

North Springs Charter High School

*Providing
Excellence, Equity and Excitement in Education*

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North Springs Charter High School offers a very diverse curriculum. The purpose of this catalog is to provide you with general information and assist you in becoming familiar with the many course options available. Included you will find graduation requirements, college admissions requirements for Georgia, special programs, and course offerings and descriptions.

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Georgia Board of Regents' Admission Standards for Graduating Class of 2012 or Later

The Board of Regents requires 17 units. Students will be required to present a transcript that includes four units of language arts, four of mathematics, four of science, three of social studies, and two of the same world language.

In addition to the 17 CPC units requirement, freshman applicants will be considered for admission based on the "Freshman Index (FI)"—a formula using the applicant's SAT score and high school grade point average—which will be used to help determine a student's readiness for college work.

The FI is a means of applying several factors to the admissions decision-making process. It provides equity for students who test well on standardized tests as well as those who do not but who work hard to earn great grades. Using the index, both can be given appropriate consideration.

Curriculum Requirements:

17 Curriculum Units are required at all university system institutions:

- 4 units of language arts – literature (American, English, World) integrated with grammar, usage and advanced composition skills
- 4 units of mathematics – algebra I and II, geometry, and a fourth year of advanced algebra and trigonometry, algebra III, pre-calculus, discrete mathematics, calculus, AP calculus, statistics, IB mathematics or analysis
- 4 units of science – including at least one lab course from life science and one lab course from the physical sciences
- 3 units of social studies – must include US history and world history
- 2 units of world language – emphasizing speaking, listening, reading and writing skills
- In addition, different types of institutions (research universities, regional universities, senior colleges, two-year colleges) may require additional academic units.

Freshman Index (FI):

SAT Verbal Score + SAT Math Score + (High School GPA x 500)

Minimum admission standards for traditional freshmen

- Research universities (UGA, Ga. Tech, Ga. State)
17 units and a FI of 2500; must include a minimum of 430 verbal and 400 math SAT scores *or* ACT English 17 and ACT Math 17
- Regional universities (Georgia Southern, Valdosta State)
17 units and a FI of 2040; must include a minimum of 430 verbal and 400 math SAT scores *or* ACT English 17 and ACT Math 17
- State Universities (Kennesaw, Southern Polytechnic and Clayton State)
17 units and a FI of 1940; must include a minimum of 330 verbal and 310 math SAT scores *or*

ACT English 17 and ACT Math 17

- State colleges (Dalton State, Macon State)
17 units and a FI of 1830; must include a minimum of 330 verbal and 310 math SAT scores *or* ACT English 17 and ACT Math 17
- Two-year colleges (Abraham Baldwin Agricultural, Georgia Perimeter)
17 units and a FI of 1830; must include a minimum of 330 verbal and 310 math SAT scores.)

Students should check with the Admissions Office of the school(s) of their choice to be sure they are aware of any particular requirements the university or college may have.

North Springs High School Graduation Requirements

North Springs’ students will have an opportunity to earn twenty-eight (28) units in four years. A minimum of twenty-six (26) units are required to graduate.

	Math/Science Magnet	Visual & Performing Arts Magnet	Dual Magnet	Non Magnet
Language Arts	4	4	4	4
Math	4	4	4	4
Science	4	4	4	4
Social Studies	4	4	3	4
Career/Technical/ Agricultural/ or World Language and/or Fine Arts Elective	1	1		3 (2 yrs of World Language recommended for college bound students)
Health	½	½	½	½
Personal Fitness	½	½	½	½
General Electives	4			8
World Language	2	2	2	
Math/Science Electives	4		3	
Visual/Performing Arts Electives		8	7	
TOTAL	28	28	28	28

HOPE Scholarship Eligibility

The HOPE (*Helping Outstanding Pupils Educationally*) Scholarship Program is Georgia’s unique scholarship program that rewards students’ hard work with financial assistance in degree, diploma, and certificate programs at any eligible Georgia public or private college, university, or public technical institute. Eligible students receive financial assistance covering tuition, HOPE-approved mandatory fees, and a book allowance.

The GPA for HOPE will be determined by averaging ALL core curriculum coursework (English, Math, Science, Social Science, and Foreign Language), including failing grades on a 4.0 scale (A = 4.0, B = 3.0, C =

2.0, and F = 0). In addition, all honors points are removed before the calculation and .50 weighting is added back in for AP and IB courses only, not to exceed 4.0. Grades from high school courses taken in middle school are not calculated in the HOPE GPA. Please note: A 2.99 GPA does NOT qualify you for HOPE. All calculations are done by the Georgia Student Finance Commission.

Additional Current information about HOPE scholarship eligibility can be found at www.gacollege411.org.

Progress Reports and Report Cards

Progress reports are given to students to take home at least every 6 weeks and report cards are given at the end of the semester. A final grade and credit earned will be credited to the student at the end of each semester. Parents/Guardians should feel free to contact the school about their child's progress at any time during the semester. Counselors and teachers will be glad to discuss with parents the program and the progress of their child.

Guidance and Counseling

The office of Guidance and Counseling coordinates the work of school counselors in supporting students in their overall academic success throughout their school years. Graduation Coaches' professional learning and functions are coordinated through this office. The staff also coordinates the SST/504, Safe and Drug Free schools and GED programs.

Testing Programs

National Testing

Fulton County Schools participate in national testing programs such as the Admissions Testing Program of the College Board, the American College Testing Program, and others administered primarily to high school juniors and seniors. Most colleges use these test scores as a criterion for admission. Students who expect to attend postsecondary institutions should prepare for these admissions tests and for their postsecondary work by taking a strong academic program in high school. The high school counselor should be contacted regarding the specific dates for the following tests:

- DAT (Differential Aptitude Test) and Career Interest Inventory - administered to selected 9th Grade students in the fall. The results are designed to give a profile of students' interests and aptitudes with highlights of a student's strengths and those areas that may need additional study. There is no cost to the student.
- PSAT (Preliminary SAT/National Merit Scholarship Qualifying Test) - administered in October to all students in 9th, 10th and 11th grades. Students who expect to take the SAT gain valuable experience through taking the PSAT. Funding is provided for all 9th, 10th, and 11th grade students. Scores of 11th grade students determine eligibility for National Merit Scholarships.
- SAT (Scholastic Assessment Test) - usually administered several times each year at sites designated by the testing company. Juniors are encouraged to take the SAT in the spring of their junior year and again in the fall of their senior year. Students should determine if colleges to which they are applying require the SAT.

- ACT - usually administered five times each year at sites designated by the testing company. College-bound students should determine if colleges to which they are applying require the ACT. If so, they are encouraged to take this test in the fall of their senior year.
- Advanced Placement Exam - administered in May for college placement. Students who take and pass AP courses are required to take the AP exam. Funding is provided.

State Testing

Students must pass all subtests (writing, English/language arts, mathematics, science, social studies) of the Georgia High School Graduation Test to be eligible to receive a diploma.

EOCT (End of Course Tests) – Students enrolled in the second semester of the year-long Algebra I, Geometry, US History, Biology, Physical Science, Ninth Grade Literature and Composition, and American Literature and Composition courses or in the one semester of Economics must take the EOCT for the area. This applies to students taking these courses by alternative means, such as, on line, correspondence, private schools, etc. The EOCT counts as 15% of the final grade and is the final examination for the indicated courses. If a student fails to take the EOCT, he/she will receive an “I” (Incomplete) for the course and will have one academic year semester to make it up. If the EOCT is not taken during this timeframe, the student will receive an “F” and must repeat the course.

Individual and Group Tests

Individual assessments to measure aptitude, achievement, mental abilities and career interests are administered by school psychometrists and psychologists at all grade levels as needed. Their concern is to evaluate the psychological and educational aspects of the individual student's growth and development. School counselors may also administer individual and group achievement, aptitude and career interest assessments.

Special Education Interrelated Resource (IRR)

Students with mild-moderate disabilities may be served through the Interrelated Resource (IRR) Program. Services include monitoring as well as self-contained, modified curriculum, and team-taught classes. Placement in the program and services rendered are determined through an annual Individualized Educational Program (IEP) conference.

