

## SECTION III: COURSE DESCRIPTIONS

The following list of course descriptions encompasses all courses offered in Gwinnett County High Schools. Whether or not a particular course is offered at a given school depends on faculty expertise, student demand, master schedule, etc.

Most semester courses carry one-half Carnegie unit of credit; therefore, a course running two semesters would carry one Carnegie unit of credit (1 unit = 1 year long course). Certain technical courses carry 1 ½ units of credit per semester. These are identified in the course description. Also, if there are no prerequisites needed, this space is left blank in the course description.

### FINE ARTS

Any Fine Arts course will fulfill graduation requirements for Fine Arts. **Courses indicated with an asterisk (\*) may require after school rehearsals and/or performances.**

#### Dance

##### **\* Introduction to Dance - Up to 8 Semesters - Grades 9-12**

##### **Prerequisite - Teacher Recommendation**

The student acquires basic dance knowledge and skills, including change of level, movement sequence, spatial patterns and dynamics in a variety of styles. The student studies the role of dance in various cultures. The student observes and critiques dance performances using specified criteria and appropriate dance terminology. The student develops coordination, flexibility and strength and acquires technical skills in preparation for further dance study.

##### **\* Intermediate Dance - Up to 8 Semesters - Grades 9-12**

##### **Prerequisite - Teacher Recommendation**

Students extend their knowledge and skill in various dance forms, public performance techniques, and choreographic concepts. Students study prominent historical figures in dance and learn to recognize classical dance works. Students practice dance analysis and movement sciences as related to injury prevention and technical training.

##### **\* Advanced Dance - Up to 8 Semesters - Grades 9-12**

##### **Prerequisite - Teacher Recommendation**

The student acquires a comprehensive understanding of the elements of movement and dance technique. The student acquires knowledge in dance history and skills in choreography, performance, and critical analysis of dance.

##### **\* Dance Composition – Up to 6 Semesters - Grades 10-12**

##### **Prerequisite - Advanced Dance**

Students study the elements of choreography, lighting principles and techniques, and principles of costuming. Students will create original choreographic works. Students will critique their own choreographic works and those created by others.

**\* Theatre Dance - Up to 8 Semesters - Grades 9-12**

**Prerequisite - Teacher Recommendation**

Students will develop skills in social and musical theatre dance. They will study innovators in the fields of social and musical theatre dance. Students will acquire basic knowledge of historical and cultural dance forms and injury prevention.

**Theatre Arts**

**Introduction to Theatre - 1 Semester - Grades 9-12**

**Prerequisite - Teacher Recommendation**

Introduction to Theatre surveys theatre history, acting, and the technical skills involved in production. Students analyze and evaluate live theatre and explore the relationship between theatre and other art forms.

**\* Acting - 2 Semesters - Grades 10-12**

**Prerequisite - Teacher Recommendation or Audition and Introduction to Theatre**

Students acquire skills in role analysis, character development, vocal techniques and communication of a text. Students solve theatrical problems through knowledge of cultural, social and political aspects of the setting.

**\* Advanced Drama - 4 Semesters - Grades 10-12**

**Prerequisite - Introduction to Theatre and Acting**

The focus of Advanced Drama is on scene analysis, critical reviewing, and beginning directing. Students identify dramatic theories, styles and literature.

**\* Theatre Production Workshop - Up to 7 Semesters - Grades 9-12**

**Prerequisite - Teacher Recommendation and/or Introduction to Theatre**

This course is designed to provide experience in all aspects of theatrical production and management. Students explore the creation of technical stage effects. The course culminates in a major theatrical production. Students are expected to attend required rehearsals and performances outside the school day.

**\* Advanced Theatre Workshop - Up to 7 Semesters - Grades 9-12**

**Prerequisite - Audition, Introduction to Theatre, *and* any acting or production class.**

Advanced Theatre Workshop is for the experienced student performer or technician and includes the preparation of a major production. Students design and implement technical aspects of a production. In addition, students learn theatre management techniques. Students are expected to attend required rehearsals and performances outside the school day.

**\* Musical Production Workshop - Up to 7 Semesters - Grades 9-12**

**Prerequisite - Audition, Introduction of Theatre, *and* any acting or production class.  
(Recommended classes: Choral Music/Dance)**

This class will culminate in the production of a musical. Opportunities will be provided for students to develop individual and ensemble skills in singing, acting, and dancing. Students analyze production options to solve musical theatre problems. Students are expected to attend required rehearsals and performances outside the school day.

**\* Stagecraft - Up to 8 Semesters - Grades 10-12**

**Prerequisite - Teacher Recommendation and/or Introduction to Theatre**

Students engage in problem-solving activities in theatre management, scenery construction, costumes, makeup, properties, stage lighting, sound technology and publicity. The course includes hands-on experience in all elements of theatre production.

**Music**

**Beginning Piano Keyboard Techniques - 2 Semesters - Grades 9-12**

Students develop skills in fundamental piano techniques. Music theory skills include notation of pitch and rhythm, scales, and intervals. A variety of literature for the piano is studied and performed. Performance and sight-reading skills will be developed and enhanced through various keyboard techniques.

**Introduction to Music Technology - 1 Semester - Grades 9-12**

Students learn computer basics and are introduced to basic MIDI sequencing applications. Students explore MIDI sequencing software, “intelligent accompaniment” software and notation software. Students create original multi-track sequences and original musical compositions.

**Intermediate Music Technology - 1 Semester - Grades 9-12**

**Prerequisite - Introduction to Music Technology**

Students extend their knowledge of the computer, the electronic keyboard (synthesizer) and MIDI sequencing techniques. Students create a multi-track sequence of background music for a specific setting such as movie/TV score, computer game, commercial, etc. Students apply MIDI editing features and drum kits.

**Advanced Music Technology - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Music Technology**

In addition to extending their knowledge and skill in MIDI sequencing techniques, students study and apply basic recording techniques and track mixing techniques. Students explore careers associated with the music industry such as producer, engineer and manager. Students create a multi-track sequence of background music and synchronize it to a video format. Students expand their understanding and use of compositional techniques including harmonization, orchestration, and arranging.

**Music Theory - 2 Semesters - Grades 9-12**

This course introduces the fundamentals of music theory, including key signatures, meter, tempo and dynamic terms, and harmonic progressions. Emphasis is placed on developing the students’ sight-singing, music dictation, and analysis skills. Students interpret figured bass symbols and analyze musical texture and form.

**AP Music Theory - 2 Semesters - Grades 11-12**

**Prerequisite - Two semesters of Instrumental Music or Vocal Music courses. Students must have at least a B+ average in music courses and a B average in mathematics.**

The students will follow the AP Music Theory curriculum as prescribed by the College Board. Emphasis is placed on harmonic structure of music and aural analysis of harmony. Students are given the opportunity to take the College Board AP Music Theory examination for AP college credit.

## **Music History - 2 Semesters - Grades 9-12**

This survey course covers the evolution of musical style through major stylistic periods. Students examine the history of rhythm and pitch notation, the orchestral and keyboard instruments, and the lives of historically significant composers. Listening skills and analysis of style characteristics are emphasized.

### **Choral Music**

**An interview/audition is required for admission to courses beyond Beginning Chorus.**

#### **\* Beginning Choral Ensemble - Up to 8 Semesters - Grades 9-12**

This course emphasizes the development of vocal techniques and performance skills using a variety of choral literature. Students develop music reading skills. No prior experience is necessary.

#### **\* Intermediate Choral Ensemble - Up to 8 Semesters - Grades 9-12**

This course further develops the student's skill in vocal performance. The emphasis is on vocal technique development, including breath control diction and vocal production. Students participate in public performances.

#### **\* Advanced Choral Ensemble - Up to 8 Semesters - Grades 9-12**

This course is designed for students interested in developing superior performance skills. Students refine vocal production skills to improve blend, balance, intonation, diction and tone quality.

#### **\* Vocal Ensemble - Up to 8 Semesters - Grades 9-12**

Students expand their choral/vocal repertoire to include all major historical and contemporary styles and genres written for the small vocal ensemble. Increasing technical skills in sight singing and musical analysis is expected. Historical performance practices are stressed.

#### **\* Advanced Vocal Ensemble - Up to 8 Semesters - Grades 9-12**

This course stresses the development of advanced vocal techniques. Both *a cappella* and accompanied literature for the ensemble are studied. Students explore composition and improvisation techniques and analysis of choral music.

### **Instrumental Music - Orchestra**

**An interview or audition is required for placement in any instrumental music course.**

#### **\* Beginning Orchestra - Up to 2 Semesters - Grades 9-12**

Students develop skills in fundamental strings instrument techniques. Music theory skills include notation of pitch and rhythm, scales and intervals. Aural development is emphasized. A variety of literature for the string ensemble is studied and performed.

#### **\* Concert Orchestra - Up to 8 Semesters - Grades 9-12**

In Concert Orchestra, students acquire intermediate level solo and ensemble performance skills. Students refine music reading skills as well as performance skills, including more advanced bow techniques. Students acquire knowledge in music theory and history as they relate to orchestral literature. Students are expected to participate in all concerts and extra rehearsals.

**\* Symphonic Orchestra - Up to 8 Semesters - Grades 9-12**

Students engage in preparation and performance of music literature equivalent to GMEA difficulty level IV/V (the highest difficulty level being VI). Students refine bowing techniques, performance techniques, intonation, and knowledge of music theory and history. Students are expected to participate in all concerts and extra rehearsals.

**\* Philharmonic Orchestra - Up to 8 Semesters - Grades 9-12**

This course is for the most advanced string instrument students. Emphasis is placed on the standard orchestral repertoire, advanced techniques, independence and confidence in performance situations, and thorough understanding of the theoretical and historical basis for the music performed. Students are expected to participate in all concerts and extra rehearsals.

**\* Chamber Orchestra - Up to 8 Semesters - Grades 9-12**

This course is designed for the student who wishes to study and perform the string chamber ensemble repertoire. Students learn the unique skills of small ensemble performance. Students are expected to participate in public chamber ensemble performances and rehearsals.

**Instrumental Music - Band**

**An interview or audition is required for placement in any instrumental music course.**

**\* Beginning Band - 2 Semesters - Grades 9-12**

This course is designed for students having no prior band experience. The course content includes beginning instrumental skills and music reading.

**\* Intermediate Band - 2 Semesters - Grades 9-12**

Students extend skills in music reading, instrumental music techniques and knowledge of repertoire appropriate to the instrument studied. Some public performance with the ensemble is expected.

**\* Concert Band - Up to 8 Semesters - Grades 9-12**

Concert Band is designed for the advancing student who has acquired the necessary skills for frequent public performance. These skills include the ability to sight read, to consistently produce an appropriate instrumental tone quality, and consistently and accurately respond appropriately to expression markings in the music score. Students will further refine their performance skills. Required out-of-class activities, as stipulated by the teacher, will determine a portion of the student's grade.

**\* Symphonic Band - Up to 8 Semesters - Grades 9-12**

Students acquire advanced skills in music reading and performance techniques. A variety of literature of various historical and contemporary styles and genres is performed. Students extend their knowledge of music theory, including analysis of form and style. Students explore the composition and improvisation of instrumental music. Required out-of-class activities, as stipulated by the teacher, will determine a portion of the student's grade.

### **Symphonic Winds - Up to 8 Semesters - Grades 9-12**

Students acquire advanced skills in music reading and performance techniques. A variety of literature of various historical and contemporary styles and genres is performed. Students extend their knowledge of music theory, including analysis of form and style. Students explore the composition and improvisation of instrumental music. Symphonic Winds is designed for the smaller ensemble performing from the classical and contemporary concert literature.

### **\* Advanced Band - Up to 4 Semesters - Grades 9-12**

This is a non-ensemble class for the advanced instrumental music student concentrating on refining technique and the preparation of solo-ensemble materials. Students acquire advanced skills in music reading and solo performance techniques. A variety of literature of various historical and contemporary styles and genres is performed. Students extend their knowledge of music theory, including analysis of form and style. Students explore the composition and improvisation of instrumental music.

### **\* Jazz Band - Up to 8 Semesters - Grades 9-12**

Students acquire skills in performance of instrumental music in the jazz and rock idioms. The development of contemporary instrumental music styles is studied.

### **Instrumental Music - Miscellaneous**

**No interview or audition is required.**

### **Beginning Guitar - 2 Semesters - Grades 9-12**

Students acquire basic music reading and guitar playing techniques, including tuning, chords, rhythm and strumming/picking techniques.

### **Visual Arts**

#### **Two-Dimensional Design - 1 Semester - Grades 9-12**

This course encompasses exploration of image and makes use of techniques in drawing, printmaking, lettering, painting and collage. A variety of two-dimensional designs are created. Historical and contemporary achievements in two-dimensional art are explored.

#### **Three-Dimensional Design - 1 Semester - Grades 9-12**

This course involves exploration of concepts and techniques of construction, assemblage, and media manipulations. Historical and contemporary developments in three-dimensional arts are explored.

The following advanced visual arts courses are designed for grades 10-12. All have Two-Dimensional Design and Three-Dimensional Design as prerequisites. Exception: A ninth grade student may take advanced art classes during spring semester if he/she has successfully completed both TWO-DIMENSIONAL DESIGN and THREE-DIMENSIONAL DESIGN during fall semester of the ninth grade year.

**Sculpture - Up to 4 Semesters - Grades 10-12****Prerequisite - Two-Dimensional and Three-Dimensional Design**

Students study the basic elements of design as they relate to 3-D form. The course emphasizes solving problems which incorporate basic additive, subtractive, and manipulative methods. Students also explore combinations of media and the resolution of 3-D design problems. Historical and contemporary developments in sculpture are explored.

**Pottery - Up to 4 Semesters - Grades 10-12****Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will design and create hand-built clay pottery forms which incorporate the elements and principles of 3-D design. The student will be introduced to wheel pottery. Historical and contemporary developments in clay will be explored.

**Jewelry and Metalworking - Up to 4 Semesters - Grades 10-12****Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will use a variety of materials and methods to design and create jewelry. The student will form and join metals using basic casting and fabrication techniques. Historical and contemporary developments in jewelry design will be explored.

**Computer Applications in Art - Up to 4 Semesters - Grades 10-12****Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students use a variety of electronic media, software, techniques and equipment to solve computer art problems. Students learn to apply knowledge of the principles of design in creating computer art by generating and integrating illustrations, typography and photographic images into complete pieces of computer art. Related historical and contemporary art works will be explored.

**Commercial Photography I - Basic Black and White Photography - 1 Semester - Grades 10-12****Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students are introduced to the creation of images using light sensitive materials. The technical areas addressed are: camera and lens theory, basic light and optics, exposure controls, fundamental darkroom operations, safety, chemistry, paper and film theory, black and white printing, and equipment usage. Students are introduced to basic lighting and flash photography as well as historical and contemporary developments in photography.

**Commercial Photography II - Studio Techniques in Photography - 1 Semester - Grades 10-12****Prerequisite - Two-Dimensional Design, Three-Dimensional Design and Commercial Photography I - Basic Black and White Photography**

Students create commercial photographic images using professional quality cameras, lighting, light-meters, strobes, flash units, backdrops and props. Students are introduced to studio lighting effects and techniques. Darkroom assignments include the materials, paper, printing techniques, and chemistry associated with commercial darkroom operations. Students study and research historical and contemporary developments in photography.

### **Commercial Photography III - Digital Photography - 1 Semester - Grades 10-12**

**Prerequisite - Commercial Photography I - Basic Black and White Photography or Computer Applications in Art**

As a growing part of commercial photography, students will be introduced to the creation of images using electronic digital still cameras, scanners, video cameras, and digital studio cameras. All final work will be the product of photo imaging using Adobe Photoshop and other relevant software. The work will be illustrative, documentary, photojournalistic, and experimental in nature. The traditional skills of the retoucher will be explored in an electronic format, as well as, the changing role of digital photography in the new world of web/internet/intranet publications.

### **Commercial Photography IV - Non-traditional Printing Techniques in Photography - 1 Semester Grades 10-12**

**Prerequisite - Commercial Photography I - Basic Black and White Photography**

Students will be introduced to the creation of images using light sensitive materials, non-traditional printing methods, and current technology. Actual shooting and printing assignments will allow the student to acquire knowledge and skills in historically commercial image production and contemporary fine print production.

### **Photo Design - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students are introduced to the creation of images using light sensitive materials. Pinhole photography and contact printing are emphasized along with other introductory work with film. Eventually, students will use the photographic medium to communicate feelings and ideas while applying the technical skills acquired in previous courses. Historical and contemporary developments in photography will be explored.

