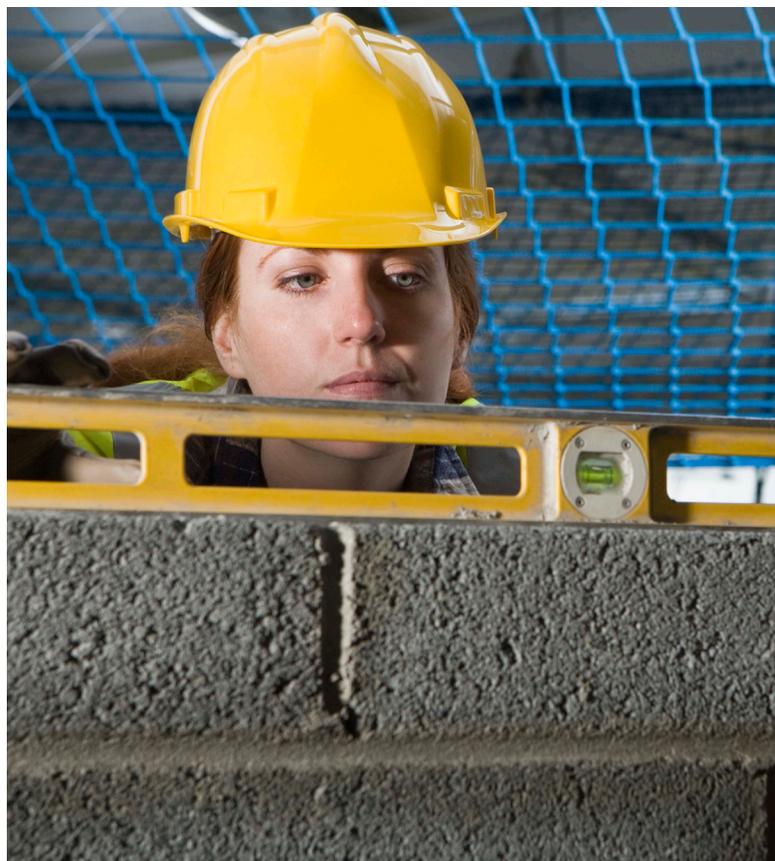
Students will learn the theoretical information regarding various conductors and properties, types of insulation, point of termination principles, and Ohm's Law calculations; as well as, identifying types of wire and cable and selection of electrical boxes and fittings.

Masonry Pathway

Students will demonstrate theoretical competency in general estimation of masonry materials, concrete footings, paving applications, masonry steps, flue chimney building codes, and concrete applications.

Plumbing Pathway

Students will examine the proper use of fittings, drains, waste and venting, copper tubing and steel piping, and the installation of hangers and supports, pipe sizing, residential fixtures and appliances.



continued on back

Occupation Specialties	Entry Level of Education Needed	2012 Average Annual Wage	Annual Openings 2012-2020
Carpenters	High School	\$35,700	730
Construction Managers	Associate's Degree	\$78,300	490
Architectural & Civil Drafters	Associate's Degree	\$49,700	40
Surveyors	Bachelor's Degree	\$44,200	30
Cost Estimators HOT	Bachelor's Degree	\$57,300	210
Electricians	High School	\$40,700	340
HVACR Mechanics & Installers	Some College	\$38,500	150
Sheet Metal Workers	High School	\$41,500	160
Welders, Cutters, & Welder Fitters	High School	\$32,400	480

Architecture & Construction Cluster

Machining Operations Pathway

Students will learn introductory skills needed for operation of lathe and milling machines, and other trade equipment; as well as, acquiring skills needed to be successful as a machinist.

Welding Pathway

Students will develop knowledge and apply safe-operating skills needed to demonstrate the proper set of oxyfuel and shield metal arc welding equipment; as well as, creating accurate cuts and performing washing and gouging procedures, checking welding codes and reviewing work pieces, imperfections, common test methods, and evaluating proper work and equipment setups.

Sheet Metal Pathway

Students will master basic sheet metal techniques and basic trade mathematics; as well as, identifying the rate, selection, and use of steel and other metals to develop and fabricate basic sheet metal projects. In addition, students will learn basic parallel line development and skills using fasteners, hangers, and other support systems.

Heating, Ventilation, Air-Conditioning Refrigeration (HVACR) Pathway

Students will develop skills and knowledge for concepts of conditioning air within a given space; as well as, learn about the skills needed to install hardware and systems used by HVACR technicians.

Heating, Ventilation, Air-Conditioning Refrigeration (HVACR)-Electrical Pathway

Students will learn about refrigeration and heating processes of electronic circuitry; as well as, acquire introductory skills and knowledge needed for conduit bending and installation.

Fine Furniture - Cabinetmaking Pathway

Students will learn about the world of woodworking to develop competencies, in-depth knowledge of hand-tool and machine safety, craftsmanship, and technology essential to the fine furniture/cabinetmaking industry.

Industry-Validated Credentials

Students have an opportunity to gain valuable skills and knowledge through participation and completion of all required courses in a career pathway. Obtaining such skills will potentially provide students with increased opportunities to earn industry-validated credentials while still in high school, thus leading to increased earning potential throughout the students' career span.

Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Admission's testing varies from institution to institution. Students should contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)
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- Students should utilize GAfutures.org to select the most appropriate postsecondary opportunities to match their selected career field, including state-registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Information Technology Cluster

Educational programs in this cluster prepare students to build linkages in information technology occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

Web & Digital Design Pathway

Students will create, design and produce interactive multimedia products and services used in business, training, entertainment, communications, and marketing.