Talented and Gifted Program (TAG)

The Talented and Gifted (TAG) program provides curriculum extensions for academically advanced and talented students. This curriculum, which includes honors, Advanced Placement and joint/dual enrollment courses, is provided through the general education program and the gifted program. The gifted program augments classroom activities through seminars, subject-area extensions, independent studies, career internships and advisement. Grades are not given for seminars and subject area extensions; academic credit is earned through directed studies and internships. Students participating in the TAG program in middle school qualify for immediate placement in high school TAG. Screening is held each year at the high school level for students not previously recommended for TAG.

English Speakers of Other Languages (ESOL)

The ESOL program provides students whose primary language is not English an opportunity to acquire language and content skills needed for success in and out of school. Students develop proficiency in listening, speaking, writing, and reading English and become acclimated to American culture through language-based activities. All instruction in the ESOL program is given in English to facilitate the acquisition of English language skills.

Joint Enrollment/Postsecondary Options and Dual Enrollment

High school juniors and seniors above the age of 16 may be eligible to attend Georgia public colleges, universities and technical schools tuition free. If a student elects joint enrollment/post secondary options, he/she receives college credit only. Most private colleges and universities in this area also have dual enrollment agreements with Fulton County Schools; however, the student and his/her parents are responsible for all costs incurred. Under dual enrollment, high school students with outstanding academic records may combine high school with the freshman year of college or technical school and receive simultaneous credit for each. This allows students to earn college or technical school credit while completing their high school diplomas. **Students who want to enter a joint enrollment/dual enrollment program should discuss their plans with a counselor early in their junior year.**

Arts and Sciences Magnet Program

North Springs' offers the only dual magnet program in Fulton County. Both the Visual & Performing Arts and the Math & Science programs offer enrichment and acceleration opportunities in mathematics, science, art, dance, theater (acting & technical), and music (band, orchestra and chorus). As in other high school programs, magnet program students must complete core curriculum courses and may also qualify for and take Advanced Placement and honors classes. Unlike other high school programs, magnet programs require students to take at least one elective unit per year in their major area of interest. Qualified students may participate in either or both components of the magnet program.

The **Math & Science Magnet Program** is an interest-based program with a focus on research and problem based learning that enables students to explore and study math and science beyond the four walls of the core curriculum. The program provides exploration into such areas as: design of experiments, environmental science, number theory, computer programming, engineering and medical ethics. Students are required to earn 12 math/science credits over the course of four years. This includes the eight required core math and science courses. Credits earned in eighth grade do not count towards the 12 required credits to meet the magnet program requirements.

The **Visual & Performing Arts Magnet Program** is an interest-based program that enables students to receive pre-professional training that extends beyond the introductory level. The program provides exploration into such as areas as: music theory, history of the arts, composition, conducting, choreography, playwriting, directing, art production, and art criticism. Students are required to earn 8 math/science credits over the course of four years.

Advanced Placement (AP) Program

Advanced Placement is a program of college-level courses offered in the high school setting. High school students in AP courses have the opportunity to earn college credit or advanced placement upon passage of the nationally-administered AP exam given in May of each year. All students who enroll in AP courses and successfully complete the course are required to take the spring exam which is paid for by the Fulton County Board of Education. AP courses are more rigorous than regular-level and honors courses, but the potential to earn college credit and mature intellectually make the investment worthwhile.

Reasons for taking AP courses:

- To learn a subject in greater depth
- To develop analytical reasoning skills
- To develop disciplined study habits appropriate for continued success at the college level
- To earn tuition-free college credit
- To improve probability of admission to competitive colleges

Schedule Changes

Once classes are scheduled, it is difficult to make schedule changes because many classes will have reached maximum enrollment. Students may not be enrolled in a class that is considered filled. Overloading classes constitutes a violation of State Standards and is not permitted. If there is a need to request a schedule change, students must do so well in advance of the semester for which the change is desired. Requests will be granted on an "as available" basis when stated timelines for requests are followed. After classes have been scheduled, requests will be considered only for the following reasons:

- the student has failed a required course and must repeat the course
- the student has failed a prerequisite and is not eligible to continue in the course sequence
- the student has failed to enroll in a course required for graduation
- the student demonstrates poor achievement in a prerequisite course and is advised by both the teacher and counselor or administrator not to enroll in a more advanced course
- there is a scheduling conflict or a course has been cancelled

Requests for changes of a class period or lunch *will not* be honored. North Springs reserves the right to make adjustments to student schedules due to changes in enrollment and/or to balance class sizes. Students enrolled in an Honors or AP class requesting a change to a regular level course are expected to complete the first semester before the change will be made.

Art

The Visual Arts Department is designed to establish a learning atmosphere which nurtures the up and coming student artist. Serving both as artists and educators, the members of the staff strive to create this environment through teaching a disciplinary based curriculum which includes not only art production, but also art criticism, aesthetics, and art history. The Visual Arts Department is more than just a hands-on program. It is about heads, hearts, and human beings exploring key questions about themselves and the world in which they live. The students receive a strong appreciation for the arts and a broad cultural understanding, which provides them with a meaningful artistic experience.

Students who are not in the magnet program may complete a screening process to be placed in magnet level courses as long as space is available.

Advanced Placement (AP) Art History (yr) – Conforms to College Board topics for the AP Art History examination. The course covers prehistory to Egyptian, Greek and Roman, early Christian, Byzantine, early Medieval, Romanesque, Gothic, Renaissance and Mannerist, 17th & 18th century, 19th century, 20th century and non-western.

Advanced Placement (AP) Studio Art (yr) – Conforms to College Board topics for the AP Art Portfolio examination. The portfolio will be assembled throughout the course consisting of a breadth section with a specific emphasis and a depth section in the selected area of concentration. The process will involve students assessing, selecting and matting their work, and completing slides and an essay.

Art Fundamentals M (sem)- Emphasizes various artistic techniques and media. Drawing techniques such as still life, figure drawing, and design composition are covered, as well as sculpture techniques, color theory and painting. The nature, language, materials, tools, and functions of art are also covered. This course offers a quality, comprehensive, introduction to the study of art with rigor and depth.

Art History (yr) – Emphasizes technological, economic, religious, political, and social influences on the development of art from the prehistoric period through the Renaissance period. Topics include style symbolism, media, subject matter, purposes of art, role of artist and criticism. During second semester students explore the art created during the Renaissance era through art forms being created today. Both semesters have students producing art work similar to the culture being studied.

Ceramics 1-2/1M-2M (sem) – Emphasizes design by clay. Basic hand-building methods include pinch, coil, slab and modeling.

Drawing and Painting 1-4/1M-4M (sem) – Drawing and Painting 1 emphasizes and investigates a variety of drawing techniques, styles, and media. Students will further develop their perception and drawing skills and begin to work with color theory. Drawing and Painting 2-4 emphasizes and investigates a variety of painting techniques, styles, and media. Students will work with traditional methods and materials as well as alternative materials.

Jewelry Design 1-2/1M-2M (sem)– Emphasizes jewelry as small scale sculpture for personal adornment. Topics include historical and social origins, non-metal and metal processes, surface design and art critical processes.

Photographic Design 1/1M (sem) – Emphasizes the “how” and “why” a photographic image is captured. Students build and work with a pinhole camera. Black and White photographic processing (in the darkroom)

is used in this class.

Photographic Design 2/2M (sem)– Students work with a 35mm manual camera. Students should have a strong grasp on composition and darkroom techniques at this point so the emphasis is on subject matter and content.

Photographic Design 3 -4/3M-4M (sem) – Advanced experimental pinhole, 35 mm, and/or medium format and alternative darkroom techniques. Special effects are also covered. At each sequential level, photographic design problems are more complex; students assume increasing responsibility and autonomy in fulfilling expectations.

Printmaking 1-2/1M-2M (sem) – Emphasizes the historical development, elements and principles of printmaking. Techniques include relief printing (monoprint, collograph, block), intaglio processes (drypoint, etching, engraving), and serigraphy (silkscreen, film, stencils, block-out). Additional topics include historical and social influences, styles, periods and art criticism.