### **Drawing and Painting - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will acquire skills in a variety of drawing and painting techniques, including the use of contour line, gesture line, value and color. The development of a painting style will be introduced with emphasis on constructing personal visual statements that communicate feelings and ideas. Career opportunities in the field will be examined. Historical and contemporary developments in drawing and painting will be explored.

### **Architectural Design - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will survey the principles of design in historical architecture and environmental design development and apply the skills learned to practical designs. Students' experience will include model-making, architectural drawing, field trips to view exemplary architectural examples, and discussions related to career opportunities in the field.

### **Printmaking - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will experiment with various printmaking processes including relief, intaglio, lithography and screen printing. Related history and contemporary developments will be explored and career opportunities will be examined.



### **Advanced Placement Art History - Up to 2 Semesters - Grades 10-12**

**Prerequisite - Student must have been enrolled in honors or gifted Social Studies or Language Arts classes.**

The student will follow the prescribed College Board AP Art History curriculum. Student may take the AP Art History Test.

### **Advanced Placement Studio Drawing Portfolio - Up to 2 Semesters - Grades 11-12**

**Prerequisite - Student must demonstrate competence and self-motivation in numerous advanced level Visual Arts courses and must pass a portfolio check by the instructor of the course.**

**Teacher Recommendation Necessary**

The student will follow the prescribed College Board drawing Portfolio (AP Studio) curriculum. Students may submit work for AP credit. Work concentration will be in painting, printmaking, and mixed media, as well as abstract, observational, and inventive works, may qualify. (Works of photography, videotapes, and digital works may not be submitted for AP Studio Drawing Portfolio.)

### **Advanced Placement 2-D Design Portfolio - Up to 2 Semesters - Grades 11-12**

**Prerequisite - Students must demonstrate competence and self-motivation in numerous advanced level Visual Arts courses and must pass a portfolio check by the instructor of the course.**

**Teacher Recommendation Necessary**

The student will follow the prescribed College Board 2-D Design Portfolio (AP Studio) curriculum. Students may submit work for AP credit. Work concentration will be in, but not limited to, graphic design, typography, digital imaging, photography, collage, fabric design, weaving, illustration, painting and printmaking.

### **Advanced Placement 3-D Design Portfolio - Up to 2 Semesters - Grades 11-12**

**Prerequisite - Student must demonstrate competence and self-motivation in numerous advanced level Visual Arts courses and must pass a portfolio check by the instructor of the course.**

**Teacher Recommendation Necessary**

The student will follow the prescribed College Board 3-D Design Portfolio (AP Studio) curriculum. Students may submit work for AP credit. Work concentration will be in traditional sculpture, architectural models, apparel, ceramics, three-dimensional fiber, arts or metal works. Any work that is derived from photographs, published images, and/or other artists' works must show substantial and significant development beyond duplication.

### **Graphic Design - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students study the basics of design related to advertising, packaging, displaying and illustrating. Students employ lettering and drafting techniques and technology to create designs that communicate an idea. Projects and problems will be explored to simulate experiences from the world of work. Historical and contemporary developments in typography and graphic design will be explored.

### **Crafts Design - Up to 4 Semesters - Grades 10-12**

**Prerequisite - Two-Dimensional Design and Three-Dimensional Design**

Students will explore the elements of two-dimensional and three-dimensional design through study and creation of various craft forms. Media may include metals, clay, fibers, textiles, wood, and mixed media. Students will explore questions of functionality and market appeal of their work. Contemporary and historical developments from Western and non-Western cultures will be explored.

## HEALTH

### **Introduction to Health - 1 Semester - Grades 9-12**

This course is a graduation requirement designed to offer a practical approach to health topics that concern adolescents. The course covers knowledge and skills necessary for personal health and well being and the prevention and treatment of injury. Additional information covered includes: disease prevention, relationships, consumer health, the life cycle, tobacco, alcohol, and other drug use prevention. (Required for College Prep and Technical Diploma)

### **First Aid & CPR - 1 Semester - Grades 10-12**

#### **Prerequisite - Introduction to Health and Introduction to Lifetime Fitness**

This rigorous course will provide students with the necessary skills to assess and care for patients in emergency situations. The course will cover the legal aspects of first responder care, personal safety and protection, patient assessment, patient stabilization and basic trauma and first aid information.

### **Adapted Health - 1 Semester - Grades 9-12 (Alternate)**

This course is designed for students who require a modified curriculum. Successful completion of this course will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **VPP Health - 1 Semester - Grades 9-10**

This course is designed to help students develop habits for healthy living, develop traits that will help them get along with others and traits to be responsible for their own behavior. Students enrolled in this course are pursuing an Individualized Education Diploma and are enrolled in the VPP program.

## JUNIOR ROTC

Junior ROTC (JROTC) is a four-year progressive program which is open to male and female students in the ninth through twelfth grades. There are Air Force units at Shiloh and North Gwinnett High Schools, a Navy unit at Duluth High School and a Marine unit at Parkview.

**Air Force (AFJROTC)** program provides leadership training and an aerospace science program for high school students. The mission statement of the program is to develop citizens of character dedicated to serving their nation and community. The yearly course of instruction (180 hours) is divided into two categories: academic (108 hours) and leadership (72 hours). Academic studies include one year of the history of airpower and national defense, two years of science to include aerodynamics and space operations, and one year of cadet corps management. Leadership studies include Air Force customs and courtesies, cadet corps activities, study habits, time management, communicative skills, and leadership/management studies

### **Frontiers of Aviation History - 2 Semesters - Grades 9-11**

This course covers the history of airpower, the role of the military in U.S. history, the role of aerospace forces as instruments of U.S. national policy, and the composition of the aerospace community. The leadership portion of the course promotes followership and leadership fundamentals, customs and courtesies of the armed forces, drill and ceremonies, organization and management instruction, communication, and problem solving skills.

### **Science of Flight - 2 Semesters - Grades 9-11**

This course is general study of aerodynamics and the principles of flight. Specific areas covered include: the aerospace environment, human requirements of flight, and the principles of flight and navigation. The leadership portion covers communication skills, and introduction to leadership theory, and understanding of individual and group behavior, and the application of these skills during drill and ceremonies.

### **Exploration of Space - 2 Semesters - Grade 9-11**

This course studies our present military and aerospace system and the social aspects of aerospace. The subject matter includes aircraft propulsion systems, rocketry, and space travel. The leadership area refines management communication and techniques, and hones the cadet's followership and leadership skills as a basis for assuming Cadet Corps command and staff positions.

### **Cadet Corps Management - 2 Semesters - Grades 11-12**

#### **Prerequisite - Frontiers of Aviation History, Science of Flight and Exploration of Space**

This course stresses the challenge of command and staff, and individual planning and career management. The leadership portion integrates and applies all previous academic and leadership instruction by requiring the Cadet Commander and staff to run all aspects of the Cadet Corps. These duties and responsibilities include command, operations, information management, personnel, awards and decorations, finance, public affairs, and logistics management.

**Navy Junior ROTC (NJROTC)** offers four years of progressive leadership training based on a curriculum of naval science. The program is open to all students in the ninth through twelfth grades. The NJROTC course involves the study of engineering in the naval environment, maritime geography, naval history of the world, international relations, human behavior, total quality leadership and followership, seamanship and navigation. The course includes orientation field trips to Armed Forces facilities, mini-cruises aboard naval vessels, transportation via military aircraft, leadership camps, and competitive cocurricular (volunteer after school) activities.

### **Naval Science I - 2 Semesters - Grades 9-11**

This course covers the NJROTC program, introduction to leadership, naval ships: missions and organization, American democracy, national policy and maritime geography, naval history through 1815, introduction to navigation, basic seamanship and leadership experiences.

### **Naval Science II - 2 Semesters - Grades 10-11**

This course covers leadership in the NJROTC unit, naval orientation and career planning, citizenship in the US and other countries, naval history from 1815 through 1930, naval weapons, oceanography, navigation, small boat seamanship, survival training and orienteering.

### **Naval Science III - 2 Semesters - Grades 11-12**

This course covers naval leadership, military justice, international law and sea, naval history: 1930- the Nuclear Age, astronomy, meteorology and weather, naval intelligence and national security, maneuvering board, challenges of future naval research, electricity and naval electronics.

## **Naval Science IV - 2 Semesters - Grade 12**

This course covers selected readings in practical leadership for NJROTC students. It contains an Orientation and Indoctrination Lecture Series, a four seminar series to develop/review the strategic plan of the NJROTC unit. An evaluation/feedback series, and selected leadership readings throughout.

**Marine Corps Junior ROTC (MCJROTC)** is a four-year progressive program that is open to male and female students in the ninth through twelfth grades. The MCJROTC program of instruction is designed to emphasize leadership education and leadership development. Basic training in leadership tenets, military history, military customs and courtesies, military organizations, citizenship, physical fitness and health, drill and ceremonies, marksmanship, time management, financial management and planning, communication skills, and career preparation is taught as part of the cadet's orientation to the Marine Corps' leadership through individual challenges and team building exercises. An orientation visit to a Marine Corps installation every other year helps further define the roles and missions of the Marine Corps. Cadets also have the opportunity to compete in extracurricular sports as a member of the Precision Rifle Team, Drill Team, Color Guard, Physical Fitness Team or Orienteering Team. The Precision Rifle Team is also a Georgia High School Athletic Association Varsity sport and is also open to non-ROTC students at Parkview High School.

## **Leadership Education I (LE I) - 2 Semesters - Grades 9-12**

Leadership Education I introduces the cadets to the major subjects to lay the foundation for the grade levels to follow. This course emphasizes followership, development of leadership traits, Marine Corps drill and ceremonies, military customs and courtesies, patriotism and civic responsibilities. Additionally, cadets will become familiar with the cadet rank structure, chain of command, and the proper wearing of the uniform. At this level, memorization skills and proper study habits will be developed.

## **Leadership Education II (LE II) - 2 Semesters - Grades 10-12**

### **Prerequisite - Leadership Education I**

During the second year, each cadet will explore each subject that was taught in the first year, only in greater detail. Emphasis is on leadership theory, style and principles. Some leadership roles are assigned to second year cadets. Curriculum includes military history (early America through 1945) and the great patriots of America, oral and written communication, national defense, land navigation, marksmanship, military drill with arms, and the National Endowment for Financial Education (NEFE) Financial Planning Program.

## **Leadership Education III (LE III) - 2 Semesters - Grades 11-12**

### **Prerequisite - Leadership Education I and Leadership Education II**

During the third year, each cadet will focus on leadership training and leadership application through assignment to key billets within the Corps of Cadets battalion organization. Cadets will expand their leadership foundation through discussions of ethical conduct and learn how to develop subordinate leaders through mentoring. Additional instruction will be given on the subjects of time management, goal setting, event planning, troop leading steps, military history (1945-1990), conduct armed and unarmed drill, career exploration and opportunities in public service. There will be a major emphasis toward developing strong communication skills and confidence in public speaking.

## **Leadership Education IV (LE IV) - 2 Semesters - Grade 12**

### **Prerequisite - Leadership Education I, Leadership Education II and Leadership Education III**

The fourth year cadet will be expected to hold the highest leadership positions within the Corps of cadets and further develop leadership foundation through developing lesson plans and assisting the Marine Instructor and Senior Marine Instructor in classroom instruction and armed and unarmed drill. Additionally, cadets will study military history (1990 to present), conduct international studies on current events and real world conflicts, and plan and execute community service projects.

## **LANGUAGE ARTS**

The goal of the Gwinnett County Language Arts program is to develop effective users of language. For this reason, students will have an opportunity to practice reading, writing, speaking and listening skills in **every** language arts course. Academic Knowledge and Skills have been adopted by the GCPD Board of Education as the essential curriculum. Primary emphasis will be on developing students' abilities to apply these skills effectively.

All students in Gwinnett County must pass four units of language arts as part of their graduation requirements. Course selections should be made on the basis of students' post-graduation plans, abilities, and interests.

Students may not take two English classes at the local school to make up a failure until the 12th grade, and then only on a space available basis. Opportunities to make up failure before then include summer school, Phoenix High School or community school seventh period classes.

### **Technical Freshman Language Arts - 2 Semesters - Grade 9 - Requires End-of-Course Test**

This course provides practice in using language for real purposes related to a student's education and career goals and needs. A balance of composition, applied grammar and literature will be maintained to prepare a student for a variety of choices in high school and upon graduation. (Technical Diploma)

### **College Prep Freshman Language Arts - 2 Semesters - Grade 9 - Requires End-of-Course Test**

This course supports the language development of college-bound students. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, researching and test-taking skills will be an integral part of the curriculum. (College Prep Diploma)

### **Honors Freshman Language Arts - 2 Semesters - Grade 9 - Requires End-of-Course Test**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, researching, and test-taking will be ongoing during each semester. (College Prep Diploma)

### **Gifted Freshman Language Arts - 2 Semesters - Grade 9 - Requires End-of-Course Test**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and an in-depth study of literature. The development of vocabulary, speaking, listening, and researching will be ongoing during each semester. (College Prep Diploma)

## **Language Arts for Limited English Proficient Students - Grades 9-12**

These courses are designed for students who qualify for the English to Speakers of Other Languages (ESOL) program. In accordance with state rule 160-4-5-.02, “ESOL classes address English listening, speaking, reading, writing, and American cultural concepts which students need to participate in regular classroom instruction.” The student’s language proficiency is developed through instruction in literature, applied grammar, and composition. As per state rule 160-4-2-.03, an ESOL student may earn up to six semesters of core language arts credit in the following courses: ESOL Language Arts II, ESOL Language Arts III, and ESOL Language Arts IV. Students in the ESOL courses of ESOL I, Communication Skills, and Language Development through Content 2, 3, and 4 may earn elective credit on successful completion of a course. The LDC courses focus on the language skills needed to be successful in the content areas of science, social studies and math. (College Prep Diploma or Technical Diploma)

### **Technical Sophomore Language Arts - 2 Semesters - Grade 10**

This course provides practice in using language for real purposes related to student’s education and career goals and needs. A balance of composition, applied grammar and literature will be maintained to prepare a student for a variety of choices in high school and upon graduation. (Technical Diploma)

### **College Prep Sophomore Language Arts - 2 Semesters - Grade 10**

This course supports the language development of college-bound students. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, researching, and test-taking skills will be an integral part of the curriculum. (College Prep Diploma)

### **Honors Sophomore Language Arts - 2 Semesters - Grade 10**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and world literature. The development of vocabulary, speaking, listening, researching, and test-taking skills will be an integral part of the curriculum. (College Prep Diploma)

### **Gifted Sophomore Language Arts - 2 Semesters - Grade 10**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and an in-depth study of world literature. The development of vocabulary, speaking, listening, and researching will be an integral part of the curriculum. (College Prep Diploma)

### **Technical Junior Language Arts - 2 Semesters - Grade 11 - Requires End-of-Course Test**

This course provides practice in using language for real purposes related to a student’s goals and needs. A balance of composition, applied grammar and literature will be maintained to prepare the student for a variety of choices upon graduation. (Technical Diploma)

### **College Prep Junior Language Arts - 2 Semesters - Grade 11 - Requires End-of-Course Test**

This course supports the language development of college-bound students. Each semester will have a balance of composition, applied grammar and literature. The development of vocabulary, speaking, listening, researching, and test-taking skills will be an integral part of the curriculum. The literature program will focus on American authors. (College Prep Diploma)

### **Honors Junior Language Arts - 2 Semesters - Grade 11 - Requires End-of-Course Test**

This course challenges college-bound student to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, researching, and test-taking skills will be ongoing during each semester. The literature program will focus on American authors. (College Prep Diploma)

### **Gifted Junior Language Arts - 2 Semesters - Grade 11 - Requires End-of-Course Test**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and an in-depth study of literature. The development of vocabulary, speaking, listening, and researching will be an integral part of the curriculum. The literature program focuses on American literature. (College Prep Diploma)

### **Technical Senior Language Arts - 2 Semesters - Grade 12**

This course provides practice in using language for real purposes related to a students' goals and needs. A balance of composition, applied grammar, and literature will be maintained to prepare the student for a variety of choices upon graduation. (Technical Diploma)

### **College Prep Senior Language Arts - 2 Semesters - Grade 12**

This course supports the language development of college-bound students. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, researching and test-taking skills will be an integral part of the curriculum. The literature program focuses on British authors. (College Prep Diploma)

### **College Prep Composition Workshop - 1 Semester - Grade 12**

This course is designed for seniors who need an additional one-half unit in English to graduate. The course utilizes a variety of media and literature for thinking and responding, and focuses on the student's writing skills in a workshop approach. (College Prep Diploma)

### **Honors Senior Language Arts - 2 Semesters - Grade 12**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and literature. The development of vocabulary, speaking, listening, research and test-taking skills will be ongoing during each semester. The literature program will focus on British authors. (College Prep Diploma)

### **Gifted Senior Language Arts - 2 Semesters - Grade 12**

This course challenges college-bound students to extend and refine their use of language. Each semester will have a balance of composition, applied grammar, and an in-depth study of literature. The development of vocabulary, speaking, listening, and researching will be an integral part of the curriculum. The literature program focuses on British literature. (College Prep Diploma)

### **Advanced Placement English Language and Composition - 2 Semesters - Grade 12** **Prerequisite - Teacher Recommendation - Sequential**

College level studies in language and composition are designed to assist exceptional language arts students who may choose to take the Advanced Placement examination. (College Prep Diploma)

## **Advanced Placement Literature and Composition - 2 Semesters - Grade 12**

### **Prerequisite - Teacher Recommendation - Sequential**

College level studies in literature and composition are designed to assist exceptional language arts students who may choose to take the Advanced Placement examination. (College Prep Diploma)

## **Adapted Language Arts - 8 Semester - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

## **VPP Language Arts - 8 Semester - Grades 9-12**

These courses focus on basic reading, writing and communication skills essential for the work force from the initial stages of acquiring a job to the necessities of maintaining a job. Students learn how information is organized, where to find information and how to use reference tools that foster success in daily living. Students enrolled in these courses are pursuing a Individualized Education Diploma and are enrolled in the VPP program.