Programming Pathway

Students will learn essential skills involved in the design, development, implementation, and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages, and software development.

Computer Science Pathway

Students will prepare for entry level, technical, and professional IT careers, including the design, development, implementation, and maintenance of computer systems and software, as well as knowledge of computer operating systems, programming languages, and software development required of cutting-edge technologies.



continued on back

Occupation Specialties	Entry Level of Education Needed	2012 Average Annual Wage	Annual Openings 2012-2020
Computer System Analysts HOT	Bachelor's Degree	\$78,000	810
Application Software Developers	Bachelor's Degree	\$85,700	350
Computer Support Specialists HOT	Some College	\$45,600	990
Network and Computer System Administrators	Bachelor's Degree	\$73,000	580
Computer and Information Systems Managers HOT	Bachelor's Degree	\$111,400	370
Computer Network Support Specialists	Some College	\$45,600	190
Web Developers	Bachelor's Degree	\$79,600	350
Informatics Nurse Specialists	Bachelor's Degree	\$72,000	810

Information Technology Cluster

Information Support & Services Pathway

Students will learn to deploy and implement computer systems and software; as well as, provide technical assistance and manage information systems through the creation of technical documentation and information management systems.

Networking Pathway

Students will understand and apply the necessary steps for network analysis, planning, and implementation to include the design, installation, maintenance, and management of network systems.

Health IT (Information Technology) Pathway

Students will learn to connect the healthcare industry with information technology skills that include the design, development, support, and management of hardware, software, multimedia, and systems integration services. Students will connect healthcare industry skills with information technology skills that include capturing, managing, and processing diagnostic images and clinical data.

Cybersecurity Pathway

Students will understand and apply cybersecurity terminology and practices, examine fundamental skills of internal and external threats to network security and design, enforce network level security policies, and learn how to protect industry data and information.



Industry-Validated Credentials

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Arts, Audio Video Technology & Communications Cluster

Educational programs in this cluster prepare students to design, produce, exhibit, perform, write, and publish multimedia content that includes visual and performing arts and design, journalism, and entertainment services.

Audio-Video Technology and Film Pathway

Students will design, manufacture, operate and/or repair audiovisual equipment; create presentations of sound, video, and data in a variety of formats; gather information, prepare broadcasts, build sets, and operate equipment used to record and transmit programs and/or motion pictures; and operate sound mixing and/or video editing equipment.

Graphics Communication Pathway

Students will create, develop, produce, and distribute products that incorporate words and/or pictorial images to convey information, ideas, and feelings, as well as utilizing the technologies of printing, publishing, packaging, electronic imaging, and related industries.

continued on back



Occupation Specialties	Entry Level of Education Needed	2012 Average Annual Wage	Annual Openings 2012-2020
Desktop Publishers	Associate's Degree	\$37,800	30
Graphic Designers HOT	Bachelor's Degree	\$49,900	390
Multimedia Artist and Animators	Bachelor's Degree	\$54,900	150
Camera Operators, Television, Video and Motion Picture	Bachelor's Degree	\$47,300	30
Film and Video Editors	Bachelor's Degree	\$45,600	10

Arts, Audio Video Technology & Communications Cluster

Graphics Design Pathway

Students will communicate visually using typography and/or images to convey information; as well as, utilizing a range of cognitive skills, problem-solving skills, aesthetics, and crafts that include typography, visual arts, illustration, photography, and layout.

Animation and Digital Media Pathway

Students will apply components of 2-D and 3-D animation elements ranging from storyboarding to mastering industry software tools; as well as, the physics and anatomy of motion, the technology of animation, and the uses of cameras and lighting.



Industry-Validated Credentials

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Manufacturing Cluster



Educational programs in this cluster prepare students to plan, manage, and perform the processing of materials into intermediate or final products, and the related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Integrated Manufacturing Technology Pathway

Students will familiarize themselves with related careers and develop fundamental technological literacy as they learn about the history, systems, and processes of manufacturing; apply their knowledge of computer aided design (CAD), computer numerical control (CNC), robotics, computer assisted manufacturing (CAM), programmable logic controllers (PLC), automated guided vehicles (AGV), and computer integrated manufacturing (CIM); and learn how businesses engage in the production of products beginning with pre-production activities and continuing through post-production activities.

continued on back

Occupation Specialties	Entry Level of Education Needed	2012 Average Annual Wage	Annual Openings 2012-2020
Industrial Engineers	Bachelor's Degree	\$76,880	250
Industrial Engineering Technicians	Associate's Degree	\$48,330	45
Industrial Machinery Mechanics	High School	\$42,500	293

Manufacturing Cluster

Mechatronics Pathway

Students will master the integrated and automated systems of Mechatronics that encompasses a wide range of applications such as: Electronics, Mechanics, Fluid Power, Electrical Control Systems, Programmable Logic Controllers (PLC), Computers, and Robotics.

Granite Technology Pathway

Students will experience hands-on opportunities related to the various careers in the granite industry. In addition, students will learn about the types of training and required skills, the specialized tools and equipment used to polish, cut stone, handle material, sandblast, as well as, the MonuCAD design operations for specialized granite projects.

Industry-Validated Credentials

Students have an opportunity to gain valuable skills and knowledge through participation and completion of all required courses in a career pathway. Obtaining such skills will potentially provide students with increased opportunities to earn industry-validated credentials while still in high school, thus leading to increased earning potential throughout the students' career span.

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