Sculpture 1-2/1M-2M (sem)– Emphasizes additive and subtractive modeling methods for relief sculpture and sculpture-in-the-round topics include elements and principals in three-dimensional form; historical origins, functions of sculpture and art criticism applied to sculptural form.

Three-Dimensional Block 1M (sem) - Emphasizes traditional and contemporary 3-dimensional design, sculpture as art and design, and structure of sculptural form (subject matter, form, content). Topics include elements and principles, concepts and ideas fro art history, styles, periods and cultures.

Two-Dimensional Block 1M (sem) - Emphasizes drawing and structure (subject matter, form, contact) in 2-dimensional design. Topics include elements of art and principles of design, concepts and ideas from art history, styles, periods and cultures. Composition and experimentation are highly focused on and with this knowledge and experience the magnet study has a strong foundation for all future advanced art courses.

Career & Technical Education

Career and Technical Education programs and courses allow students to apply mathematics, science and communication competencies in laboratory and occupational settings that develop specific technical skills applicable in broad concentration areas. Program concentration areas include JROTC, Business & Computer Science, Family & Consumer Science, Graphic Communications and Healthcare Science. Career and Technical Education Pathway completion requires that students earn three (3) units of credit in one pathway chosen from among the following concentration areas:

- Business & Computer Science
- Family and Consumer Science
- Healthcare Science

Business

The **Business** program consists of a variety of courses designed to provide students with foundation knowledge and skills required for careers in specific areas. Career Pathways include Small Business Development, Financial Management Services, and Interactive Media. Students also have an opportunity to participate in the Work-based Learning Program.

Business Essentials (yr) This is the foundation course for the *Small Business Development and Financial Management Pathways*. Students build a strong knowledge base and develop management skills as they study forms of business ownership, functions of management, technology, communications, legislation, leadership and teamwork. Prepares students with a competitive edge for the global marketplace and post secondary education.

Banking & Investing (yr) – Major topics in this course include money & its history; banking careers & services, language and documents of banking; opening and managing checking and saving accounts; records for small businesses and introduction to accounting.

Computer Applications (yr) – This is a course that introduces practical computer applications. Review procedures for touch control of the keyboard and basic document formatting. Other topics covered include: operating environments, word processing, spreadsheets, database, Internet usage, and software integration.

Cooperative Business Education (CBE) Internship (yr) – This course provides students with the opportunity to gain valuable work or internship experience while receiving high school credit and possible wages.

Entrepreneurial Ventures (yr)– Major topics in this course include market research; funding; location; marketing plan; management; accounting process; business ethics; cultural differences; business plan; running a business; characteristics and role of entrepreneur; goal -setting; business skills; opportunity recognition; role of government.

Legal Environment of Business (yr)– This course covers laws for business and personal use. Topics include origin of laws; crimes and torts; ethics; contracts; agency relationships; employment contracts; business organization; rights and responsibilities pertaining to minors, family and real property; sole proprietorship and partnerships; agencies and corporations; bailment; Insurance and warranties; law careers/simulations.

Multimedia Technology (yr) – In this course computerized presentations are used to create, format, illustrate, design & print business presentations using multimedia.

Computer Science

The **Computer Science** program offers students an opportunity to work with the latest tools and technologies in an innovative curriculum developed in partnership with Georgia Tech. hands on learning projects include building Web pages, managing databases, and writing programming code. Students will also explore ethical and privacy issues related to computers and the Internet. These courses count towards Math & Science Magnet credit.

Advance Placement (AP) Computer Science A (yr)* – This course will provide opportunities for students to apply data abstraction and encapsulation; read and understand class specifications and relationships among classes; design an interface; understand and modify existing code; extend existing code using inheritance; and analyze algorithms.

Advanced placement (AP) Computer Science AB * (yr) – In addition to the topics covered in AP Computer Science A, this course will also include decomposing a problem into classes, defining relationships and responsibilities of those classes, choosing appropriate advanced data structures and algorithms, and analyzing worst-case and average-case time and space.

Computing in the Modern World (yr)- In this foundation course students acquire a fundamental understanding of the operation of computers and computer networks and create useful programs. By developing Web pages that include images, sound, and text, students acquire a working understanding of the

Internet, data transmission, and design of the human-computer interface. Course includes exposure to career possibilities and discussion of ethical issues relating to computers.

Fundamentals of Web Design (yr) – This course covers Web site basics to include layout and design; markup language, text and scripting languages.

Networking – (yr) This course provides an introduction to networking essentials. Topics include architecture and operating systems; wide-area networks; and network management.

Operating & Systems management (yr) – Major topics of study include hardware design, operation, and maintenance; operating systems; basic mainframe concepts; software systems management; and system administration and control.

*count as science credits for the class of 2012 and beyond.

Family & Consumer Sciences

The **Family and Consumer Sciences** program draws upon learning from all curricular and integrate this knowledge into the daily process of living.

Early Childhood Education

The **Early Childhood Education** courses are designed to provide students with the foundation knowledge and skills required for a career in the child care industry.

Introduction to Early Childhood (yr) – This course covers careers in Early Childhood, developmental issues, principles and theories, learning environment, lesson planning, students with special needs.

Human Growth & Development (yr)– Topics in this course include introduction to Early Childhood Education, optimal growth and development of children and infants, developmental stages, impact of family and society on development, Children/Early Years.

Early Childhood Education Internship I & II (yr)– This course provides students with the opportunity to work with children and gain valuable hands-on experience in a early childhood learning setting while receiving high school credit. Major topics include Observation and analysis, portfolio development, Children/Early Years.

Interior Design

The **Interior Design** program introduces students to the principles and techniques of interior design.

Intro to Interior Design – Topics in this course include the world of interior design; social, psychological and economical influences; trends and issues; interior design principles.

Interior Design Fundamentals – Topics in this course include space and traffic patterns; color theory; drawing for interior design; blueprint reading.

Food Nutrition & Wellness

The **Food Nutrition & Wellness** courses allow students to gain valuable knowledge for personal and family nutrition wellness. Topics include an overview of & factors contributing to wellness and the relationship of health risks, physical activity, and food choices, to nutrition & wellness.

Food Nutrition & Wellness (yr)– This course promotes the understanding of nutritional needs and food choices for optimal health of individuals across the lifespan.

Food Nutrition & Wellness for the Life Cycle (yr)* - Topics in this course include careers in foods and nutrition, menu planning, healthy eating for various life stages.

Food Science (yr) * - This course covers careers in food science, science of food, emerging technology, basic chemistry concepts, macronutrients, and micro components.

*count as science credits for the class of 2012 and beyond if taken after passing the prerequisite Nutrition & Wellness.

Graphic Communications

The **Graphic Communications** program is designed to help students select, enter and advance in one of America's fastest growing industries. Students learn to design, create and apply technical and computer skills to print electronic communications. These courses count towards Math & Science and Visual & Performing Arts Magnet credit.

Introduction to Graphic Designs (yr) – Major topics in this course include History of graphic communications; introduction to offset printing; safety; maintenance; design fundamentals measurements; lay-out process; typography; introduction to desktop publishing software; appropriate printing; special projects & work ethics.

Fundamentals of Graphic Communications (yr) – Topics in this course include introduction to Graphic Design Careers; career manual & resume; advanced desktop publishing & software; digital camera & color printers; offset operations; design, layout & paste-up; plate making & press operations; silk screen, printing & drying; and work ethics.

Printing Technology Lab 1 (yr) – **This course covers** Fundamentals of Graphic Communications Safety; digital file preparation; digital output; press operations; finishing & binding; and screen printing.

Printing Technology Lab 2 (yr) – This course enables students to be involved in advanced work in graphic communications.

Healthcare Science

The **Healthcare Science** program allows a student to develop their analytical and technical skills to facilitate a smooth transition from secondary education to entry-level career, post-secondary education and life long learning. These courses count towards Math & Science Magnet credit.

Introduction to Healthcare Science (yr)* – Major topics in this course include health care systems; careers in health care; ethical and legal responsibilities; safety; anatomy and physiology; diseases and treatment modalities; vocational student organizations; patient care skills, vital signs, and CPR.