## **Dramatic Interpretation/Competitive Speaking/Debate - Up to 8 Semesters**

### **Grades 9-12 (Elective Credit Only)**

#### **Prerequisite - Teacher Recommendation**

Competitive speaking (extemporaneous speaking, original oratory, and oral interpretation, with a major emphasis on debate) trains and permits students to express their individual talents in competition. In competitive speaking, however, the skills taught and used are those which the students develop in the classroom as part of their regular academic instruction.

## **Journalism/Newspaper - Up to 8 Semesters - Grade 9-12**

### **Prerequisite - Teacher Recommendation**

This course is designed to train students in the production of a school newspaper. The fundamentals of journalism and newspaper production are taught. Interviewing, event coverage, and the business and legal aspects of newspaper production are included.

## **Reading Intervention - 8 Semesters (Elective Credit Only)**

This course is designed to provide special assistance in reading for students who are still having difficulty meeting AKS on grade level and also meet state selection criteria. Emphasis is placed on the reading strand of the AKS with attention given to content area reading and use of graphic organizers.

## **Journalism/Literary Magazine - Up to 8 Semesters - Grades 9-12**

### **Prerequisite - Teacher Recommendation**

This course is designed to train students in the production of a literary magazine. The fundamentals of journalism and literary magazine production are taught; these include: writing, collecting materials, planning, editing, layout, proofreading and financial management. This course involves the actual production of a literary magazine.



## **Journalism/Yearbook - Up to 8 semesters - Grades 9-12**

### **Prerequisite - Recommendation from Yearbook Advisor**

Through various units students will develop their journalistic abilities, especially those required for a pictorial publication such as the high school yearbook and certain magazines. This course provides students who are interested in journalism an opportunity to explore and to experience the process involved in the creation of a rather large publication, including preplanning, layouts, copyrighting, proofreading, visual organization and financial management - all of which involve a certain amount of creativity. This course involves the actual production and sale of the yearbook.

## **MATHEMATICS**

### **Concepts of Problem Solving- 2 Semesters - Grade 9**

#### **Prerequisite - Teacher Recommendation**

This integrated course is designed to help students learn to reason and communicate mathematically and to become more proficient problem solvers. This is done through real-life applications and the development/reinforcement of mathematical skills. Practical skills such as computation, estimation, use of ratio and proportion, and interpreting data are stressed. Topics in algebra, geometry, statistics and discrete mathematics are covered. Throughout the course emphasis is placed upon the selection and use of appropriate tools for solving problems. (Technical Diploma)

### **Algebra I - 2 Semesters - Grade 9 - Requires End-of-Course Test**

#### **Prerequisite - Prealgebra (Grade 8) or Algebra (Grade 8) and Teacher Recommendation**

This course stresses the understanding and application of algebraic concepts and content. Topics include linear and quadratic equations and inequalities, polynomials, systems of equations, matrices, variation, functions, probability and statistics. Real world problems, computer based explorations, and career connections are used to provide relevance, motivation and conceptual development. (College Prep Diploma)

### **Honors Euclidean Geometry/Gifted Euclidian Geometry - 2 Semesters - Grade 9 - Requires End-of-Course Test**

#### **Prerequisite - Honors Algebra (Grade 8) and Teacher Recommendation**

This course is more in-depth study of the topics covered in Geometry. Greater emphasis is placed upon students' ability to reason abstractly, analyze and evaluate problems in a variety of ways. (College Prep Diploma)

### **Concepts of Algebra - 2 semesters - Grades 10-12 - Requires-End-of-Course Test**

#### **Prerequisite - Concepts of Problem Solving**

This course is designed to extend and reinforce the content, concepts and skills covered in Concepts of Problem Solving. Successful completion of Concepts of Problem Solving and Concepts of Algebra will satisfy the technical diploma Algebra I requirement. Modeling of real-life problems and providing applications of mathematics in various vocations creates relevance and motivation. Students will solve measurement problems using appropriate technology, collect, organize and analyze data, formulate, solve, and graph equations and inequalities, factor polynomials, and explore additional topics in number relationships, algebra, statistics, functions and relations, and statistics. (Technical Diploma)

## **Euclidean Geometry - 2 Semesters - Grades 10-12 - Requires End-of-Course Test**

### **Prerequisite - Algebra I**

The major focus of this course is the study of geometry from an algebraic perspective and a synthetic perspective. Topics include congruence and similarity, properties of polygons, transformational and coordinate geometry, and logic. Appropriate tools are used as aids in analyses and interpretation of data, graphing and applications of transformations. (College Prep Diploma)

## **Informal Geometry - 2 Semesters - Grades 10-12 - Requires End-of-Course Test**

### **Prerequisite - Concepts of Algebra**

This course is designed to extend and reinforce the content, concepts and skills covered in the Concepts Courses and will continue to focus upon applications of mathematics in the work place. Topics studied include geometry from an algebraic perspective, geometry from a synthetic perspective, statistics and probability, functions and relations, discrete mathematics, and trigonometry as well as the use of appropriate tools and technology to solve problems. (Technical Diploma)

## **Algebra II - 2 Semesters - Grades 10-12**

### **Prerequisite - Geometry, Honors Geometry or Gifted Geometry**

The major focus of this course is the study of functions. Topics include polynomial, exponential and logarithmic functions, rational and irrational expressions, and probability and statistics. Emphasis is placed upon graphing various functions and analyzing the graphs to develop an understanding of the foundations of calculus and to model realistic problems and problem situations. The use of graphing calculators and other technologies will be extensive. (College Prep Diploma)

## **Honors Algebra II/Gifted Algebra II - 2 Semesters - Grades 10-12**

### **Prerequisite - Geometry, Honors Geometry or Gifted Geometry**

This course includes the topics covered in Algebra II as well as trigonometry and discrete mathematic topics. (College Prep Diploma)

## **Applied Algebra - 2 Semesters - Grades 11-12**

### **Prerequisite - Concepts of Algebra**

This course is designed to extend and reinforce the content, concepts and skills covered in Concepts of Algebra and to emphasize application of the mathematical skills students will need in their chosen careers. Topics to be studied include numbers and number relationships, algebra, geometry from an algebraic perspective, statistics, probability, functions and relations, and discrete mathematics. Algebraic concepts and the use of appropriate tools and technology to solve problems are emphasized. (Technical Diploma)

## **Mathematical Money Management - 2 Semesters - Grades 11-12**

### **Prerequisite - Concepts of Problem Solving and Concepts of Algebra**

Students will learn the mathematics required to make informed decisions about money management and will use a variety of representations (concrete, graphical, and numerical) to solve financial problems. The mathematical skills needed include solving linear equations, manipulating algebraic formulas and analyzing data in order to make sense of complicated situations and solve complex problems. (Technical Diploma)

**Advanced Algebra and Trigonometry/Gifted Advanced Algebra and Trigonometry - 2 Semesters  
Grades 11-12**

**Prerequisite - Algebra II, Honors Algebra II or Gifted Algebra II**

**\* Advanced Algebra and Trigonometry is highly recommended in the College Prep Sequence.**

Content stressed includes discrete mathematics, functions, trigonometry, and underpinnings of calculus. Examples of specific topics are functions, systems of equations, vectors, sequences and series, and polar coordinates. Mathematical modeling and realistic problem solving are used to develop content and reinforce concepts. (College Prep Diploma)

**Statistics/Gifted Statistics - 1 Semester - Grade 12**

**Prerequisite - Algebra II and Teacher Recommendation**

This course is designed to help students learn how to apply statistical methods in problem-solving. An integral component of the course is collecting, representing, and processing data as students learn about the interrelatedness of probability and statistics. Opportunities are provided for students to model statistical methods, derive probabilities and make inferences. (College Prep Diploma)

**Discrete Mathematics/Gifted Discrete Mathematics - 1 Semester - Grade 12**

**Prerequisite - Algebra II and Teacher Recommendation**

This course is designed to study objects and ideas that can be divided into separate or discontinuous parts. Possible topics include problem-solving, reasoning, communication, decision-making, graph theory, combinatorics, discrete probability, recursion, matrices, sets, logic function and relations, real numbers system, and algebraic structures. (College Prep Diploma)

**Precalculus/Gifted Precalculus - 2 Semesters - Grades 11-12**

**Prerequisite - Algebra II, Honors Algebra II or Gifted Algebra II and Teacher Recommendation**

This course includes the topics of Advanced Algebra and Trigonometry with greater emphasis upon preparation for calculus. (College Prep Diploma)

**Basic Skills Remediation Math - Up to 8 Semesters - Grades 9-12 (Elective Credit Only)**

This course is designed to provide special assistance to students based on state selection criteria. Emphasis is placed on the middle school mathematics AKS in which the student needs to gain proficiency to be successful in high school.

**AP Statistics/Gifted AP Statistics - 2 Semesters - Grade 12**

**Prerequisite - Algebra II, Honors Algebra II or Gifted Algebra II and Teacher Recommendation**

The objectives follow the AP syllabus developed by the College Board for the Advanced Placement (AP) Statistics Examination. In depth experience in statistical concepts and methods, including data collection and exploration, experimental and theoretical probability, probability distributions, and descriptive and inferential statistics are covered. Projects involve planning a study, anticipating patterns, producing models and confirming models.

### **AP Calculus AB/Gifted AP Calculus AB - 2 Semesters - Grades 11-12**

#### **Prerequisite - Precalculus or Gifted Precalculus and Teacher Recommendation**

Objectives follow the AP syllabus developed by the College Board for the Advanced Placement (AP) Calculus Examination. Limits, derivatives and integrals of algebraic and transcendental functions, continuity, applications of derivatives to related rates, maxima and minima, curve sketching, integration formulas, applications of the definite integral, and methods of integration. (College Prep Diploma)

### **AP Calculus BC/Gifted AP Calculus BC - 2 Semesters - Grades 11-12**

#### **Prerequisite - Precalculus or Gifted Precalculus and Teacher Recommendation**

The objectives follow the AP syllabus developed the College Board for the Advanced Placement (AP) Calculus BC Examination. Limits, derivatives and integrals of algebraic and transcendental functions, continuity, applications of derivatives to related rates, maxima and minima, curve sketching, integration formulas, applications of the definite integral, methods of integration, graphing, and integrating in polar coordinates, infinite sequences and series, power series, vectors, and differential equations are included (College Prep Diploma)

### **Adapted Mathematics - 8 Semesters - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **VPP Mathematics - 8 Semesters - Grades 9-12**

These courses are designed to address math skills needed for successful independent living and vocational preparation. Content emphasizes skills such as basic math operations, personal finance, applying for loans, computing taxes, and time management. Students enrolled in these courses are pursuing an Individualized Education Diploma and are enrolled in the VPP program.

## **MODERN/CLASSICAL LANGUAGES**

### **Classical Languages**

#### **Latin I - 2 Semesters - Grades 8-12**

**(Students taking Latin I in 8th grade take Latin II in 9th grade.)**

The student will develop the ability to read and write Latin through the study of vocabulary and grammar, and be introduced to Ancient Roman culture. The influence of Latin upon English will be emphasized.

#### **Honors Latin I - Gifted Latin I - 2 Semesters - Grades 9-12**

Through extensions of Latin Level I Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

#### **Latin II - 2 Semesters - Grades 10-12**

##### **Prerequisite - Latin I**

Students continue to develop skills and acquire the content of Latin and Ancient Roman culture begun in Latin I.

**Honors Latin II - Gifted Latin II - 2 Semesters - Grades 9-12**

**Prerequisite - Honors Latin I - Gifted Latin I - Teacher Recommendation**

Through extensions of Latin Level II Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

**Latin III - 2 Semesters - Grade 10-12**

**Prerequisite - Latin II**

Latin III is a continuation of the study of the Latin language, including grammar, vocabulary, and literature. Students also study Roman history and culture.

**Honors Latin III - Gifted Latin III - 2 Semesters - Grades 10-12**

**Prerequisite - Honors Latin II - Gifted Latin II - Teacher Recommendation**

Through extensions of Latin Level III Academic Knowledge and Skills, students will perform at an accelerated level in translating and reading authentic Latin texts.

**Latin IV - 2 Semesters - Grades 11-12**

**Prerequisite - Latin III**

Latin IV is a continuation of the study of the Latin language and Ancient Roman culture including grammar, vocabulary, and literature.

**Honors Latin IV - Gifted Latin IV - 2 Semesters - Grades 11-12**

**Prerequisite - Honors Latin III and Gifted Latin III - Teacher Recommendation**

Through extensions of Latin Level IV Academic Knowledge and Skills, students will perform at an accelerated level in translating and reading authentic Latin text.

**Advanced Placement Latin - 2 Semesters - Grades 11-12**

**Prerequisite - Teacher Recommendation**

Students will complete college-level work in Latin which will prepare them to take the Advanced Placement examination.

**Modern Languages**

**French I - 2 Semesters - Grades 8-12**

**(Students taking French I in 8th grade, take French II in 9th grade)**

Through realistic use of the language, the student will learn to communicate in oral and written form on a variety of everyday topics and will gain cultural knowledge of French-speaking countries.

**Honors French I - Gifted French I - 2 Semesters - Grades 9-12**

Through extensions of French Level I Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

**French II - 2 Semesters - Grades 9-12**

**Prerequisite - French I**

Building on the background of French I, the student will learn to interact in more complex situations, read more complicated materials, and write more extended messages. Cultural understanding increases through reading and discussion of authentic documents.

**Honors French II - Gifted French II - 2 Semesters - Grades 9-12**

**Prerequisite - Honors French I - Gifted French I - Teacher Recommendation**

Through extensions of French Level II Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

**French III - 2 Semesters - Grades 10-12**

**Prerequisite - French II**

The student will learn to give detailed information about himself/herself, narrate events, read authentic texts, and handle difficulties using French.

**Honors French III - Gifted French III - 2 Semesters - Grades 9-12**

**Prerequisite - Honors French II - Gifted French II - Teacher Recommendation**

Through extensions of French Level III Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

**French IV - 2 Semesters - Grades 11-12**

**Prerequisite - French III**

The student will refine his/her communicative ability and build his/her vocabulary, allowing him/her to converse in a variety of situations and comprehend literary or factual texts. Cultural understanding remains an important goal throughout the entire sequence of French language study.

**Honors French IV - Gifted French IV - 2 Semesters - Grades 11-12**

**Prerequisite - Honors French III - Gifted French III - Teacher Recommendation**

Through extensions of French Level IV Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.

**French V - 2 Semesters - Grade 12**

**Prerequisite - French IV**

The student will continue to refine his/her communicative ability, allowing him/her to converse in diverse situations and comprehend authentic tests.

**Honors French V - Gifted French V - 2 Semesters - Grade 12**

**Prerequisite - Honors French IV - Gifted French IV - Teacher Recommendation**

Through extensions of French Level V Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

**Advanced Placement French - 2 Semesters - Grades 11-12**

**Prerequisite - Teacher Recommendation**

Students will complete college-level work in the French language which will prepare them to take the Advanced Placement examination.

**German I - 2 Semesters - Grades 8-12**

**(Students taking German I in 8th grade, take German II in 9th grade)**

Through realistic use of the language, the student will learn to communicate in oral and written form on a variety of everyday topics and will gain cultural knowledge of German-speaking countries.

### **Honors German I - Gifted German I - 2 Semesters - Grades 9-12**

Through extensions of German Level I Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

### **German II - 2 Semesters - Grades 9-12**

#### **Prerequisite - German I**

Building on the background of German I, the student will learn to interact in more complex situations, read more complicated materials, and write more extended messages. Cultural understanding increases through reading and discussion of authentic documents.

### **Honors German II - Gifted German II - 2 Semesters - Grades 9-12**

#### **Prerequisite - Honors German I - Gifted German I - Teacher Recommendation**

Through extensions of German Level II Academic Knowledge and Skills, students will perform at an accelerated level of speaking, reading, writing, and listening.

### **German III - 2 Semesters - Grades 10-12**

#### **Prerequisite - German II**

The student will learn to give detailed information about himself/herself, narrate events, read authentic texts and handle difficulties using German.

### **Honors German III - Gifted German III - 2 Semesters - Grades 10-12**

#### **Prerequisite - Honors German II - Gifted German II - Teacher Recommendation**

Through extensions of German Level III Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

### **German IV - 2 Semesters - Grades 11-12**

#### **Prerequisite - German III**

The student will refine his/her communicative ability and build his/her vocabulary, allowing him/her to converse in a variety of situations as well as comprehend literary or factual texts. Cultural understanding remains an important goal throughout the entire sequence of German language study.

### **Honors German IV - Gifted German IV - 2 Semesters - Grades 11-12**

#### **Prerequisite - Honors German III - Gifted German III - Teacher Recommendation**

Through extensions of German Level IV Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

### **German V - 2 Semesters - Grade 12**

#### **Prerequisite German IV**

The student will continue to refine his/her communicative ability, allowing him/her to converse in diverse situations and comprehend authentic texts.

### **Honors German V - Gifted German V - 2 Semesters - Grade 12**

#### **Prerequisite - Honors German IV - Gifted German IV - Teacher Recommendation**

Through extensions of German Level V Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading writing, and listening.

### **Advanced Placement German - 2 Semesters - Grades 11-12**

#### **Prerequisite - Teacher Recommendation**

Students will complete college-level work in German which will prepare them to take the Advanced Placement examination.

### **Spanish I - 2 Semesters - Grades 8-12**

**(Students taking Spanish I in 8th grade, take Spanish II in 9th grade)**

Through realistic use of the language, the student will learn to communicate in oral and written form on a variety of everyday topics and will gain cultural knowledge of Spanish-speaking countries.

### **Honors Spanish I - Gifted Spanish I - 2 Semesters - Grades 9-12**

Through extension of Spanish Level I Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.

### **Spanish II - 2 Semester - Grades 9-12**

#### **Prerequisite - Spanish I**

Building on the background of Spanish I, students will learn to interact in more complex situations, read more complicated materials, and write more extended messages. Cultural understanding increases through reading and discussion of authentic documents.

### **Honors Spanish II - Gifted Spanish II - 2 Semesters - Grades 9-12**

#### **Prerequisite - Honors Spanish I - Gifted Spanish I - Teacher Recommendation**

Through extensions of Spanish Level II Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.

### **Spanish III - 2 Semesters - Grades 10-12**

#### **Prerequisite - Spanish II**

The student will learn to give detailed information about himself/herself, narrate events, read authentic texts, and handle difficulties using Spanish.

### **Honors Spanish III - Gifted Spanish III - 2 Semesters - Grades 10-12**

#### **Prerequisite - Honors Spanish II - Gifted Spanish II - Teacher Recommendation**

Through extensions of Spanish Level III Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing, and listening.

### **Spanish IV - 2 Semesters - Grades 11-12**

#### **Prerequisite - Spanish III**

The student will refine his/her communicative ability and build his/her vocabulary, allowing him/her to converse in a variety of situations and comprehend literary of actual texts. Cultural understanding remains an important goal throughout the entire sequence of Spanish language study.

### **Honors Spanish IV - Gifted Spanish IV - 2 Semesters - Grades 11-12**

#### **Prerequisite - Honors Spanish III - Gifted Spanish III - Teacher Recommendation**

Through extensions of Spanish Level IV Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.



**Spanish V - 2 Semesters - Grade 12****Prerequisite - Spanish IV**

The student will continue to refine his/her communicative ability, allowing him/her to converse in diverse situations and comprehend authentic texts.

**Honors Spanish V - Gifted Spanish V - 2 Semesters - Grade 12****Prerequisite - Honors Spanish IV - Gifted Spanish IV - Teacher Recommendation**

Through extensions of Spanish Level V Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.

**Spanish VI - 2 Semesters - Grade 12****Prerequisite - Spanish V**

The student will continue to refine his/her communicative ability, allowing him/her to converse in diverse situations and comprehend authentic texts.

**Honors Spanish VI - Gifted Spanish VI - 2 Semesters - Grade 12****Prerequisite - Honors Spanish V - Gifted Spanish V - Teacher Recommendation**

Through extensions of Spanish Level V Academic Knowledge and Skills, students will perform at an accelerated level in speaking, reading, writing and listening.

**Advanced Placement Spanish - 2 Semesters - Grades 11-12****Prerequisite - Teacher Recommendation**

Students will complete college-level work in the Spanish language which will prepare them to take the Advanced Placement examination.

**Spanish for Native Speakers I - 2 Semesters - Grades 9-12****Teacher Recommendation**

Provides native speakers an opportunity to maintain oral competency in the Spanish language and to acquire a more sophisticated level of competency in reading and writing. Promotes a deeper understanding of the native culture and cultures of other Spanish-speaking countries.

**Spanish for Native Speakers II - 2 Semesters - Grades 9-12****Teacher Recommendation**

Provides native speakers a continued opportunity to practice communication skills, to maintain, improve and perfect oral competency in Spanish language and to acquire a more sophisticated level of competency in reading authentic texts and writing. Promotes a deeper understanding of an interest in the native culture and cultures of other Spanish-speaking countries.

**PHYSICAL EDUCATION**

Elective physical education courses are designed with an increasing level of cognitive and performance skill levels. Counselors should refer to the SASI/State course numbers to assure students progress from beginning, to intermediate, to advanced course levels.

### **Introduction to Lifetime Fitness - 1 Semester - Grades 9-12**

This course is a graduation requirement and a prerequisite to all elective physical education courses. The course provides the students with a sound, basic knowledge and understanding of how to attain a healthful level of physical fitness. It is recommended that Introduction to Lifetime Fitness be taken in the 9th or 10th grade. (Required for College Prep, Technical or Combination Diploma)

### **Sports Medicine - 1 Semester - Grades 10-12**

**Prerequisite - Introduction to Health and Introduction to Lifetime Fitness**

This course is designed as an introduction to the fields of sports medicine, athletic training, and physical therapy. It will provide the student with basic information relevant to the prevention, recognition, first aid, referral and rehabilitation of athletic injuries. The student will also learn the basics of training room organization and function.

### **Theory in Physical Education - 2 Semesters - Grades 9-12**

**Prerequisite - Teacher Recommendation - Junior or Senior Who Has Completed Introduction to Lifetime Fitness**

Theory in Physical Education provides an opportunity for selected students to develop and apply the knowledge attained in the other physical education courses through assisting a physical education teacher. This course is particularly useful for those interested in recreation, coaching, or teaching careers.

### **Adapted PE - 8 Semesters - Grades 9-12 (Alternate)**

This course is designed for students who require a modified curriculum. Successful completion of this course will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **Team Sports - 6 Semesters - Grades 9-12**

**Prerequisite - Introduction to Lifetime Fitness**

This series of courses provides students with an opportunity to learn the history, rules, and basic skills of two or three of the following team sports: basketball, volleyball, soccer, speedball, touch or flag football, field hockey, floor hockey or softball. As the courses progress, students will have an opportunity to experience team play, strategy development and officiating techniques in each of the team sports offered.

### **General Physical Education - 8 Semesters - Grades 9-12**

**Prerequisite - Introduction to Lifetime Fitness**

This series focuses on a combination or variety of team sports, lifetime sports, track and field, outdoor education, rhythmic and dance, recreational games, gymnastics and/or self-defense. Basic methods to attain a healthy and active lifestyle are emphasized.

### **Lifetime Sports - 6 Semesters - Grades 9-12**

**Prerequisite - Introduction to Lifetime Fitness**

This series of courses introduces and enhances fundamental skills, strategies, and knowledge of rules associated with lifetime sports such as golf, tennis, bowling, racquetball and/or badminton. Students will have the opportunity to use the skills and participate in game situations.

## **Recreational Games - 6 Semesters - Grades 9-12**

### **Prerequisite - Introduction to Lifetime Fitness**

This series introduces and enhances recreational games that are suitable for lifetime leisure activities, such as: table tennis, bowling, shuffleboard, frisbee, deck tennis, horseshoes, and/or croquet.

## **Tumbling/Stunts - 4 Semesters - Grades 9-12**

### **Prerequisites - Introduction to Lifetime Fitness (Tumbling In Middle School Highly Recommended)**

This series offers an introduction to students and tumbling with an emphasis on safety measures that will enable the student to perform a variety of skills. Single and double combination pyramids will be introduced. Students may be introduced to vaulting with the Reuther board.

## **Track and Field - 6 Semesters - Grades 9-12**

### **Prerequisite - Introduction to Lifetime Fitness**

This series introduces and enhances basic skills involved in the various track and field events, such as running events, hurdles, shotput, jumping, etc. Emphasis on history and rules will be included.

## **Outdoor Education - 6 Semesters - Grades 9-12**

### **Prerequisite - Introduction to Lifetime Fitness**

This series of courses provides an appreciation of the outdoors and provides physical activities in an outdoor laboratory. Topics such as camping, hiking, orienteering, outdoor cooking, boating safety, and hunter safety are learned.

## ***Fitness Courses***

### **Beginning Weight Training - 2 Semesters - Grades 9-12**

#### **Prerequisite - Introduction to Lifetime Fitness**

This series provides students an opportunity to experience beginning level weight training and conditioning principles. This program is designed to teach students the academic, knowledge and skills needed to improve muscular strength and endurance.

### **Lifetime Fitness - 2 Semesters - Grades 9-12**

#### **Prerequisite - Introduction to Lifetime Fitness**

Lifetime Fitness is a course which integrates all of the factors relating to individual fitness, including proper diet, rest and relaxation, and regular physical activity. The course provides the student with the opportunity to develop a fitness program based on strength, flexibility, endurance, and developmental concepts that are adapted to individual needs.

### **Intermediate Weight Training - 2 Semesters - Grades 9-12**

#### **Prerequisite - Introduction to Lifetime Fitness and Beginning Weight Training**

This intermediate series provides students an opportunity to apply weight training and conditioning principles at an intermediate level. Basic knowledge of conditioning principles and lifting techniques are required. A variety of training methods may be used to address flexibility, muscular strength and endurance, cardiovascular endurance and body composition. Speed and power training methods may be utilized.

### **Aerobic Exercise - 6 Semesters - Grades 9-12**

#### **Prerequisite – Introduction to Lifetime Fitness**

Aerobic or cardio-respiratory endurance is one of the most important components of personal fitness. In this class, a variety of aerobic exercise modes (walking, jogging, dance aerobics, cardio kicking, rope skipping conditioning with weights, lateral training and circuit training may be used to improve individual fitness).

### **Advanced Weight Training - 8 Semesters - Grades 9-12**

#### **Prerequisite - Introduction to Lifetime Fitness and Intermediate Weight Training or Teacher Recommendation**

This advanced series provides students an opportunity to apply weight training and conditioning principles at an advanced level. Intermediate knowledge of conditioning principles, lifting techniques and spotting techniques are required. A variety of training methods may be used to address flexibility, muscular strength and endurance, cardiovascular endurance and body composition. Personal fitness, equipment, lifting technique, nutrition, and ergogenic aids will be addressed. Speed and power training methods may be utilized.

### **Body Sculpting – 2 Semester – Grades 9-12**

#### **Prerequisite – Introduction to Lifetime Fitness**

This course provides basic instruction in methods to define, condition, and reshape the body through specific exercises. Topics covered through this overall conditioning program are weight training, conditioning exercises, proper nutrition, muscle definition, posture, physical response to exercise and weight control. A variety of equipment, training methods, and nutrition discussions will be used to provide a healthy means to redefine and shape the body.

### **Advanced Body Sculpting – 6 Semesters – Grades 9-12**

#### **Prerequisite – Introduction to Lifetime Fitness and Weight Lifting, Body Sculpting or Teacher Recommendation**

This course provides advanced instruction in methods to define, condition and reshape the body through specific exercises. Topics covered through this overall conditioning program are weight training, conditioning exercise and weight control. Participants will engage in higher levels of activity and be expected to use basic concepts and knowledge of body sculpting to track personal improvement.

## **SCIENCE**

Science courses are based on Gwinnett County Public Schools Board adopted Academic Knowledge and Skills (AKS) as the essential curriculum in the following courses.

### **Technical Biology - 2 Semesters - Requires End-of-Course Test**

#### **Prerequisite - Concurrent enrollment in Concepts of Problem Solving or higher and 8th grade science teacher recommendation.**

Biology topics (the study of the living world) will be investigated through an applied conceptual approach that integrates biological and chemistry concepts. This course will integrate laboratory investigation with conceptual development. Students will take the Georgia's End of Course Test in Biology. (Technical Diploma)

**College Preparatory Biology - 2 Semesters - Requires End-of-Course Test**

**Prerequisite - Concurrent enrollment in Algebra I or higher and 8th grade science teacher recommendation.**

Biology concepts will be investigated through a systemic approach that ties together the concepts of energy transformation, photosynthesis, heredity, natural selection, evolution, biotechnology, life processes, population dynamics, taxonomy, and ecology. This course will integrate scientific laboratory and research processes as part of the conceptual development. Students will take the Georgia's End of Course Test in Biology. (College Prep Diploma)

**Honors Biology/Gifted Biology - 2 Semesters - Requires End-of-Course Test**

**Prerequisite - Concurrent enrollment in Honors Geometry or higher, 8th grade mathematics tests average of 85% or higher, 8th grade science overall average of 90% or higher, and eighth grade science teacher recommendation.**

Biology concepts will be investigated through a systemic approach that ties together the concepts of energy transformation, photosynthesis, heredity, natural selection, evolution, biotechnology, life processes, population dynamics, taxonomy and ecology. This course will integrate scientific laboratory and research processes as part of the conceptual development. Experimental science project is required. Students will take the Georgia's End of Course Test in Biology. (College Prep Diploma)

**Technical Chemistry - 2 Semesters**

**Prerequisite - Successful completion of Technical Biology or higher, Concepts of Problem Solving or higher, concurrent enrollment in Concepts of Algebra or higher and teacher recommendation.**

Chemistry topics (the study of matter) will be investigated through an applied conceptual approach that integrates biological and chemistry concepts. This course will integrate laboratory investigation with conceptual development. (Technical Diploma)

**College Preparatory Chemistry - 2 Semesters**

**Prerequisite - Successful completion of College Preparatory Biology or higher and Algebra I or higher and concurrent enrollment in a Geometry or higher and teacher recommendation.**

This laboratory course deals with matter, its composition and the changes it undergoes. (College Prep Diploma)

**Honors Chemistry/Gifted Chemistry- 2 Semesters**

**Prerequisite - Successful completion of Honors Biology or higher and Honors Geometry or higher and concurrent enrollment in Honors Algebra II or higher and teacher recommendation.**

This laboratory course is a rigorous mathematical approach to matter, its composition and the changes it undergoes. Experimental science project is required. (College Prep Diploma)

**Technical Physical Science - 2 Semesters - Requires End-of-Course Test**

**Prerequisite: Successful completion of Technical Chemistry or higher, concurrent enrollment in Concepts of Algebra or higher and teacher recommendation.**

This course is a study of physics concepts including mechanics, sound, light electricity and magnetism and a review of chemistry concepts related to matter and its changes. This course will integrate laboratory investigations with conceptual development. Students will take the Georgia's End of Course Test in Physical Science. (Technical Diploma)

### **Technical Physics - 2 Semesters**

**Prerequisite - Successful completion of Technical Chemistry or higher, concurrent enrollment in Informal Geometry or higher and teacher recommendation.**

Technical Physics is an applied physics course which emphasizes the basic principles of physics which form the foundation of modern technology. Science and mathematics concepts are combined with extensive hands-on laboratory experiences. The approach of the course is occupational-oriented and heavily emphasizes how the basic concepts are applied to actual jobs. (Technical Diploma)

### **College Preparatory Physics - 2 Semesters**

**Prerequisite - Successful completion of College Preparatory Chemistry or higher and Geometry or higher and concurrent enrollment in Algebra II or higher and teacher recommendation.**

This course is an in-depth study of matter in motion. Emphasis is placed on mechanics, sound, light, electricity, magnetism and modern physics. (College Prep Diploma)

### **Honors Physics/Gifted Physics - 2 Semesters**

**Prerequisite - Successful completion of Honors Chemistry or higher and Honors Algebra II or higher, concurrent enrollment in Advanced Algebra and Trigonometry or higher and teacher recommendation.**

This course is a rigorous mathematical approach to an in-depth study of matter in motion. Emphasis is placed on mechanics, sound, light, electricity, magnetism and modern physics. (College Prep Diploma)

### **AP Physics B/Gifted AP Physics B- 2 Semesters**

**Prerequisite - Successful completion of Honors Chemistry or higher and Honors Algebra II or higher, concurrent enrollment in Precalculus or higher and teacher recommendation.**

This course is a rigorous mathematical approach to an in-depth study of matter in motion. Emphasis is placed on mechanics, sound, light, electricity, magnetism and modern physics. Students will be prepared to take the Advanced Placement Physics B exam upon completion of this course. (College Prep Diploma)

### **Science Electives and Advanced Courses**

#### **Science, Technology and Society - 2 Semesters - Elective**

**Prerequisite - Successful completion of a Biology and a Chemistry course.**

Science, Technology and Society is designed to explore the scientific and technological aspects of today's world. This course addresses the environment, natural resources, pollution, human population changes, the impact of technological advances and local studies. Study of today's issues that will impact on tomorrow including the automobile, food, robotics, space technologies, steroids, the homeless, genetic engineering, AIDS biological warfare, communication, lasers, and music and video technologies.