Applications of Therapeutic Services (yr) * – This course covers anatomy and physiology; diseases and treatment modalities; developmental stages, first aid; patient care skills; medical office management skills; medical math and medications; and isolation techniques.

Emergency and Disaster Preparedness (yr) – Topics in this course include Emergency Medical Services systems & operations; legal & ethical issues; human body; lifting & moving patients; airways; patient assessment; circulation; bleeding & soft tissue injuries; medical emergencies; and childbirth, infants, & children.

Concepts of Emergency Medicine (yr)– This course covers emergency medical care, medical, legal and ethical issues, anatomy and physiology, lifting and moving, airway management, communications, types of emergencies.

Medical Services Internship (yr) – This course involves an of-campus internship at a medical facility. Prior to placement students will cover safety and security, interpersonal skills, information processing, and occupation-specific skills.

*count as science credits for the class of 2012 and beyond.

Work-Based Learning Program

The purpose of the **Work-Based Learning (WBL)** program at is to provide students with the opportunity to gain valuable work or internship experience while receiving high school credit and possible wages. Qualified students may be released from school one or two periods a day to go to an approved worksite where he/she gains experience in the world of work. Students are given the opportunity to receive academic and occupational preparation that equips them with the necessary skills for competing in a global marketplace and/or post-secondary education programs of study.

The WBL program is designed to be a culmination of any Career, Technical and Agriculture Education (CTAE) Pathway to integrate classroom learning with productive, structured, experiences related to the student's career goal. An application process is required and students are selected through a rigorous screening process. A checklist is used to determine which of the four placement areas will best meet the needs of each student.

Dance

The Dance Magnet Program will introduce students to an entirely new and expressive world of dance. Through the use of innovative teaching techniques, the program allows each student to reach his or her potential. We are grounded in the rich traditions of dance, including classical ballet, modern (contemporary), and jazz. In addition to these techniques, the students study choreography, improvisation, and multicultural dance. Students are allowed to explore their creative and artistic talents, while gaining an appreciation for the established techniques that they study. Through all of these studies the students are encouraged to see the universality of all movement. This allows them to cross cultural barriers and to better understand the world of non-verbal communication.

The dance program is designed to encourage more students to study dance. We believe that dance classes should not be limited to a few handpicked individuals, but should be available to all. This creates a larger appeal for potential students and greater interest for students already in the program. Every child has something to give through his or her individual strengths. These strengths shine through and encourage further growth, which will in turn, make the program stronger as a whole. Every student will have an important place at North Springs. Their accomplishments will help prepare these students for the future challenges in life.

Students who are not in the magnet program may audition or complete a screening process to be placed in magnet level courses as long as space is available.

Dance Master I (yr)- Emphasizes dance as a means for reactive self-expression. Techniques include Ballet, Jazz, and Modern dance. A study of the development and vocabulary of these dance forms is stressed throughout this course.

Modern Dance II/Dance Master II (yr) - Emphasizes advanced techniques in Ballet, Jazz and Modern dance. This course also includes introduction to performance, choreography, contact improvisation and social/ethnic dance.

Modern Dance III (yr) - Emphasizes advanced techniques in Ballet, Jazz and Modern dance. This course also includes the history of Musical Theater and the various styles of dance which have evolved from the development of the American musical and the history of jazz dance and music, which includes study of choreography, music theory and improvisation.

Dance Master III/Dance Master IV (yr) - Emphasizes advanced levels of Ballet, Jazz and Modern dance technique with special attention to technical proficiency and awareness. Advanced levels of choreography and dance history and improvisation and movement theories are also included in this course.

Dance Master III/Dance Master IV (Dance Company) (yr) - Emphasizes advanced levels of Ballet, Jazz and Modern dance technique. This is an audition based course which focuses on creating and nurturing advanced performance and choreographic skills. This course also includes audition preparation.

Musical Theater (yr) – Through the study of music and plays, this course focuses on the production of plays in modern theater. Students will learn first hand the makings of a production in educational theater. This class will study other plays in this genre as means to learn production, performance, and technical elements as they apply to stage musical selections. This course will culminate with an in class performance which will serve as the performance final exam.

African Dance Workshops - Throughout all dance levels a strong emphasis is also placed on African dance technique through regular workshops and performances.

Health & Physical Education

The **Health & Physical Education** program provides developmentally appropriate and comprehensive experiences through exposure to a wide variety of activities and quality instruction at all levels. Through this program students are able to acquire the skills and beliefs needed to pursue a lifelong involvement in physical activity and healthful decision-making.

Freshman Focus (sem) - This course will offer students strategies on how to be successful in making the transition to high school. Topics covered will include study habits, decision making, goal setting, responsibility, school involvement, diversity, leadership and much more.

General PE I (sem)– This course offers an introduction to the basic skills and rules for basketball, volleyball, speedball, gatorball, Frisbee games, flag football, hockey, team handball, and soccer.

General PE II (sem) - Students are further introduced to flag football, basketball, team handball, and soccer. Basic rules and strategies are emphasized.

General PE III (sem) – Students are further introduced to Flag football, basketball, team handball, soccer, softball, tennis, volleyball, and frisbee games.

Health (sem) – This course is required to graduate in the state of Georgia. Topics in this course include wellness concepts and promotion, alternatives for health problems, responsibility for health decisions, human sexuality, state ADAP requirement, safety practices, CPR training, and first aid procedures.

Lifetime Sports (sem)– This course offers an introduction to the games of tennis, golf, and pickleball.

Outdoor Education (sem) – This course offers an introduction to backpacking, camping, and outdoor safety/survival.

Personal Fitness (sem) – This course is required to graduate in the stat of Georgia. It involves students in a Personal fitness program that includes stress management, fitness games, weight training and conditioning, and nutrition.

Weight Training (sem) – This course offers an introduction to weight training skills, and strength and endurance training.

Intermediate Weight Training (sem) – This course provides an intermediate weight training program with a focus on weight training skills, and strength and endurance.

Recreational Games (sem) – This course is an Introduction to bowling, badminton, pickleball, table tennis, golf, horseshoes, frisbee games, and shuffleboard.

Intermediate Recreational Games (sem) – **Students are further introduced to** bowling, badminton, pickleball, table tennis, golf, horseshoes, frisbee games, and shuffleboard.

Track & Field (sem)-This introductory course provides students with a basic knowledge of track and field events as well as the principles of training and conditioning.

JROTC

The **Junior Reserve Officer’s Training Corps (JROTC)** program is designed to teach students the value of citizenship, leadership and service to the community, personal responsibility and a sense of accomplishment, while instilling in them self esteem, teamwork, and self-discipline. The curriculum focus is reflected in its mission statement, “To motivate young people to be better citizens.” Satisfactory completion of the program can lead to advanced placement credit in the Senior ROTC program at an accredited college or university, or advanced rank in the armed forces.

Army JROTC 1 (yr) – This course offers an introduction to leadership & character education. Major topics include history, customs, traditions and purpose of Army JROTC; leadership principles, values and attributes; achieving a healthy lifestyle; study skills, communication skills, and conflict resolution.

Army JROTC 2 (yr) – This course covers intermediate life skills. Major topics include geography & government; communication skills, conflict resolution, styles of leadership, management skills; overview of

the globes, maps and land navigation; the federal judicial system; first aid emergencies; achieving a healthy lifestyle.

Army JROTC 3 (yr) – This course covers advanced leadership skills. Major topics include principles of management, advanced life skills, orienteering and history; the nation’s defense forces; leading situation: performance indicators, negotiating, decision making, and planning.

Army JROTC 4 (yr) – Major topic in this course include leadership seminar and social sciences; leading situations: leading meetings, supervising, team development, project management, mentoring and career planning. Students are placed in leadership positions and perform administrative, logistical, or operational duties.

Language Arts

North Springs offers a balanced language arts program that provides opportunities for students to read and respond critically to literature; write creatively, expressively, and analytically; develop effective oral language skills; investigate and present topics of interest using research methods; and use media and technology to communicate for a variety of purposes.