#### **Anatomy and Physiology - 2 Semesters - Elective**

**Prerequisite - Successful completion of or concurrent registration in College Preparatory Physics or higher.**

Human Anatomy and Physiology is an in-depth study of the structure and function of the human body. This course is based on a systems approach with an emphasis on tissues, metabolic processes, homeostasis, and clinical applications.

**AP Biology/Gifted AP Biology - 2 Semesters**

**Prerequisite - Successful completion of or concurrent enrollment in College Preparatory Physics or higher.**

This course is designed to prepare students to take the Advanced Placement Biology exam. This is a college level freshman course.

**AP Physics C/Gifted AP Physics C - 2 Semesters**

**Prerequisite - Successful completion of College Preparatory Physics or higher and successful completion or concurrent enrollment in AP Calculus.**

This course is designed to prepare students to take the mechanics (C) Advanced Placement Physics exam. This is a college level freshman course and is calculus based.

**AP Chemistry/Gifted AP Chemistry - 2 Semesters**

**Prerequisite - Successful completion of or concurrent enrollment in College Preparatory Physics or higher**

This course is designed to prepare students to take the Advanced Placement Chemistry exam. This is a college level freshman course.

**AP Environmental Science – 2 Semesters – Elective**

**Prerequisite – Successful completion of or concurrent enrollment in College Preparatory Physics or higher.**

This course is designed to prepare students to take the Advanced Placement Environmental Science exam. This is a college level freshman course.

**Astronomy - 2 Semester - Elective**

**Prerequisite: Successful completion of College Preparatory Physics or higher.**

This course is an in-depth study of astronomy. Topics studied include the history of astronomy, the relationship between the Earth, Moon and Sun, the solar system, stars, galaxies and the universe.

**Earth Systems - 2 Semester - Elective**

**Prerequisite: Successful completion or concurrent enrollment in College Prep Physics or higher.**

This course is an in-depth study of geology. Topics studied include the Earth's place in the universe, forces affecting land form structures, geologic time table, biochemical cycles, changes in the Earth's crust, and Georgia's geologic resources.

**Environmental Science - 2 Semester - Elective**

**Prerequisite: Successful completion or concurrent enrollment in Technical Physics or higher.**

This course is an in-depth study of environmental science. Topics studied include ecology, effects of natural and human activity on land, water and air, energy resources and conservation, food production, preservation and storage, waste management, pollution and human health, and biotechnology.

**Microbiology - 2 Semester - Elective**

**Prerequisite: Successful completion of College Preparatory Physics or higher.**

This course is an in-depth study of microbiology. Topics studied include historical microbiology, growth and identification of bacteria, controlling bacterial growth, other microbes, viruses, pathogenic microbiology, and food, soil and water microbiology.

### **Forensic Science – 2 Semesters – Elective**

**Prerequisite – Successful completion of or concurrent enrollment in College Preparatory Physics and Algebra II**

Forensic Science is the study of the application of science to the law. This integrated science course is designed to explore the scientific and technological aspects of criminal investigations. Topics will include the study of DNA, glass, blood, fingerprinting, chemical residues and evidence collection as it relates to forensic issues. Applications to court cases, literature, psychology and criminology will also be examined.

### **Oceanography - 2 Semester - Elective**

**Prerequisite: Successful completion of College Preparatory Physics or higher.**

This course is an in-depth study of oceanography. Topics studied include historical oceanography, plate tectonics, properties of water, ocean circulation, marine sediments, interactions between air, land and sea, and marine environments, resources and pollution.

### **Adapted Science - 6 Semesters - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **VPP Science - 6 Semesters - Grades 9-12**

These courses offer a comprehensive, systematic overview of key scientific concepts. It will show how the application of scientific and industrial skills are used in everyday living. Students enrolled in these courses are pursuing an Individualized Education Diploma and are in the VPP program.

## **SOCIAL STUDIES**

The Gwinnett County Social Studies program prepares students to participate as constructive citizens in a democratic society. Students achieve mastery of the Academic Knowledge and Skills (AKS) through an authentic approach integrating discipline based content with interpretive skills involving maps and globes, information processing, social participation, and problem solving.

All students in Gwinnett County must pass three units (six semesters) of social studies as part of their graduation requirement. Students should select elective social studies courses based on their interests, abilities and plans for college and/or career.

All courses will provide opportunities for students to develop and demonstrate competency within the framework of the Gwinnett County Public Schools mission, vision and goals.

### **World Geography or Honors World Geography or Gifted World Geography - 2 Semesters – Grade 9**

This two semester course provides the content knowledge and skills necessary to understand the roles, responsibilities, and relationships of people and places throughout the world, both past and present. The course will prepare students for the three year required social studies sequence. Topics will include the themes of Historical Geography, Political Geography and Economic Geography.



Extensive opportunities to develop and refine writing competencies will prepare students for the *High School Gateway Assessment*. Integrated throughout the course, students are instructed on efficient and effective methods and strategies to read, write, think, organize, take notes and demonstrate what they have learned. This course will focus on geography objectives assessed on the *Georgia High School Graduation Test*.

Students who successfully complete both semesters of World Geography will earn one of the required units of state elective credit toward the *College Preparatory Diploma with Seal of Distinction (CP+)* program of study.

**World History *or* Honors World History *or* Gifted World History - 2 Semesters - Grade 10 – Required (AP World History also satisfies this requirement.)**

This two semester course provides a comprehensive, chronological survey of the significant conditions, challenges and accomplishments that have influenced the progress of humankind. Beginning with prehistory, students examine topics associated with the growth of early civilization, classical contributions of Greece and Rome, regional civilizations and the rise of medieval Europe. Other topics of study include emergence of the modern world, age of revolution, growth of industry and nationalism, world wars in the 20th century and development of the contemporary world.

**U.S. History *or* Honors U.S. History *or* Gifted U.S. History - 2 Semesters - Grade 11 - Required - (AP U.S. History also satisfies this requirement.) - Requires State End-of-Course Test**

This two semester course provides a comprehensive, chronological survey of the history of the United States. Students examine topics beginning with the period of exploration and colonization, and then continue through independence and revolution, constitutional debate between the Federalist and Republicans, Jeffersonian and Jacksonian democracy, sectionalism and civil war, reconstruction and industrialization, immigration and urbanization, imperialism and the progressive era, World War I and the Great Depression, World War II and the Cold War. The course concludes with a study of the emergence of modern America.

**Psychology - 1 Semester - Grades 11-12**

This elective course introduces students to basic psychological concepts and principles as well as the rules, laws, and theories of psychology. Topics of study include: determiners of personality (heredity and environment), theories of the development of intelligence and testing characteristics of basic needs. A study of self-concept (theories of development) is also included. With this knowledge of themselves and others, students should be able to make informed decisions which are impacted by changing environments and situations.

**Sociology - 1 Semester - Grades 11-12**

This elective course helps students understand and appreciate people as independent agents in cooperative activities with others. Topics to be covered are: the organized way people fulfill basic needs (institutions); the setting of social rules and their enforcement (social control); and the possessions people have, the way they think, and their actions as members of society (culture). Students will use the social scientific method as a mode of research.

### **Contemporary Issues - 1 Semester - Grades 11-12**

This elective course provides students with opportunities to identify and evaluate political, social, and economic issues on a local, state, national and international level. The central emphasis is on contemporary issues and problems and their effects on the student as a constructive citizen in an interdependent world. A variety of current news media will be used for instructional purposes.

### **Controversial Issues - 1 Semester - Grades 11-12**

This elective class is designed for mature upper level students who are able to confront controversial issues in an analytical manner. The readings and subject matter are at a high level and will challenge students to use a studious approach to investigate views on issues that are controversial in nature. The purpose of this class is not to force a particular viewpoint or agenda on the student, but rather to allow the student the opportunity to develop and employ critical thinking skills when considering his/her personal evaluation of current events and issues of social relevance.

### **Philosophy - 1 Semester - Grades 11-12**

This elective class is designed to guide students to form a basic framework for the study of philosophical thought. Material covered will include basic beliefs of selected ancient and medieval philosophers; aspects of Eastern philosophy originating in China, India, and the Middle East; historical developments that resulted in a distinct western school of philosophy; specialized approaches common to the study of modern philosophy; and how the Enlightenment Age tradition of reason has given way to a postmodern Age of Reason.

### **Political Systems *or* Honors Political systems *or* Gifted Political Systems - 1 Semester - Grade 12 - Required (AP American Government also satisfies this requirement.)**

Political Systems is a required one semester course designed to provide students with a fundamental understanding of their rights and responsibilities as citizens by examining the American political structure and process. Topics of study include the origin and growth of representative democracy, the development of the U.S. Constitution founded on the concept of federalism, landmark legal decisions and their impact on constitutional government, the adaptive nature of the political process as influenced by political parties, special interest groups and media coverage as well as a comparison of our political system with other forms of government throughout the world.

### **Economics *or* Honors Economics *or* Gifted Economics - 1 Semester - Grade 12 - Required - Requires State End-of-Course Test (AP Macroeconomics or AP Microeconomics also satisfies this requirement.)**

Economics offers students the opportunity to study the issues of scarcity and choices related to the utilization of limited resources. Students learn how to apply the tools of economic analysis to personal, community, national and international issues. Economic preparedness enables students to make choices relying on past historical and geographical knowledge to actively and successfully engage in our complex society.

### **Law - 1 Semester - Grades 11-12**

This elective course develops an understanding of the basic components of the legal and criminal justice system in the United States. Students are offered an overview of civil and criminal law in this country as well as an examination of various legal institutions and processes (e.g. the police, the courts, rehabilitation systems, etc.)

**AP Microeconomics - 1 Semester - Grade 12 – Requires State End-of-Course Test (Will count for Economics Graduation Requirement)**

Advanced Placement Microeconomics gives students a thorough understanding of the principles of economics that apply to functions of individual decision makers, both consumers and producers, within the larger economic system. The course places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy.

**AP Human Geography - 2 Semesters - Grades 9-12**

The Advanced Placement program in Human Geography is designed to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to interpret human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice.

**AP Macroeconomics - 1 Semester - Grade 12 - Requires State End-of-Course Test (Will count for Economics Graduation Requirement)**

Advanced Placement Macroeconomics gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price determination, and also develops students' familiarity with economic performance measures, economic growth, and international economics. This course also satisfies the requirement for Economics.

**AP U.S. History - 2 Semesters - Grade 11 - Requires State End-of-Course Test (Will count for the U.S. History Graduation Requirement)**

The Advanced Placement program in United States History provides students with factual knowledge and analytical skills in the interpretation of the history of the United States from the 1600's through the 1990's. Political, economic, and social issues are stressed through the following topics: The Colonial Period; the American Revolution; the Jacksonian Period; Civil War and Reconstruction; Populism and Progressivism, the New Deal; and International Affairs and Domestic Changes in the Post 1945 Period.

**AP European History - 2 Semesters - Grades 11-12**

**Prerequisite – World History or Honors World History or Gifted World History**

The goals of the Advanced Placement Program in European History are to develop (a) an understanding of some of the principle themes in modern European history and (b) an ability to analyze historical evidence. Students are expected to demonstrate a knowledge of a basic chronology and of major events and trends from the Renaissance to the present. Students should also have some familiarity with those aspects of the late medieval period. The major themes to be covered are: political and diplomatic history, intellectual and cultural history, and social and economic history.

**AP World History - 2 Semesters - Grade 10**  
**(Will count for the World History Graduation Requirement)**

Focuses primarily on the past thousand years of the global experience, this course builds on an understanding of cultural, institutional, and technological foundations that, along with geography, set the human stage prior to the year 1000. Specific time periods from the organizing principle for dealing with change and continuity from that point to the present. Historical themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study.

**AP American Government - 1 Semester - Grades 11-12**  
**(Will count for the American Government graduation requirement.)**

The purpose of this Advanced Placement program is to provide an overview of government, politics, and political behavior at local, state, and national levels. Topics to be included: an examination of the structure, functions, and inter-relationships of various levels of government; political socialization; elections, the party system; and the role of the individual in American government. Students will be exposed to specific information about government and how government affects their daily lives.

**AP Comparative Government - 1 Semester - Grades 11-12**

This Advanced Placement program provides an introduction to the study of various forms of government which exist in the twentieth century. The course emphasizes the philosophical basis, as well as the political, social, and economic realities of capitalism, communism, socialism and fascism. The slowly changing structures of these ideologies will also be examined.

**AP Psychology - 2 Semesters - Grades 11-12**

Advanced Placement Psychology provides students with the opportunity to examine the scientific nature of psychology and to determine the relevance of the behavioral sciences in our lives today. Students will examine the issues leading to the development of psychology as a science as well as the issue currently being addressed in the field of human behavior.

**Peer Leadership I - 2 Semesters - Grades 11-12**  
**Prerequisite - Recommendation of Counselor**

This course provides students a framework for understanding the problem-solving process, taking opportunities to participate in meaningful activities that affect our society in positive ways (civic participation), utilizing conflict resolution skills, learning effective communication skills, adhering to ethical codes of practice, and exercising tolerance and advocacy of others' rights. This course can satisfy a Social Studies elective credit.

**VPP Citizenship - 6 Semesters - Grades 9-12**

This course is designed to provide students with a basic understanding of their rights and responsibilities as citizens; how the local, state and federal government operate; and the political process. Much emphasis is on civil law. Students enrolled in these courses are pursuing a Individualized Education Diploma and are in the VPP program.

**Adapted World Geography - 2 Semesters - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **Adapted World History - 2 Semesters - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **Adapted U.S. History - 2 Semesters - Grades 9-12 (Alternate)**

These courses are designed for students who require a modified curriculum. Successful completion of these courses will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **Adapted Political Systems - 1 Semester - Grades 9-12 (Alternate)**

This course is designed for students who require a modified curriculum. Successful completion of this course will satisfy requirements toward the Individualized Education Diploma or elective credit.

### **Adapted Economics - 1 Semester - Grades 9-12 (Alternate)**

This course is designed for students who require a modified curriculum. Successful completion of this course will satisfy requirements toward the Individualized Education Diploma or elective credit.

## **TECHNICAL EDUCATION**

### **BUSINESS INFORMATION TECHNOLOGY**

To earn a Technology/Career-Preparatory Diploma, students must complete three units within one Technical Education area of concentration plus one related unit. Business Information Technology offers a concentration of units that qualify for the Technology/Career-Preparatory Diploma. Careful course planning is required to achieve the concentration. See your counselor/teacher/advisor for further information on planning for the Technology/Career-Preparatory Diploma.