The language arts core curriculum offers courses on three levels, regular, honors and, AP. Regular level courses meet the needs of most students and are approved for the college preparatory course of study. Honors level courses are appropriate for students who have a past record of excellent achievement in English and reading. These courses are also approved for the college preparatory course of study. Advanced Placement (AP) courses are more rigorous than regular and honors level courses and have the potential to be applied towards college credits.

Core Curriculum Offerings

Freshman Literature and Composition/Honors Freshman Literature and Composition (yr) - Freshman Literature and Composition will continue to build on the reading and language curriculum established in middle school. Throughout this year-long course, students will have opportunities to develop and expand their knowledge of literature and language and demonstrate their mastery level of new learning through performance tasks and assessments. At the completion of this course, students will take the Ninth Grade End-of-Course Test required by state law.

Sophomore Literature and Composition/Honors Sophomore Literature and Composition (yr) – Sophomore Literature and Composition will continue to build on the reading and language curriculum established in ninth grade. Throughout this year-long course, students will have opportunities to develop and expand their knowledge of literature and language and demonstrate their mastery level of new learning through performance tasks and assessments.

Junior American Literature and Composition/ Honors Junior American Literature and Composition (yr) - American Literature and Composition will continue to build on the reading and language curriculum established in tenth grade. Throughout this course, students will have opportunities to develop and expand their knowledge of American literature and demonstrate their mastery level of new learning through performance tasks and assessments. At the completion of this course, students will take the American Literature and Composition End-of-Course Test required by state law.

AP Language/American Literature – 11th grade (sem) – This course offers advanced college level study of authors’ styles and techniques, survey of American literature, review of writing skills, and preparation for AP exam. Specific criteria are set by the College Board.

World Literature and Composition (sem) - Twelfth graders will continue to build on the reading and language curriculum established in grades 9-11. Throughout this required one-semester course, students will have opportunities to develop an understanding of literature as both a product of its culture and as a culture-bearer. In addition, students will recognize the commonalities and the differences among works of literature from different times in history and from different places in the world. They will demonstrate their mastery level of new learning through performance tasks and assessments.

British Literature & Comp (sem) - Twelfth graders will continue to build on the reading and language curriculum established in grades 9-11. Throughout this one-semester course, students will have opportunities to develop and expand their knowledge of British literature and demonstrate their mastery level of new learning through performance tasks and assessments.

Contemporary Literature & Composition (sem) - Twelfth graders will continue to build on the reading and language curriculum established in grades 9-11. Throughout this one-semester course, students will have opportunities to develop and expand their knowledge of contemporary culture and its influence on the literature of modern times. Students will demonstrate mastery level of new learning through performance tasks and assessments.

AP Literature and Composition – 12th grade (yr) – This course offers advanced college level study of literature and critical approaches, review of writing skills, and preparation for AP exam. Specific criteria are set by the College Board.

College English (yr)– this course covers advanced analytical study of language and advanced study and practice of writing. Specific criteria are set by the joint enrollment programs.

Additional Offerings

Journalism/Newspaper Production 1-4 (yr) – This course offers a study of newspaper journalism. Major topics include literature and composition; writing for the public; print composition; and Journalism. Students in this class are responsible for the production of the school newspaper.

Journalism/News/Editorial/Sports Writing 1-4 (yr) – This course offers a study of newspaper journalism. Major topics include literature and composition; writing for the public; print composition; and Journalism. Students in this class are responsible for news articles, editorials and sports writing.

Journalism/Annual/Yearbook Production 1-4 (yr) – This course offers a study of photo journalism and provides instruction on the writing and layout of the school yearbook. Students assume supervisory positions in the publication of the yearbook.

Journalism/Creative Writing/Literary Magazine Production (yr) – This course provides students with an opportunity to experiment with various forms of creative verbal and visual expression. Students gather and critique entries for publication of the literary magazine. Major topics include Narrative writing; expository writing; editing and revising; artwork as a part of literature.

SAT Preparation (sem) – This course includes Topics in mathematics and language arts and selected test-taking strategies related to successful test-taking. Students receive intense practice and instruction in the areas of problem solving and advanced grammar.

Mathematics

The Mathematics curriculum is written from a vision of mathematics as problem solving, communication,

reasoning and connecting. It includes the study of numbers and operations on them, algebra, functions, geometry from a synthetic perspective, geometry from an algebraic perspective, trigonometry, statistics, probability, discrete mathematics, conceptual underpinnings of calculus and mathematical structure.

The new Georgia Performance Standards (GPS) curriculum focuses on mastery and application of key concepts. GPS clearly states what students are expected to know, understand, and be able to demonstrate. It integrated key mathematical strands throughout the curriculum at each grade level.

The mathematics core curriculum offers courses on three levels, regular, honors and AP. Regular level courses meet the needs of most students and are approved for the college preparatory course of study. Honors level courses are appropriate for students who have a past record of excellent achievement in mathematics. These courses are also approved for the college preparatory course of study. Advanced Placement (AP) courses are more rigorous than regular and honors level courses and have the potential to be applied towards college credits.

Core Curriculum Offerings

Integrated Advanced Algebra 1 (yr) – Major topics in this course include characteristics of families of functions and their transformations, operations with radicals and other algebraic expressions, solving simple equations, properties of geometric figures, properties of polygons, elementary probability, and variability of data.

Accelerated Integrated Advanced Algebra 1 (yr) – Major topics in this course include operations with complex numbers, families of functions and their transformations, operations with radicals and other algebraic expressions, quadratic equations and inequalities, properties of geometric figures, properties of polygons, properties of circles and spheres, basic laws of probability, and variability of data.

Integrated Geometry (yr) – Major topics in this course include families of functions (piecewise-defined, exponential, quadratic), quadratic equations or inequalities of a single variable, inverse functions, special right triangles, trigonometric functions, properties of circles and spheres, inferences about population means and standard deviations, and models to describe real-world data.

Accelerated integrated Geometry (yr) – Major topics in this course include families of functions (exponential, higher degree polynomial, logarithmic), inverse functions, solving higher degree equations or inequalities, operations and problem solving with matrices, special right triangles, trigonometric ratios, conic sections, inferences about population means and standard deviations, discrete random variables, normal distributions, and differences between experimental and theoretical probabilities.

Algebra II/Honors Algebra II (yr) – Major topics in this course include problem solving and reasoning, linear equations and inequalities, relations, functions, graphs, systems, rational expressions, irrational and complex numbers, conic sections, analytic geometry, exponential /logarithmic functions, probability and statistics, and series and sequences.

Algebra III (yr) – Major topics in this course include problem solving and reasoning, estimation, algebra, real number systems, patterns and models, graphing, linear equations, statistics, matrices, measurement, and geometry.

Advanced Algebra/Trigonometry (yr) – Major topics in this course include problem solving and reasoning, estimation, exponential/logarithmic functions, trigonometry, complex numbers, vectors, matrices, analytic geometry/conic sections, probability and statistics, and series and sequences.

Pre-Calculus Honors (yr) – Major topics in this course include problem solving and reasoning, estimation, relations and functions, exponential/logarithmic functions, trigonometry, complex numbers, vectors, matrices,

analytic geometry/conic sections, logic, probability and statistics, and set theory.

Calculus (yr) - Problem solving, reasoning and estimation, function, derivatives, applications of the derivative, integrals, and application of the integral.

AP Calculus AB (yr) – Major topics in this course include a review of real numbers and the Cartesian plane; review of functions; limits and their properties; derivatives and differentiation applications; indefinite integration; area and definite integrals; integration by substitution; the trapezoidal rule; logarithmic, exponential and other transcendental functions; and applications and methods of integration.

AP Calculus BC (yr) – Major topics in this course include all topics of AP Calculus AB; integration involving work and arc length; parametric equations; analysis of acceleration and velocity vectors; applications of slope fields to differential equations; analysis of geometric, harmonic, p -series and alternating series; and approximations of polynomials.

AP Statistics (yr) – Introduction to statistics; descriptive statistics; probability; probability distributions; normal probability distributions; estimates and sample size; hypothesis testing; inferences from two samples; correlation and regression; multinomial experiments; analysis of variance; statistical process control; nonparametric statistics; design and sampling.

College Calculus (taught by GA Tech instructor via Distant Learning Lab) (YR) – Major topics include all topics of AP Calculus (AB & BC), Newton's method, surfaces of revolution, vectors, differential equations, determinants, linear transformations, orthogonality, and eigenvalues.

Additional Course Offerings

Problem Solving (SAT Prep) - This course includes Topics in mathematics and language arts and selected test-taking strategies related to successful test-taking. Students receive intense practice and instruction in the areas of problem solving and advanced grammar.

Magnet Course Offerings

Advanced Mathematics Topics (yr)* - Emphasizes the use of mathematics in solving problems in political science, economics, and sports. This course also explores the internet, money management, and visual math. This course also has a competition focus.

Journeys Across Mathematics (yr)* - Emphasizes strategies in problem solving. This course covers introduction to number theory, factorization, numeration systems, congruencies, history of mathematics, concepts and methods, probability, puzzles, patterns, paradoxes, and new trends in math. The course content also includes advanced topics in Transformational, Fractal, and Spherical Geometry. This course is offered based on student interest. It may not be offered every year.

Mathematics, Technology & Society (yr) - Emphasizes basic concepts of computer science. Topics include operating systems, computer languages and architecture, networks, databases, algorithms, artificial intelligence and introduction to programming.

Research Methods in Mathematics (yr) - Emphasizes the exploratory analysis of data. Graphical and numerical techniques, enhanced by the statistical features of the TI-83 calculator, are used to study patterns. An introduction to methods of data collection, probability and simulation, and statistical inference are included.

* Offered based on level of interest

Music

The **Vocal Music** department is dedicated to encouraging and developing the vocal talents of young people. Classes are designed to develop musicianship through the systematic study of sight singing, ear training, and music vocabulary. Choral ensembles are prepared to achieve the highest possible level of beautiful tone mixed with sensitive artistry. Students are provided additional opportunities to develop their skills through voice, piano, and theory labs. The goal of the program is to provide positive singing experiences which will enable students to develop a solid foundation for continued music performance study.

The study of **Instrumental Music** is important to one's aesthetic, emotional, academic, physical and social growth, and is a significant part of the cultural heritage of all peoples. Through the music department, students have the opportunity to develop keener insights into the dignity and worth of people, to enjoy a more humanized educational environment, and to be in touch with themselves intellectually and artistically. In addition, students are provided a developmental, sequential, and productive music education program that encourages self directed learning and creativity. Through their many experiences, students will be prepared to study music on the post secondary level and build a value system applicable to new musical experiences, and life in general. The curriculum areas offered in this department include band, orchestra, guitar, piano and music theory. Magnet majors are only offered in band and orchestra.

Beginning Chorus - Emphasizes vocal production and techniques, music literacy, and styles and forms of vocal literature.

Intermediate Mixed Chorus - Emphasizes vocal production, music reading, genres of choral music, stylistics of choral music, and aesthetic qualities. Rehearsals and performances held outside regular school hours are considered required coursework.

Advanced Mixed Chorus 1 - 4/Advanced Women's & Men's Chorus 1 - 4 – Emphasizes advanced levels vocal production, music reading, genres of choral music, stylistics of choral music, and aesthetic qualities. Performance expectations increase at each sequential level. This course is intended for experienced singers wishing to develop their musical skills and understanding. Rehearsals and performances held outside regular school hours are considered required coursework.

Beginning/Intermediate Band - Emphasizes Steel Drum technique. This course also includes the development of performance skills, music analysis, and creativity skills.

Advanced Band I, II, III, & IV - Emphasizes advanced instruction on developing performance skills, analyzing music and enhancing creativity skills. Performance expectations increase at each sequential level. This course functions as the Concert Band of North Springs High School. Participants should possess school band experience prior to enrolling. Rehearsals and performances held outside the regular school hours are considered required coursework.

Brass, Woodwind, or Percussion Master class I, II, III, & IV - Emphasizes advanced instruction on developing performance skills, analyzing music and enhancing creativity skills. Performance expectations increase at each sequential level. This course functions as the Concert Band of North Springs High School. Participants should possess school band experience prior to enrolling. Rehearsals and performances held outside the regular school hours are considered required coursework.

Beginning Orchestra – Emphasizes mechanics of string instruments, note reading, rhythm, pitch discrimination, expression and music literacy. This is a performance course for students who have prior string instrument experience. **This is not a beginning level class.** It begins the beginning level of the high school orchestra curriculum.

String Master I, II, III & IV – Emphasizes mechanics of string instruments, note reading, rhythm, pitch

discrimination, expression and music literacy. Performance expectations increase at each sequential level.

Advanced Orchestra I, II, III, & IV - Emphasizes mechanics of string instruments, note reading, rhythm, pitch discrimination, expression and music literacy. Performance expectations increase at each sequential level. This is a performance-based course for students who have demonstrated string instrument proficiency. Placement in this course is by audition only. Rehearsals and performances held outside of the regular school hours are considered required coursework.

Chamber Music 1-4 – This course also emphasizes mechanics of string instruments, note reading, rhythm, pitch discrimination, expression and music literacy. Performance expectations increase at each sequential level. Students will be working on chamber style literature as well as ensemble class music. This is a performance-based course for students who have demonstrated string instrument proficiency. Placement in this course is by audition only. Rehearsals and performances held outside of the regular school hours are considered required coursework

Guitar I – Emphasizes the development of guitar performance skills. This course covers chords, rhythm and notation reading, tablature, and ensemble work. No prior experience is required.

Piano 1 – Emphasizes the development of skills in piano playing, music reading, terminology and music fundamentals including scales arpeggios and chords. Chord progressions are also covered. Students will develop the ability to play simple piano literature.

Piano 2 – Advanced levels of piano playing, music reading and terminology are emphasized. Styles of piano playing, improvisation, music expression and interpretation and varied repertoire from historical periods are also taught at this level.

Piano Master 1-4 – Emphasizes advanced piano techniques, music literature and music theory. Performance expectations increase at each sequential level.

Music Theory – Emphasizes fundamentals of music, music notation, scales and key signatures, chords, part writing and composition.

AP Music Theory - Emphasizes advanced levels of music theory with greater depth and complexity in part composition, writing, dictation, and listening skills.

Musical Theater – Through the study of music and plays, this course focuses on the production of plays in modern theater. Students will learn first hand the makings of a production in educational theater. This class will study other plays in this genre as means to learn production, performance, and technical elements as they apply to stage musical selections. This course will culminate with an in class performance which will serve as the performance final exam.

Science

The Science Department offers a wide range of courses in which students are able to study a variety of topics in a problem-based/project-based learning environment. Objectives and goals from the national standards, the Georgia Quality Core Curriculum (QCC) and the Georgia Performance Standards (GPS) are all incorporated into the science courses. The curriculum is designed to enhance students' understanding of science, enabling them to become environmentally, scientifically and technologically literate.

Students graduating in the class of 2012 or later will be required to earn four units of science to graduate. Students must take a yearlong course of biology and physical science, or physics. The third credit may be chosen from environmental science, earth science, chemistry or AP Science courses. The fourth credit may be

earned from any courses offered that the student has not earned credit for previously.

The science core curriculum offers courses on three levels, regular, honors and AP. Regular level courses meet the needs of most students and are approved for the college preparatory course of study. Honors level courses are appropriate for students who have a past record of excellent achievement in science. These courses are also approved for the college preparatory course of study. Advanced Placement (AP) courses are more rigorous than regular and honors level courses and have the potential to be applied towards college credits.

Core Curriculum Offerings

AP Biology (yr) – Major topics include biochemistry, cells, energy transformations, molecular genetics, heredity and evolution, principles of taxonomy and systematics, survey of monera, protista, fungi, plants and animals, and ecology.

Advanced Topics in Biology (yr) – Major topics include biochemistry, cells, energy transformations, molecular genetics, heredity and evolution, principles of taxonomy and systematics, survey of monera, protista, fungi, plants and animals, and ecology. Concentration in biology research and research methodology.