The Business Information Technology curriculum is designed to closely parallel technical skills and foundational business knowledge that is expected by employers and by colleges and universities in their business administration programs. Academic knowledge and skills in reading, writing, computation, and problem solving are reinforced in all Business courses.

### **Computer Applications – 2 semesters - Grades 9-12**

Knowing how to use computer applications software is a basic skill for everyone. Students will have the opportunity to gain basic computer skills needed for future education or employment plans. Students in this course will be introduced to word processing (MS Word), desktop publishing (MS Publisher), spreadsheet (MS Excel), database (MS Access), and presentation (MS PowerPoint) applications. Students will receive training on equipment and software that is most commonly used in business today. This course is suggested for all students and is a pre-requisite for several Business Information Technology Courses.

### **Accounting I – 2 semesters – Grades 10-12**

This course offers an introduction to the balance sheet; the general journal; the general ledger; classification and summary of income and expenses; and basic principles, terms, and procedures used in entering data in an accounting system. Additional emphasis is placed on journalizing, posting, checking of accounts, reconciling of bank statements, and working with adjustments and closing entries.

## **Accounting II – 2 semesters – Grades 11-12**

This course provides advanced instruction in departmentalized accounting procedures, cash funds, depreciation, uncollected accounts, notes, payables, receivables, unearned revenue, corporation dividends and capital acquisition, manufacturing costs, break-even points, and electronic spreadsheet information. Computerized and manual accounting systems will be used.

## **Banking – 1 semester - Grades 9-12**

This course provides instruction in banking, credit, and personal finance. Course content includes the history of banking, budgeting, negotiable instruments, personal banking accounts, consumer protection laws, banking services, technology in banking, and other related topics.

## **Business Data Applications – 2 semesters – Grades 10-12**

### **Prerequisite – Computer Applications**

This course provides core, intermediate and advanced level instruction on spreadsheet software used by colleges and businesses to solve problems. Continued integration of software and more emphasis on video instruction is provided to produce advanced multimedia presentations. Current Windows-based industry software and spreadsheet and data base software will be used.

## **Business Document Processing – 2 semesters – Grades 10-12**

### **Prerequisite-Computer Applications**

Business Document Processing focuses on the development of skills required for improved productivity of electronically produced business letters, reports, memos, and other documents. Advanced features including macros, columns, merging, tables, styles, automatic outlining, and other features to enhance business documents will be emphasized. In addition, this course focuses on development of skills required for improving productivity of electronically produced newsletters, brochures, and flyers. Students will utilize two popular desktop publishing pieces of software – Microsoft Publisher and Adobe PageMaker software.

## **Business Law – 1 semester – Grades 11-12**

This course is designed to develop a basic knowledge of the legal system and how business law impacts commerce domestically and internationally. Topics studied include structure of the court system, ethics, procedural contracts, sales contracts, consumer and agency contracts, employment, personal and real property, insurance, bankruptcy, wills and trusts, impact of technology, and environmental and energy regulation.

## **Business Management – 1 semester – Grades 11-12**

Business Management helps students understand various management theories, basic management functions and their interrelationships, and the organization and competitive niche of a business. This course will help students build a strong knowledge base and develop management skills as they study the functions of management; organizational structures; human resources management; financial management; operations management; general management skills; marketing/competitive advantage; ethics; and government regulations and community involvement.

### **Business Procedures – 1 semester – Grades 10-12**

#### **Prerequisite – Computer Applications and Teacher Recommendation**

This is a computer-based course that provides entry-level skills and knowledge for business management and office environments. Topics covered will include human relations, job application process, communication skills, document processing, management information systems, business etiquette, and business related software.

### **Business Procedures Internship – 2 semesters – Grades 10-12**

#### **Prerequisite – Business Procedures and Teacher Recommendation**

This course allows the student an internship within the school in selected office sites with supervised and evaluated non-paid work tied to the Business Procedures curriculum. No admittance without completion of Business Procedures and an approved application by the teacher.

### **Finance – 1 semester – Grades 9-12**

Using project-based instruction, students are introduced to the foundations of finance and the role finance, credit, savings, investments, and estate planning play in business. Various technological tools will be used to assist in modeling financial decisions. Business partnerships with financial service institutions, guest speakers, field trips, and work-based learning activities may be incorporated in this course.

### **International Business – 1 Semester – Grades 11-12**

International Business is designed to raise awareness of the interrelatedness of one country's political policies and economic practices. Understanding the global business environment and the interconnectedness of cultural, policy, legal, economic and ethnics will be covered.

### **Investing - 1 semester – Grades 11-12**

Using project-based instruction, students will formulate business and individual investment decisions by comparing and contrasting the investment qualities of cash, stocks, bonds, and mutual funds. Students will analyze annual reports, predict growth rates, and chart trend lines. Business partnerships with investment firms, stock market simulations, guest speakers, field trips, and work-based learning activities may be incorporated in this course.

### **Multimedia & Communication Technology – 2 semesters – Grade 10-12**

#### **Prerequisite – Computer Applications**

The purpose of Multimedia is to provide the student with a survey of multimedia applications. The course focuses on the hands-on creation of presentations and other applications using multimedia software that meets the standards of business and industry. Students will incorporate sound, clip art and scanned images into multimedia applications.

### **Risk Management and Insurance – 1 semester – Grades 11-12**

Using project-based instruction, students will analyze risk management techniques from the viewpoints of those employed in the industry as well as from that of business owners seeking to meet risk management needs. Insurance products will be evaluated in relation to cost and effectiveness. The importance of ethical practices is emphasized. Business partnerships with risk management companies, guest speakers, field trips, and work-based learning activities can be incorporated in this course.

## COMMUNICATION TECHNOLOGIES

To earn a Technology/Career-Preparatory Diploma, students must complete three units within one Technical Education area of concentration plus one related unit. Communication Technologies offers a concentration option of units that qualify for the Technology/Career- Preparatory Diploma. Careful course planning is required to achieve the concentration. See your counselor/teacher/advisor for further information on planning for the Technology/Career-Preparatory Diploma.

These courses are designed to provide students with a hands-on experience in the development of visual communication. Development of media includes project management, script development, editing, and studio work. Students work as a team producing news stories, editorials, features and documentaries. This media is broadcast through school video labs and provides a communication service for the learning community. Students will acquire the knowledge and skills to be lifelong effective consumers and producers of visual. It is recommended that students have basic computer skills, keyboarding skills, and strong written communication skills.

### **Video Broadcast Journalism/Video Production I - 2 Semesters - Grades 9-12**

#### **Prerequisite - None Required**

The program seeks to integrate recent trends in the study of mass communications into a class that is appropriate for an advanced level course. Skills will be developed in basic theory, practice and operations of equipment related to a television studio, the portable camera, and videotape editing. Through problem-solving activities, projects, and discussions, knowledge of how video/film affects life and society will be demonstrated. Students also learn about video and film equipment operation, cover switches, camera, lighting, audio boards and tape machines.

### **Video Broadcast Journalism/Video Production II - 2 Semesters - Grades 10-12**

#### **Prerequisite – VBJ I**

Through problem solving activities, projects and discussions, knowledge of how film/video affects life and society will be demonstrated. Additionally, study will be conducted on recent trends in mass communication. This course enhances prerequisite skills and provides instruction in producing non-narrative videos, and commercials.

### **Video Broadcast Journalism/Video Production III - 2 Semesters - Grades 11-12**

#### **Prerequisite – VBJ I & II**

This course will enhance prerequisite skills and provide instruction in producing narrative videos. Students should be able to perform at an independent level of proficiency. This course builds upon prerequisite skills by requiring students to analyze, evaluate and synthesize the body of video work created during the student's high school career, and to develop a substantial video portfolio based upon this work for public presentation.

### **Video Broadcast Journalism/Video Production IV - 2 Semesters – Grade 12**

#### **Prerequisite – VBJ I, II, & III**

This course offers the advanced video production student the chance to pursue independent study in video production. The student will produce a number of short videos on selected topics. Students will be able to perform at an independent level of proficiency. This course will allow advanced production students a chance to pursue independent studies in video production. The student will produce a number of short videos on selected topics. Students will perform at an independent level of proficiency.



## COMPUTER SCIENCE

To earn a Technology/Career-Preparatory Diploma, students must complete three units within one Technical Education area of concentration plus one related unit. Computer Science offers a concentration option of units that qualify for the Technology/Career Preparatory Diploma. Careful course planning is required to achieve the concentration. See your counselor/teacher/advisor for further information on planning for the Technology/Career-Preparatory Diploma.

### **Computing in the Modern World - 2 semesters - Grades 9-12**

The purpose of this course is to provide all students with an introduction to the principles of computer science and its place in the modern world. This course should also help students use computers effectively in their lives, thus providing a foundation for successfully integrating their own interests and careers with the resources of a technological society. Students will gain a fundamental understanding of the operation of computers, networks and will create useful programs implementing simple algorithms. By developing Web pages that includes images, sound, and text, they will acquire a working understanding of the Internet, common formats for data transmission, and insight into the design of the human-computer interface. Exposure to career possibilities and discussion of ethical issues relating to computers will also be important threads in this course.

### **Introduction to Programming - JAVA - 2 Semesters - Grades 10-12**

#### **Prerequisite – One unit of Algebra I or Teacher Recommendation**

The major goal of this course is for students to develop the computer science skills of algorithm development, problem solving, and programming. While the emphasis of the course will be on programming, students will also be introduced to other important topics, such as careers, the limits of computing and the difference between interpreters and compilers.

### **Advanced Placement Computer Science (JAVA for AP Test) - 2 Semesters - Grade 11-12**

#### **Prerequisite- JAVA Computer Programming Course is highly suggested, but not required**

The purpose of the Advanced Placement Computer Science course is to provide the student with a course equivalent to a first-year college computer science course. Through the intense study of structured programming in JAVA, the student will be provided an opportunity to become proficient in programming methodology, algorithms, and data structures. Applications are chosen to develop student awareness of the necessity for particular algorithms and data structures. Topics concerning computing systems and social implications of electronic computing are integrated into the course. An ultimate goal of the class is to prepare the student for the successful completion of the Advanced Placement Computer Science Test.

### **Computer Networking - CISCO - 4 Semesters - Grades 11-12**

#### **Prerequisite - Teacher Recommendation**

This course is designed to provide fundamental steps toward achieving CISCO Networking Certification. Check local school availability. Class limited to selected students who meet criteria.

## **IT Foundations - 2 Semesters - Grades 11-12**

### **Prerequisite - Teacher Recommendation**

This course is designed to enable students to pursue certification in A+, NET+, or iNET+. The students will receive instruction in hardware, software and networking principles that are at the base of these certification programs. Emphasis will be given about the careers available to students after they have been certified in these available areas.

This course is only offered at schools with IT labs. See your counselor for information.

## **Web Development and Design - 2 Semesters - Grades 9-12**

### **Prerequisite – Computer Applications or Multimedia or Teacher Recommendation**

Web Development and Design will include an overview of the basic principles of designing web pages. Students will utilize the planning process to create web pages. HTML and Javascript programming techniques will be taught in preparation for use of the web page design program, Microsoft FrontPage. Students will use Microsoft FrontPage to create and maintain web sites. Second semester activities provide students with an opportunity to apply their HTML/Web Design knowledge. Students will design, build, manage, and deploy high-quality, low maintenance web pages that include animation, interactive content, and photo editing. The school web site may be an ongoing project for this class. This course may offer initial Certified Internet Webmaster exam.

## **COOPERATIVE BUSINESS EDUCATION**

### **Cooperative Business Education I – 2 semesters – Grades 11-12**

CBE is a cooperative work-training program for high school juniors and seniors preparing for full-time employment in business occupations. CBE provides students the opportunity to combine their knowledge, skills and techniques learned in business classes and apply the skills to on-the-job training. CBE prepares students for occupational flexibility and job mobility in business occupations. The related classroom instruction and coordinated on-the-job experiences are designed to foster self-confidence, self-sufficiency and self-discipline.

### **Cooperative Business Education II – 2 semesters – Grade 12**

This course is a continuation of Cooperative Business Education I. The CBE student-trainee will demonstrate his/her skills through project-based simulations. Students complete practical, realistic applications and create materials suitable for portfolio evaluation. CBE II continues to prepare students for occupational flexibility and job mobility in business occupations. The related classroom instruction and coordinated on-the-job experiences are designed to foster self-confidence, self-sufficiency and self-discipline.

### **Cooperative Business Education Work Experience – 2 semesters – Grade 11-12**

Cooperative Business Education (CBE) is a cooperative work-experience program for high school juniors and seniors who are preparing for full-time employment in business occupations. It is the “capstone” of the business education program, where the knowledge, skills and techniques learned separately are brought together and applied to an actual employment opportunity.

**CREDIT NOTE:** Students enrolled in a **double period** of work experience must work a minimum of 20 hours per week (1 unit credit per semester). Students enrolled in a **single period** of work experience must work a minimum of 15 hours per week ( $\frac{1}{2}$  unit credit per semester). Students who may wish to work three (3) periods of work must work 25 hours per week and must apply for special permission for 3-period work. Approval is limited but possible.

## **FAMILY AND CONSUMER SCIENCE**

To earn a Technology/Career-Preparatory Diploma, students must complete three units within one Technical Education area of concentration plus one related unit. Family and Consumer Science offers a concentration option of units that qualify for the Technology/Career-Preparatory Diploma. Careful course planning is required to achieve the concentration. See your counselor/teacher/advisor for further information on planning for the Technology/Career-Preparatory Diploma.

### **Introduction to Family and Consumer Science - 2 Semesters - Grades 9-12**

This course introduces the various subject areas of Family and Consumer Sciences. The students will receive a foundation in Individual and Family Development, Food and Nutrition, Housing and Resource Management, Design, Textiles and Apparel. Careers will be explored.

### **Child Development - 2 Semesters - Grades 10-12**

#### **Prerequisite - Individual and Family Development and Responsible Parenting**

This course included the study of the physical, emotional, social and intellectual development of children from the end of the first year through pre-school. A student planning on a career in early childhood education, pediatric medicine or childcare in the private sector will be able to utilize the knowledge and skills gained in this course to improve their job performance.

### **Design: Interior and Fashion Technology - 2 Semesters - Grades 10-12**

This course enables students to explore trends and technological advancements in the areas of fashion and interiors. The focus of this class will be on teaching the students to recognize and apply the principles and elements of design. It will also enable a student to gain consumer skills and to explore career opportunities in both the areas of fashion and interiors.

### **Elder Care - 1 Semester - Grades 10-12**

This course provides students with the opportunity to study the physical, mental, social and emotional needs of older adults. Emphasis is placed on planning, organizing, and conducting activities that promote physical, social and emotional growth for the elderly. Students will study and carry out projects related to nutrition, housing needs, and financial planning for older adults. Students will plan and carry out project activities that give them experience with elderly individuals.

### **Family and Child Service Occupations - 2 Semesters - Grades 11-12**

#### **Prerequisite - Individual and Family Development, Responsible Parenting and Child Development**

This course provides students a hands-on opportunity to learn how they can be active and effective participants in an early childhood classroom. Experiences will include the organizing and managing of the classroom, protecting the health and safety of children, and the planning of appropriate activities.

### **Food Services Occupations - 2 Semesters - Grades 11-12**

#### **Prerequisite - Nutrition and Food Science I and Nutrition and Food Science II or Teacher Recommendation**

This advanced level course is an invaluable foundation to build upon for any career in hospitality, catering, health occupations, restaurant/hotel management or other food-related occupations. Advanced culinary and quantity preparation techniques form the basis of this laboratory oriented class. Students will gain invaluable experience and skills whether they go on to college, culinary school or straight into a position in food service. Students will exit this course with a completed portfolio.

### **Independent Living - 1 Semester - Grades 10-12**

The student will gain knowledge and skills needed for independent living. The course will examine career options, workplace requirements, financial management, consumer issues, housing selection and management, food and nutrition essentials and wardrobe management.

### **Individual and Family Development - 1 Semester - Grades 10-12**

The student will develop insight into personal growth and development. The course will examine the individual and the family as it relates to responsibilities and the development of relationships. Effective communication skills, family crises management, and goal setting will be explored.

### **Nutrition and Food Science I - 2 Semesters - Grades 9-12**

This course provides instruction in basic principles of nutrition for the encouragement of health and wellness. Food consumerism, basic food preparation, techniques, technology in the food lab, and safety and sanitation are taught in this course. In addition, U.S. regional foods and a variety of ethnic food patterns will be included.