AP Chemistry (yr) – Major topics include atomic theory and structure of matter, chemical bonding, gases and stoichiometry, liquids and solids, solutions and equilibrium, kinetics and thermodynamics, reaction types, nuclear and organic chemistry, and qualitative analysis.

Advanced Topics in Chemistry (yr) - Major topics include atomic theory and structure of matter, chemical bonding, gases and stoichiometry, liquids and solids, solutions and equilibrium, kinetics and thermodynamics, reaction types, nuclear and organic chemistry, and qualitative analysis. Concentration in chemistry research and research methodology.

AP Environmental Science (yr) – Major topics include ecosystems and how they work, the human population, major global problems, energy resources, resources and pollution, sustaining biodiversity and ecological integrity, and the environment and society.

AP Physics B (yr) – Major topics include kinematics and geometric optics, Newton's laws of motion, work, energy and power, linear momentum and impulse, torque and rotational motion, oscillation and gravitation, temperature and heat, kinetic theory and thermodynamics, static electricity and direct current circuits, magneto static and electromagnetism, atomic physics and quantum effects, nuclear physics and special relativity.

Advanced Topics in Physics (yr) - Major topics include kinematics and geometric optics, Newton's laws of motion, work, energy and power, linear momentum and impulse, torque and rotational motion, oscillation and gravitation, temperature and heat, kinetic theory and thermodynamics, static electricity and direct current circuits, magneto static and electromagnetism, atomic physics and quantum effects, nuclear physics and special relativity. Concentration in physics research and research methodology.

AP Physics C (yr) – Major topics include kinematics, Newton's laws of motion, work, energy and power, systems of particles, static, rotational motion and electromagnetism, oscillations, gravitation, electrostatics and magnetostatic, electric current and circuits, capacitance and capacitors, and modern physics.

Astronomy (sem) * - Topics include Measurement & motion, celestial clocks, the moon, the solar system, stars, the sun, the Milky Way and other galaxies and cosmology.

Biology/Honors Biology (yr) – Major topics include relationships between structures and functions of living cells; role of DNA/RNA in biological traits; increasing complexity in single-celled and multi-celled organisms; interdependence of organisms and flow of energy; natural selection and the theory of evolution.

Botany (sem) * – Topics include photosynthesis and respiration, classification, flowering plants, plant functions and economic botany.

Chemistry/Honors Chemistry (yr) - Habits of mind and nature of science; nature of matter and its classification; Law of conservation of matter in compounds and chemical reactions; modern atomic theory; the periodic table and properties of elements; factors affecting rate of chemical reactions; motion of atoms and molecules in chemical and physical processes; solutions, acids, and bases.

Earth Systems (yr)- 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, landform evolution, the Earth's geologic record, weather and climate, and the history of life on Earth.

Environmental Science (yr) - Topics include human population growth and cultural revolutions, advent of environmental concerns, measurements, tools and careers, fossil fuels, nuclear and alternative energies and air pollution and conservation.

Human Anatomy/Physiology (yr) – Topics include structure and function of the human body, chemistry of life, cell structures and functions and body systems.

Physical Science (yr) – Major topics include current understanding of the atom; nature, classification, and naming of matter; characteristics and components of radioactivity; arrangement of the Periodic Table; phases of matter and molecular motion; properties of solutions; transformations and flow of energy; force, mass, and motion; properties of waves; properties of electricity and magnetism.

Physics (yr) – Major topics include force, mass, gravity, and motion of objects; energy in matter and the universe; evaluate forms and transformations of energy; properties and applications of waves; electrical and magnetic forces; Newtonian physics in quantum mechanics and relativity.

Magnet Course Offerings

Biochemistry (sem) – Study of nucleic acids, metabolic functions and immunity. Major topics include drug manufacture and applications, food science, metabolic activities, the chemistry of heredity, and medical applications.

Biotechnology (sem) - Emphasizes techniques of biotechnology. Topics include molecular genetics, cloning ethics, gene amplification, genetic engineering, and medical research.

Career Math/Science - Advanced Research Methods (sem) – Emphasizes advanced individual project research through student-designed experiments with an emphasis on science. This course includes exploration of data through surveys, sampling techniques, and field studies. This course also has a competition focus.

Microbiology (sem) - Emphasizes the history and techniques of microbiology. Topics include diversity of microorganisms and microbial growth and control.

Organic Chemistry (sem) – Study of hydrocarbons, alcohols, acids, aldehydes, ketones and esters. This course applies the principles of chemistry to the life sciences. A review of major organic concepts will be introduced,

including atomic structure, bonding, and molecular configuration.

Introduction to Research Methods in Science (yr) - Emphasizes individual project research through student-designed experiments with an emphasis on science. This course includes exploration of data through surveys, sampling techniques, and field studies culminating in a project for the science and engineering fair. All incoming freshmen and sophomores are required to take this course or the Research Methods in Mathematics course.

Science, Technology and Society (yr) - Emphasizes the impact of technological advances upon society. This course encompasses utilization of reference and research skills in topic exploration. Topics include environment, pollution, natural resources, and human population changes.

Science Topics/Issues - Advanced Research Methods (yr) – Emphasizes advanced individual project research through student-designed experiments with an emphasis on science. This course includes exploration of data through surveys, sampling techniques, and field studies. This course also has a competition focus.

Topics and Issues in Medical Ethics (sem) * - Emphasizes various approaches to medical issues. This course includes the history of medicine, study of significant historical case studies, development of ethical frameworks for decision-making, the physician-client relationship, research and testing.

Topics and Issues in Engineering (sem) – Emphasizes various engineering approaches. This course includes the history of engineering, definition of engineering as a profession, learning and creative thought, and the engineering approach to problem solving.

Techniques in Engineering (sem) – Emphasizes basic processes and techniques in Engineering.

* Offered based on level of interest

Social Studies

The Social Studies curriculum provides students with learning opportunities that enable them to grow in their ability to think clearly and to integrate significant facts, concepts and generalizations from history and the social sciences into their own experiences. Through their involvement in the curriculum students should develop useful skills for obtaining knowledge, devising questions and engaging in problem-solving techniques.

All students are required to earn a total of three units of social studies in American Government, World History, United States History, and Economics. In addition, students are expected to take one year of World Geography in the ninth grade. Additional Advanced Placement (AP) courses may be taken to fulfill a student's requirements for graduation when appropriate and as electives towards graduation if desired.

The Social Studies core curriculum offers courses on two levels, regular and AP. Regular level courses meet the needs of most students and are approved for the college preparatory course of study. Advanced Placement (AP) courses are more rigorous than regular and honors level courses and have the potential to be applied towards college credits.

American Government (semester) – This course covers principles and foundations of government, branches of government, citizenship, political parties and special interest groups.

AP Human Geography (year) – This course introduces students to the systematic study of patterns and processes that have shaped human understanding.

AP Macroeconomics (semester) – This course covers basic economic concepts of measurement of economic performance, national income and price determination, international economics and growth.

AP Microeconomics (semester) – This course covers basic economic concepts including an in-depth study of the nature and functions of product markets (consumer behavior, market costs), the theory of the firm (optional production and pricing), a study of resource markets (wages & profits), international economics and a discussion of personal finance.

AP Psychology (year) – This course includes neuroscience, personality, sensation and perception, learning, cognition, motivation and emotion, intelligence, social psychology, abnormal psychology and therapies.

AP United States History (year) – This course examines the social, economic, and political evolution of the United States through both primary and secondary sources. The course follows the themes of regionalism/sectionalism, the power of the pen, compromise, and national unity.

AP World History (year) – This course covers the evolution of global processes and contacts through interactions among different types of human societies; cultural, institutional, and technological precedents that, along with geography, set the human stage prior to 1000 C.E.

Economics (semester) – This course covers supply and demand, market forces, money, banking and capital, organization of natural resources, the national economy and global interdependence.

United States History (year) – The course covers colonization, the revolutionary and colonial eras, Manifest Destiny, Civil War and Reconstruction, urbanization and industrialism, progressive era, imperialism, WWI & WWII, the Cold War, Vietnam, and the decades of 1950 – 2000.