### **Nutrition and Food Science II - 2 Semesters - Grades 10-12**

#### **Prerequisite - Nutrition and Food Science I**

This course gives students insight into the many career possibilities in the food and hospitality industry. The focus of this course includes advanced lab technology, resource management, and advanced culinary techniques.

### **Responsible Parenting - 1 Semester - Grades 10-12**

This course will include the study of the stages of growth and development from the prenatal stage through the first year of life, child health and safety, discipline, and the selection of child care facilities. Also included are parenthood responsibilities, human sexuality, pregnancy, prenatal care, and special needs of children.

## **MARKETING EDUCATION (ME)**

To earn a Technology/Career-Preparatory Diploma, students must complete three units within one Technical Education area of concentration plus one related unit. Marketing Education offers a concentration option of units that qualify for the Technology/Career-Preparatory Diploma. Careful course planning is required to achieve the concentration. See your counselor/ teacher/advisor for information on planning for the Technology/Career-Preparatory Diploma.

A maximum of 3 Carnegie units per year may be earned in an ME program. One unit for classroom instruction per year and two units for the marketing internship per year may be earned. Students take four regular classes including an ME class and normally leave school after the fourth period each day for community employment in marketing businesses. Once accepted in the ME program, students are encouraged to remain for the full year. Each of the following courses requires the permission of the ME Coordinator for enrollment.

## **Marketing Principles and Practices - 1 Semester - Grades 11-12**

### **Prerequisite - ME Coordinator Recommendation**

This course provides an overview of the total Marketing Education program and its components, presents employment opportunities in marketing, prepares students for job interviews, incorporates human relations and communications in business, and explores the role of marketing in our economy. Marketing functions, marketing concepts, channels of distribution, special markets, and trends in marketing are taught. A study of retail operations, career opportunities, store location and layout, organizational structure, and merchandising policies are covered.

## **Entrepreneurship - 1 Semester - Grades 11 - 12**

### **Prerequisite - Marketing Principles and Practices and ME Coordinator Recommendation**

This course is designed to introduce the student to the role of small business in contemporary society. Students are given the opportunity to study, discuss and apply the principles and methods of small business organization and management with an emphasis on the marketing mix. Students participate in a project which includes business planning and management.

## **Fashion Marketing - 2 Semesters - Grades 10-12**

### **Prerequisite - ME Coordinator Recommendation**

This course describes the environment in which fashion thrives; introduces the terminology and basic elements of fashion; identifies the factors that influence fashion behavior; gives an historical perspective of fashion; traces the movement of fashion; identifies fashion leaders and followers; explores each of the fashion industries; presents methods of promotion, selling and coordination; and explains the development of a fashion image.

## **International Marketing - 1 Semester - Grades 11-12**

### **Prerequisite - Marketing Principles and Practices and ME Coordinator Recommendation**

This course is designed to introduce students to aspects of marketing products and services in the global marketplace and the career opportunities available in this field. The course analyzes the economic, cultural, and political factors needed to facilitate trade on a global scale.

## **Promotion in Marketing - 1 Semester - Grades 11-12**

### **Prerequisite - Marketing Principles and Practices and ME Coordinator Recommendation**

This course emphasizes the various methods to promote goods and services. Advertising, media selection, display techniques, ad layout principles, and the basic steps in selling are explored. Product service technology, human relations, and communications are covered. Students must apply their knowledge in a promotional simulation.

## **Advanced Marketing Seminar - 1 Semester - Grade 12**

### **Prerequisite - Completion of minimum of three ME courses and ME Coordinator Recommendation**

In this seminar, the student undertakes research, analysis, and recommendation for solution of a marketing problem (or instead, the investigation of a specific area of marketing) under the direction of the ME coordinator. The curriculum is arranged and outlined in a grade contract.

### **Sport and Event Marketing Fundamentals- 1 Semester - Grades 11-12**

#### **Prerequisite- Marketing Principles and Practices and ME Coordinator Recommendation**

This course introduces students to the major segments of the Sport/Event Industry and the social and economic impact the industry has on the global economy with emphasis on business fundamentals, product mix, product knowledge, product/service management, business regulation, selling, marketing information management, and economics. Project-based instruction will be incorporated in this course to provide real-world application.

### **Sport and Event Marketing Management - 1 Semester - Grades 11-12**

#### **Prerequisite - Sport and Event Marketing Fundamentals and ME Coordinator Recommendation**

This course provides students opportunities to develop managerial and analytical skills and deepen their knowledge in sport/event marketing. The prerequisite to this course is Sport and Marketing Fundamentals with emphasis on marketing information management, selling, publicity/public relations, sales promotion, management of promotion, product mix, pricing, brand positioning, and marketing planning. Project-based instruction will be incorporated in this course to provide real-world application.

### **Marketing Laboratory - 2 Semesters - Grades 11-12**

#### **Prerequisite - ME Coordinator Recommendation**

This course is designed to allow a student to utilize knowledge, skills, and attitudes learned in the classroom in operating the marketing laboratory.

### **Marketing Internship I (2 semesters) and II (2 semesters) - (5th and 6th periods); or (6th period only) – Grades 11-12**

**Prerequisite - Enrollment by recommendation of ME Coordinator; student must be at least 16 years old, meet the prerequisites of the program, and be currently enrolled in a marketing class. Students desiring three (3) periods of Marketing Internship must see the Coordinator and meet guidelines set by the County.**

Student enrolled in the Marketing Education program acquire work experience and training with a business person who provides part-time marketing employment for which students receive school credit plus pay. A minimum of 15 hours work experience per week in an approved marketing job is required to earn course credit.

Credit Note: Students enrolled in a **single period** internship must work a minimum of 15 hours per week (½ unit credit per semester). Students enrolled in a **double period** internship must work a minimum of 20 hours per week (1 unit credit per semester). Students enrolled in a **triple period** internship must work a minimum of 25 hours per week (1 ½ units per semester).

## **GRAYSON HIGH SCHOOL TECHNICAL EDUCATION PROGRAM**

Grayson High School Technical Program offers innovative instructional programs for both college prep and technical prep students in a state-of-the-art facility located on the Grayson High School campus. **Juniors and seniors from all GCPS high schools may enroll in these programs.**

The following programs are offered: Biotechnology; Commercial Photography; Culinary Arts; Environmental Horticulture; Environmental/Conservation Science; Digital Media, Design & Animation; Hospitality, Travel and Tourism; IT: Computer Network Systems and Support; Public Safety; Music Recording; Music Technology; Veterinarian Technology; Technical Theater; and Video Production. There are also opportunities for articulation with post-secondary institutions and internships/apprenticeships through many of the programs!

Students may register for the Grayson Technical Programs via their local high school registration process. Students are expected to remain in the program the entire year. Each program consists of a 2 ½ hour block class both first and second semester. Students enroll for their core classes at their home high school during a portion of the day and then travel to the Grayson campus for their technical block concentration class for the other portion of their day. Students may also transfer to Grayson High School to take both their technical block and core classes. Students must provide their own transportation to Grayson High School.

Students wishing to earn a Technology/Career Prep Diploma must complete three (3) units within one technical area of concentration, plus one related unit. Counselors can assist with further information on planning for both college and technical diploma requirements.

*\*Waiver granted by Georgia Department of Education for noted course(s) to count as technical credit. Waiver is subject to renewal on an annual basis.*

### **Biotechnology**

The biotechnology program focuses on the development of skills and content that will allow students to pursue careers in the booming biotechnology industry. Students that participate in the biotechnology program could choose several post secondary educational options within the state of Georgia.

#### **Biotechnology in Agriculture I - (Required for Biotechnology Concentration) - 1 Semester – (1 ½ units) - Grades 11-12**

Biotechnology simply defined is the use of living organisms to benefit human existence. This course will serve as an introduction to agricultural biotechnology. Emphasis will be placed on the development of industry related skills as well as comprehensive content related to the use of plants and microorganisms. Special attention will be paid to the history of biotechnology, current ethical issues associated with the use of biotechnology, and post secondary options associated with the skills and content learned in the course. Classroom and laboratory activities are supplemented through leadership programs and activities.

#### **Biotechnology in Agriculture II - (Required for Biotechnology Concentration) - 1 Semester – (1 ½ units) - Grades 11-12**

This will be a continuation of the first semester with emphasis being placed the development of skills as well as comprehensive content related to the use of animals. Special attention will be placed on ethical issues associated with the use of animals for human use, human biotechnology, and pharmaceutical research. Career choices for individuals and a projected plan of action will be developed for each student. Classroom and laboratory activities are supplemented through leadership programs and activities.

**Plant Science and Biotechnology - (Elective for Biotechnology Concentration) - 1 Semester – (1 ½ units) – Grade 12**

This course introduces the scientific theories and principles used in the production and management of plants for food, feed, fiber, soil conservation and aesthetic value. Special emphasis will be placed on industry relevant skills related to plant biotechnology and the genetic manipulation of plants to produce desired products. There is a required research project that may be presented at the Georgia state FFA Agriscience Fair. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs and activities. This course may count as either a science elective credit or a technical education concentration or elective credit. This course is designed for students that have completed the prerequisite course of study in Biotechnology at Grayson Technical.

**Animal Science and Biotechnology - (Elective for Biotechnology Concentration) - 1 Semester – (1 ½ units) – Grade 12**

This laboratory course is designed to introduce students to the scientific principles that underlie animal science. The focus is on biotechnology skills utilized for animal agricultural production. There will also be a required research project that will require the student to utilize previously learned biotechnology skills. Instruction may include information regarding breeding, husbandry, and animal care. This course is designed for students that have completed the prerequisite course of study in Biotechnology at Grayson Technical.

**Commercial Photography \***

**Commercial Photography I (Required for Commercial Photography Concentration) - 1 Semester (1 ½ units) - Grades 11-12**

This course introduces students to the creation of images using light sensitive materials. The technical areas addressed are camera and lens theory, basic light and optics, exposure controls, fundamental darkroom operations, safety, chemistry, paper and film theory, black and white printing, and equipment usage. Students are introduced to basic lighting and flash photography as well as historical and contemporary development in photography.

**Commercial Photography II (Required for Commercial Photography Concentration) - 1 Semester (1 ½ units) - Grades 11-12**

Students create commercial photographic images using professional quality cameras, lighting, light-meters, strobes, flash units, backdrops and props. Students are introduced to studio lighting effects and techniques. Darkroom assignments include the materials, paper, printing techniques, and chemistry associated with commercial darkroom operations. Students will study and research historical and contemporary developments in photography.

**Commercial Photography III (Elective for Commercial Photography Concentration) - 1 Semester (1 ½ units) – Grade 12**

As a growing part of commercial photography, students will be introduced to the creation of images using electronic digital still cameras, scanners, video cameras, and digital studio cameras. All final work will be the product of photo imaging using Adobe Photoshop and other relevant software. The work will be illustrative, documentary, photojournalistic, and experimental in nature. The traditional skills of the re-toucher will be explored in an electronic format, as well as, the changing role of digital photography in the new world of web/internet/intranet publications. This course is designed for students that have completed the prerequisite course of study in Photography at Grayson Technical.



**Internship in Commercial Photography - (Elective for Commercial Photography Concentration)  
- 1 Semester (1 ½ units) - Grade 12**

The internship is designed to provide on-the-job, site-based training experiences for Commercial Photography students in their area of interest within the field of commercial photography. An internship requires supervision by the course instructor, training plans, training agreements and special on-the job projects that are jointly evaluated by the employer and the instructor. Internship students may or may not be paid. This course is designed for students that have completed the prerequisite course of study in Commercial Photography at Grayson Technical.

**Culinary Arts**

**Professional Foods I - 1 Semester (1 ½ units) - Grades 11-12 (Required for Culinary Arts Concentration)**

This course is for students serious about pursuing a career as an entry-level food service worker. This course builds upon the knowledge and skills learned in Nutrition and Food Sciences I & II and/or Food Service Occupations courses and include the foundations for professional cooking. It provides a focus on the fundamentals of the professional kitchen including food safety and sanitation (ServSafe), culinary math, principles and processes of cooking in a professional kitchen, food identification, commercial preparation of all menu categories, and basic front of the house operations, which may lead to future employment in the hotel/restaurant and food service industry. This course offers the student an opportunity to become nationally certified by taking the National Restaurant Association Educational Foundation's (NRAEF) ServSafe Exam for a fee of \$35.00.

**Professional Foods II - 1 Semester (1 ½ units) - Grades 11-12 (Required for Culinary Arts Concentration)**

This course is for students serious about pursuing a career as an entry-level food service worker. This course builds upon the knowledge and skills learned in the Advanced Culinary Arts I course and includes the foundations for professional baking. It provides a continued focus on the fundamentals of food safety and sanitation, meal preparation, and front of the house operations in addition to the foundations of baking and pastry, food science, nutrition and menu planning, and food service operations. It provides an advanced level of food preparation and service, which may lead to future employment in the hotel/restaurant and food service industry. Additionally, students enrolled in this course are required to compete in industry sponsored student culinary competitions.

**Internship in Culinary Arts - 2 Semesters (3 units) – Grade 12 (Elective for Culinary Arts Concentration)**

The internship is designed to provide on-the-job, site-based training experiences for Culinary Arts students in their area of interest within the field of culinary arts. An internship requires supervision by the course instructor, training plans, training agreements, and special on-the job projects that are jointly evaluated by the employer and the instructor. Internship students may or may not be paid. Additionally, students enrolled in this course are required to compete in industry sponsored student culinary competitions. This course is designed for students that have completed the prerequisite course of study in Culinary Arts at Grayson Technical.

## **Digital Media, Design and Animation**

### **Digital Media and Design – 1 Semester (1 ½ units) – Grades 11-12 (required for Digital Media Design concentration)**

Students in this course master the fundamentals of graphic design and production. The principles are applied to printed media, digital presentation media, and interactive media. Students who take Digital Media and Design should be intrigued with visual design and computer technology. This is a hands-on class in which industry-standard software such as Adobe Illustrator, Adobe Photo Shop, Adobe Premiere, and Adobe InDesign are taught. Students also study digital photography, video production, web design and digital sound in this first semester class.

### **Graphics & Animation Foundations – 1 Semester (1 ½ units) – Grades 11-12 (Required for Digital Media Design Concentration)**

Students learn the foundational knowledge and skills required in graphic applications and animation. The principles of animation are applied to animation for storytelling and the web in this hands-on class. Industry-standard software and technology are used as students learn both 2D and 3D animation applications such as Flash and Maya.

### **Advanced Digital Media and Design – 1 Semester (1 ½ units) – Grade 12 (Elective for Digital Media Design Concentration)**

The course provides advanced instruction in digital media design, production and the use of graphics and animation. It is project intensive and incorporates advanced use of technology to produce products. This course is designed for students that have completed the prerequisite course of study in Digital Media at Grayson Technical.

### **Internship in Advanced Digital Media and Design – 1 Semester (1 ½ units) – Grade 12 (Elective for Digital Media Design Concentration)**

The internship is designed to provide on-the-job, site-based training experiences for Digital Media, Design and Animation students in their area of interest within the field of digital media, design and animation. An internship requires supervision by the course instructor, training plans, training agreements and special on-the job projects that are jointly evaluated by the employer and the instructor. Internship students may or may not be paid. This course is designed for students that have completed the prerequisite course of study in Digital Media at Grayson Technical.

## **Environmental/Conservation Science**

The Environmental/Conservation Science Program consists of courses which focus on the management and conservation of our world's natural resources. All classes emphasize a hands-on learning approach with regular laboratory activities and multiple site visits. Students are given multiple opportunities to gain information about post-secondary options and career exploration within their chosen area(s) of interest.

### **Natural Resource Management & Conservation - 1 Semester (1 ½ units) - Grades 11-12 (Required for Environmental Science Concentration)**

This is a laboratory based course designed to prepare students for involvement in the conservation and management of natural resources such as air, soil, water, forests, land, fish and wildlife for economic and recreational purposes. Information on current and future issues relating to natural resources that our generation will face will also be addressed through the course of the semester. Students will also be provided with multiple opportunities to explore careers within the field of natural resources. Classroom and laboratory activities are supplemented through leadership programs and activities.