World History (year) – The course includes prehistoric culture, ancient civilizations, classical civilizations, the medieval world, the Age of Exploration, Enlightenment, French Revolution, decline of colonial empires in America, Industrial Revolution, nationalism and imperialism, totalitarianism, WWI, WWII, and the modern world.

World Geography (year) – The course examines the topics of region, location, place, human-environment interaction, and movement. A special focus is placed on the development of map skills.

Theater Arts

The **Theater Arts** Department is committed to seeing the novice and seasoned actor alike succeed to the best of their ability on and off the stage. Led by three professional and dynamic instructors students learn, through hands on experiences, techniques needed to succeed in the professional and collegiate world. The Theater Department's facilities include a 500-seat Proscenium Theater and a smaller 50-seat Studio Theater. The curriculum areas offered in this department include acting, technical theater and film. Magnet majors are only offered in the areas of acting and technical theater.

Students who are not in the magnet program may audition or complete a screening process to be placed in magnet level courses as long as space is available.

Dramatic Arts Fundamentals - Emphasizes the basic rules of stage that govern an actor. This course also covers theater history.

Acting 1M – Emphasizes techniques in performance. Students develop a perspective of an actor's trade while exploring numerous performance opportunities found in a variety of plays featuring a variety of roles.

Acting 2M - Emphasizes various different acting teachers and their methods. This course covers audition techniques and challenging activities through lecture and performance. Topics include voice and movement for the stage

Advanced Drama 1M- Emphasizes the basics of directing through lecture, exercise, and production. This course includes play writing, script analyzing, communication of ideas, and individual interpretation of playwrights ideas.

Advanced Drama 2M - Emphasizes advanced techniques in preparation, performance and directing through lecture, exercise and production.

Film –Develops the student film-maker’s creative talents through hands-on film-making. Basic film-making techniques are taught using dramatic and documentary forms. Students will have opportunities to conceive, shoot, and edit several short projects that are screened, reviewed, and critiqued.

Musical Theater – Through the study of music and plays, this course focuses on the production of plays in modern theater. Students will learn first hand the makings of a production in educational theater. This class will study other plays in this genre as means to learn production, performance, and technical elements as they apply to stage musical selections. This course will culminate with an in class performance which will serve as the performance final exam.

Technical Theater 1M - Emphasizes the technical and administrative elements of theater. This course includes an introduction to parts of the theater, types of theater organizations, personnel structure of the theater, costumes, lighting, sound, sets, props, make-up, stage management and safety in the theater.

Technical Theater 2M-4M - These courses includes advanced instruction on costumes, lighting, sound, sets, props, make-up, and stage management. Students engage in hands on activities that allow them to actually run the technical aspects of school programs and performances.

World Languages

The world languages department offers three languages and a variety of levels for students to pursue from their freshman to senior year. Students who attend a Fulton County middle school have an additional opportunity to begin world language study in French, Spanish, and in some schools Chinese, German, or Japanese prior to high school. Middle school students who have completed the seventh and eighth grade world language courses receive one credit unit for successful completion of level one and enter the level two courses in the ninth grade.

College bound students are encouraged to complete a minimum of two units of the same world language.

The World Languages core curriculum offers courses on three levels, regular, honors, and AP. Regular level courses meet the needs of most students and are approved for the college preparatory course of study. Honors level courses are appropriate for students who have a past record of excellent achievement in World Languages. These courses are also approved for the college preparatory course of study. Advanced Placement (AP) courses are more rigorous than regular and honors level courses and have the potential to be applied towards college credits.

French 1 (yr) – This course focuses on topical development of language acquisition with initial emphasis on listening and speaking skills, followed by skill development in reading and writing. The students will understand and produce memorized utterances and sequences in oral and written form. They will respond to

and initiate questions pertaining to designated course topics. As the program of study progresses, students will react appropriately in uncomplicated social situations and will begin to show some spontaneity and creative language use in response to oral and written questions and visual clues. Integration of cultural information pertaining to the designated topics occurs throughout the course.

French 2 (yr) - In French 2, students will develop listening comprehension and oral communication skills by performing various life functions and tasks. This course covers French pronunciation; money & shopping; school & education; daily activities, house duties; jobs & professions; leisure activities; nature & environment; medical/dental care; sports & transportation; and French culture.

French 2/Honors French 2 (yr) - In French 2, students will develop listening comprehension and oral communication skills by performing various life functions and tasks. This course covers French pronunciation; money & shopping; school & education; daily activities, house duties; jobs & professions; leisure activities; nature & environment; medical/dental care; sports & transportation; clothing & personal appearance; and French culture.

French 3 (yr) – This course covers French pronunciation; time & weather; family & friends / relationships; food and restaurants; money & shopping; school & education; daily and leisure-time activities; service & repairs; clothing & personal appearances; transportation; vacation & travel; and French culture.

French 3 Honors (yr) – This course covers French pronunciation,; time & weather; family & friends / relationships; food and restaurants, money & shopping; school & education; daily & leisure time activities; describing oneself, service & repairs, clothing & personal appearances, transportation; vacation & travel, creation of a class newspaper or magazine utilizing the topics listed above, and French culture.

French 4 (yr) – Major topics in this course include travel; current affairs; pop music; culture segments; careers; writing enhancement; relationships; French culture; and francophone world.

French 4 Honors (yr) – Major topics in this course include Children’s literary themes; visual arts; literary selections; current events; daily life; writing enhancement; and French culture.

AP French Language (yr) – This course covers formal and informal spoken French; various forms of printed texts; written communication; audio response; cultural and current themes.

Latin I (yr) – This course covers Latin pronunciation, geography of the ancient world; Latin stories: episodes of a Roman family; Roman culture & history, and derivatives.

Latin II (yr) – This course covers Latin pronunciation, geography of the ancient world; Latin stories: continuing episodes of a Roman Family, Roman culture & history, derivatives.

Latin II Honors (yr) – This course covers Latin pronunciation, derivatives, geography of the ancient world Latin stories, and Roman culture & history. Students are expected to translate additional original Latin works and recite selected notable Latin sayings.

Latin III Roman Myths Honors (yr) – Major topics include selected mini-myths from the AENEID; myths from Ovid: Baucis & Philemon, Acis, Galatea & Polyphemus; Narcissus and Echo; Deucalion & Pyrrha, Daedalus and Icarus Atalanta, Niobe, etc.

AP Latin Literature (yr) – Major topics in this course include Roman life, Roman history, mythology, meter, literary criticism, and literary devices.

Spanish 1 (yr) – This course covers Spanish pronunciation, greetings & common expressions, family & school, time, shopping/purchases, food/meals & celebrations, house/locations, beach activities, leisure time activities, transportation, and Spanish culture.

Spanish 2 (yr) - This course covers Spanish pronunciation, greetings & introductions, conversational starters, shopping, food/meals, celebrations, house/neighborhood, beach activities, weather; school, leisure time activities, travel, and Spanish culture.

Spanish 2 Honors (yr) - This course covers Spanish pronunciation, greetings & introductions, conversational starters, shopping & food/meals, celebrations & travel, house/neighborhood, leisure time & beach activities, weather & school, creating a video program utilizing the topics listed above, and Spanish culture.

Spanish 3 (yr) - This course covers Spanish pronunciation, vacations & hobbies, health & diet, urban life & culture/music, geography & politics/citizenship, clothing & celebrations, occupations, job search/interviews, trade & industry of Latin America, and Spanish culture.

Spanish 3 Honors (yr) – This course covers weekend activities & vacations, healthful eating & applying for a job, personal interests and hobbies; geography & culture; clothing & celebrations; music of the youth; Spanish influence in North America; Spanish art and handcrafts; trade and industry of Latin America, Creation of a class newspaper utilizing the topics listed above, and Spanish culture.

Spanish 4 Honors (yr) - This course covers children’s literary themes, visual arts, literary selections, current events, daily life, and writing enhancement.

AP Spanish Language(yr) – This course covers formal and informal spoken Spanish; various forms of printed texts; written communication, and audio response.