### **Forestry Science- 1 Semester (1 ½ units) - Grades 11-12 (Required for Environmental Science Concentration)**

This course provides entry-level skills for employment in the forest industry and for further study. Units of study include: compass orienteering and mapping, tree and land measurements, tree identification, establishing forests by natural and artificial means, maintaining and surveying forests, silviculture, preparing for timber sales and harvest, keeping records, and urban forestry. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

### **Forest Management for Wildlife - 1 Semester (1 ½ units) – Grade 12 (Elective for Environmental Science Concentration)**

This course provides students with a more in-depth knowledge of wildlife management and prepares students to recognize opportunities in forestry for developing wildlife habitats. Units of study include: wildlife identification (wildlife of Georgia will be the main focus), wildlife habitat and food requirements, reproduction, management of wildlife populations, instruction in selection of tree and forage species, development of food plots, tree harvesting methods to conserve wildlife, predator/prey relationships and control, hunting and hunting leases, firearm safety, game and fish laws and regulations, trapping and taxidermy. Classroom and laboratory activities are supplemented through leadership programs and activities. This course is designed for students that have completed the prerequisite course of study in Environmental Science at Grayson Technical.

### **Internship in Environmental/Conservation Science - 1 Semester (1 ½ units) – Grade 12 (Elective for Environmental Science Concentration)**

The internship is designed to provide on-the-job, site-based training experiences for Environmental/Conservation Science students in their area of interest within the broad field of environmental science. An internship requires supervision by the course instructor, training plans, training agreements, and special on-the job projects that are jointly evaluated by the employer and the instructor. Internship students may or may not be paid. This course is designed for students that have completed the prerequisite course of study in Environmental Science at Grayson Technical.

### **Environmental Horticulture**

The “green” industry is one of the fastest growing and diverse industries in Georgia. The Environmental Horticulture program at Grayson will give students the foundation needed for a rewarding career in this field. Some of the exciting career options available to our graduates include: Landscape design, management and installation, nursery/greenhouse production, management, and sales, and garden center management and sales.

### **Landscape Design and Management – 1 Semester (1 ½ units) – Grades 11-12 (Required for Horticulture Concentration)**

Students study landscape design, management, and installation, as well as plant materials (plant identification), and plant cultural practices. They also receive specialized training in graphics, site analysis, site inventory, client interview techniques, soils and grading, turfgrass management and disease and insect control. Students will apply their skills learned in the classroom to real-world projects. Students will design several landscapes for clients one of which will be their own home. In addition, students receive computer training in the use of ProLandscape software package which includes image editor, planner (similar to LandCADD program), and proposal generator. Students will also be installing some of the projects that they design.

### **Floriculture Production and Management – 1 Semester (1 ½ units) – Grades 11-12 (Required for Horticulture Concentration)**

The floriculture class is designed to be a “hands-on” greenhouse learning experience. Various greenhouse practices will be employed in production of pot crops and/or carrying out plant growth experiments. Students will gain practical experience with techniques such as watering, fertilizer mixing, potting and general greenhouse knowledge. Students will learn propagation techniques such as rooting stem and leaf cuttings, air layering, grafting, and tissue culture. Students will continue with the study of plant materials and plant identification. Students will also study floral design and will construct several arrangements. These floral arrangements will include their own corsages and/or boutonnieres for prom. The students will also grow the plants, market and run the spring plant sale.

### **Horticulture - 1 Semester (1 ½ units) – Grade 12 (Elective for Horticulture Concentration)**

This course builds on the student’s first year knowledge and skills in horticulture. This course is designed to prepare students to produce process and market ornamental plants and to manage a horticultural enterprise. Students will learn plant identification, landscaping basics, landscape construction, botany and how to use plants for aesthetic purposes. This is a practical hands-on class that will allow the student to engage in a variety of projects both in the classroom and in the greenhouse. The students will completely organize, order plant materials and supplies, grow and sell the plants for the fall and spring sales. This course is designed for students that have completed the prerequisite course of study in Horticulture at Grayson Technical.

### **Nursery Production and Management - 1 Semester (1 ½ units) – Grade 12 (Elective for Horticulture Concentration)**

This course introduces systematic cultural practices and business procedures used in nursery businesses. It covers the production, marketing and distribution of landscape plants and related landscape materials. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs and activities. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs and activities. This course is designed for students that have completed the prerequisite course of study in Horticulture at Grayson Technical.

## **Hospitality/Travel/Tourism**

### **Intro to Hotel, Travel and Tourism - 1 Semester (1 ½ units) - Grades 11-12 (Required for Hospitality Concentration)**

This course introduces the student to the major segments of the Hotel/Lodging and Travel/Tourism industry and the economic impact the industry has on the local, state, national and global economy. The products, services and packages offered to the business and leisure travelers by different types of businesses in the industry are examined. Utilizing current technology, the Internet, and software packages, students develop a tour package and marketing plan for a selected niche market that incorporates appropriate promotional and pricing strategies that ensure business profitability. The course is articulated with a course at Gwinnett Technical College for credit at the postsecondary level.

### **Hotel and Lodging - 1 Semester (1 ½ units) - Grades 11-12 (Required for Hospitality Concentration)**

This course explores the fundamentals of operation and marketing in this major services industry. Students study front desk operations, marketing/sales activities and guest services. Case studies and field experiences are emphasized. This course is articulated with a course at Gwinnett Technical College for credit at the postsecondary level.

### **Internship in Hotel/Travel/Tourism - 2 semesters (3 units) – Grade 12 (Elective for Hospitality Concentration)**

This course enhances work-site learning experiences for students in the Hotel/Travel/Tourism industry. It requires supervision by the instructor, a training plan, and training agreement evaluated by the employer and the instructor. Internship students may or may not be paid. The program must meet Work-Based Learning Standards. This course is designed for students that have completed the prerequisite course of study in Hospitality at Grayson Technical.

## **IT: Computer Network Systems and Support**

### **Information Technology Foundations - 1 Semester (1 ½ units) – Grades 11-12 (Required for IT Concentration)**

This course develops in-depth skills in information technology, software systems management, operating systems, desktop and server hardware, and networking technology. Troubleshooting and user support are central components in a communication-driven course. Students also develop an awareness of the social, ethical, and legal issues in the information technology field approaching challenges from a business perspective. Students who find working with computers in their free time fun and have goals to enter a computer-related field will find this course rewarding.

### **Programming and Business Systems - 1 Semester (1 ½ units) – Grades 11-12 (Required for IT Concentration)**

Students in this course focus on systems analysis and design, learning basic programming concepts, applied object-oriented programming languages, software development, and database administration, including SQL. The course will also cover advanced topics, such as rapid application development, and web-application development to meet changing needs. This is not an entry-level course. Previous programming languages and computer classes are helpful, but not required.

## **Internship in Information Technology - 2 Semesters (3 units) – Grade 12 (Elective for IT Concentration)**

The internship is designed to provide on-the-job, site-based training experiences for IT students in their area of interest within the IT field. Placement depends on student compatibility with available industry opportunities. The course requires supervision by the instructor, a training plan, and a training agreement evaluated by the employer and the instructor. The program must meet Work-Based Learning Standards. Internship students may or may not be paid. This course is designed for students that have completed the prerequisite course of study in IT: Network Systems at Grayson Technical.

### **Music Recording \***

#### **Foundations of Sound and Recording (Required for Music Recording Concentration) - 1 Semester (1 ½ units) - Grades 11-12**

This course develops an understanding of the techniques and technology involved in modern multi-track recording and mixing. Course topics include the basic physics of sound, amplitude, frequency, and movement of sound through acoustic space. Instrument sounds will be studied in order to understand proper microphone placement (settings of microphone pre amps, equalizing, compressing, and mixing). Also covered will be the basic flow of audio as it relates to cables, connectors, and patch-bays. Various components of the mixing console, amplifier, speakers, tape machines, channel strips, master sections, and digital workstations will be studied. A description and function of each device will be studied. This course offers hands-on experience.

#### **Advanced Recording and Post-Production Techniques (Required for Music Recording Concentration) 1 Semester (1 ½ units) - Grades 11-12**

This course presents an advanced, hands-on approach to the principles of tape-less digital recording on a variety of digital workstation platforms, and the application of audio/studio technology in the production of audio for video/film/television. Training will include disk-based digital audio, synchronization, audio for video and film, and multi-channel sound mixing techniques. The course focuses on the use of digital audio workstations in an audio post-production environment, including microphone setups for instrument and voice, acoustics, equalization, level settings, and compressors. Advanced editing, goal setting, various time-code formats, and audio synchronization will be covered in this course.

#### **Multi-Channel Audio and Applied Digital Audio (Elective for Music Recording Concentration) 1 Semester (1 ½ units) Grade 12**

This course presents an overview of multi-channel audio technology. The history and development of multi-channel audio systems for music production are presented. Current trends in multi-channel digital audio technology are developed. The course also presents an overview of digital audio technology. Students will discuss multi-channel encoding/decoding, formats and standards such as Dolby Digital (AC-3), DTS, and THX and create DVDs. Course offers extensive hands-on experience on a digital audio workstation. This course is designed for students that have completed the prerequisite course of study in Music Recording at Grayson Technical.

**Internship in Audio Productions (Elective for Music Recording Concentration) 1 Semester (1 ½ units) – Grade 12**

This course focuses on the production of recorded music and arranging. It provides the opportunity to create a commercial music product. Students will study song selection, chart reading, record planning, budgeting and other related topics. Students will also apply the skills learned in the foundational and elective music recording courses by completing an internship in a live studio and music recording environment. This course is designed for students that have completed the prerequisite course of study in Music Recording at Grayson Technical.

**Music Technology \***

**Introduction to Music Technology and Production (Required for Music Technology Concentration) - 1 Semester (1 ½ units) - Grades 11-12**

This course presents and explores the concepts of current music technology and its use in music production methods. Open to students with formal music experience, this class creates audio music projects based on commercial music applications such as music beds for video. MIDI sequencing is learned, as well as music composing and arranging. The acoustics of music are studied, and students also learn how to setup and operate sound systems.

**Intermediate Music Technology and Production (Required for Music Technology Concentration) - 1 Semester (1 ½ units) - Grades 11-12**

A continuation of the first semester, this course allows students with music reading skills and performance experience to examine more complex sequencing practices combined with digital audio recording. Students learn film scoring, audio editing, recording techniques, and sound effects production, along with using virtual instruments. The final project consists of an original song recorded and produced to CD.

**Public Safety**

**Foundations of Public Safety and Criminal Justice - 1 Semester (1 ½ units) - Grades 11-12 (Required for Public Safety Concentration)**

Students wishing to pursue a career in public safety will begin with the Foundations of Public Safety and Criminal Justice course. This survey course introduces a variety of agencies and professions in law enforcement, private security, corrections, fire, and emergency management services. The course examines the role and structure of the government, rights/responsibilities of citizens, components of the criminal justice system, roles and responsibilities of the police, courts, and corrections, adult and juvenile justice systems, civil and criminal law, roles and responsibilities of personnel in the private security and protective services, the fire service, and the emergency management service and their contributions to public safety. The course will be taught by a certified police officer.

**Introduction to Law Enforcement - 1 Semester (1 ½ units) - Grades 11-12 (Required for Public Safety Concentration)**

This course covers law enforcement in America, law enforcement terminology, types and responsibilities of different law enforcement agencies, and various criminal justice system issues. The classification and elements of crimes, the major criminal and traffic laws of Georgia, and crime prevention and detection strategies are also discussed. Students will receive instruction in critical skill areas including communicating with diverse groups, conflict resolution, report writing, and the use of force continuum. Career planning and employability skills are also emphasized. Critical thinking and problem solving skills as well as personal and professional ethics are included throughout the course.

**Constitutional and Criminal Law - 1 Semester (1 ½ units) – Grade 12 (Elective for Public Safety Concentration)**

This course emphasizes the structure of the government and the court system. Differences between civil law and criminal law, structure and processes of the criminal justice system, rights of citizens, powers granted to police and restrictions are taught. Constitutional and non-constitutional issues facing today's law enforcement officers are included (search and seizure, arrests, interviews and interrogations, confessions, and police misconduct). Students are expected to apply critical thinking skills. This course is designed for students that have completed the prerequisite course of study in Law Enforcement at Grayson Technical.

**Techniques of Patrol and Investigation - 1 Semester (1 ½ units) – Grade 12 (Elective for Public Safety Concentration)**

This course covers patrol methods and functions, investigative theory, crime scene preservation, and methods of identifying, collecting, and preserving evidence. Crime prevention and control strategies and techniques, report writing, crime scene investigation, operation of police and emergency equipment, and courtroom testimony are covered. Students will discover how forensic science may be used to aid the prevention of crime and the apprehension and conviction of criminals. This course is designed for students that have completed the prerequisite course of study in Law Enforcement at Grayson Technical.

**Technical Theatre \***

**Introduction to Theatrical Design - 1 Semester (1 ½ units) - Grades 11-12 (Required for Technical Theater Concentration)**

The course presents basic principles and techniques needed to conceptualize and execute scenic, costume and lighting designs for theatrical productions. The course includes study of theatre terminology, functions and principles of design, color, rendering techniques, portfolio development, problem solving and design processes and techniques as they pertain to drawing and painting, model construction script analysis and materials.

**Set Design & Construction - 1 Semester (1 ½ units) - Grades 11-12 (Required for Technical Theater, Set Design Concentration)**

This course focuses on the role of the scenic designer through an exploration of design principles, art media, and skills necessary for communicating ideas, concepts and solutions to theatrical productions. Attention is also given to the process of transforming a designer's concept to a functional scenic device. Study includes tools, theatre safety procedures, drafting techniques, use of various construction materials and scene painting techniques.



**Introduction to Lighting and Sound - 1 Semester (1 ½ units) – Grade 12 (Elective for Technical Theater, Set Design Concentration)**

This course presents a study of lighting and sound design for their use in theatrical productions, including the use of color composition, instrumentation and equipment. Topics include the design process as it pertains to the overall production, physics of light and sound, use and maintenance of equipment, script analysis, creative thinking and problem-solving. This course is designed for students that have completed the prerequisite course of study in Technical Theater at Grayson Technical.

**Costume Design & Construction - 1 Semester (1 ½ units) - Grades 11-12 (Required for Technical Theater, Costume Design Concentration)**

This course focuses on the principles and elements of design as they apply to script and character analysis, costume rendering and production unity. Topics include figure drawing, physical proportions of the body and solutions to budget limitations. Attention is given to the process of transforming a designer's concept to a functional piece of wearing apparel. Study includes equipment operation and maintenance, shop organization and responsibilities, pattern drafting, fabrics and construction techniques.

**Makeup for the Stage - 1 Semester (1 ½ units) – Grade 12 (Elective for Technical Theater, Costume Design Concentration)**

This course investigates the artistic and aesthetic demands of theatre makeup techniques on the overall production process. Class participants develop knowledge and skills in all areas of theatrical makeup including design, two-dimensional and three dimensional procedures, supplies, application processes, historical influences and special effects. This course is designed for students that have completed the prerequisite course of study in Technical Theater at Grayson Technical.

**Technical Theatre Internship - 1 Semester (1 ½ units) – Grade 12 (Elective for Technical Theater Concentration)**

This course places the student an internship within the theatre industry. Students may choose to work in a professional theatre program or in a business related setting like a costume rental house or lighting company. Assignments will be geared to the individual interest of each student. Enrollment is limited and prior approval and a planned program of study is required. The internship may be paid or unpaid. This course is designed for students that have completed the prerequisite course of study in Technical Theater at Grayson Technical.

**Veterinarian Technology**

**Animal Science - 1 Semester (1 ½ units) – Grades 11-12 (Required for Veterinary Concentration)**

This course provides basic instruction in animal care for students interested in pursuing a degree in veterinary medicine or veterinary technology. Students study the history and evolution of animals as well as the six most common species: cats, dogs, cattle, horses, sheep, and pigs and the individual breeds within these species. In addition students will study anatomy and physiology; biomechanics and movement; genetics; reproduction; digestion and nutrition; health and behavior management; and animal housing. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs.

### **Animal Production and Management - 1 Semester (1 ½ units) – Grades 11-12 (Required for Veterinary Concentration)**

This course provides instruction in establishing and managing animal enterprises. Course content includes instruction in selecting, breeding, feeding, and caring for both large and small animals. In addition various laboratory and veterinary hospital techniques and procedures will be studied, including vein-puncture, first-aid, and beginner suturing. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs and activities.

### **Equine Science - 1 Semester (1 ½ units) – Grade 12 (Elective for Veterinary Concentration)**

This course introduces scientific principles and technical skills in caring for horses. Students study history and evolution of horses; breeds, types, and classes; anatomy and physiology; biomechanics and movement; selection and judging; reproduction; health and behavior management; tack, equipment, and facility management. Classroom and laboratory activities are supplemented through supervised experiences and leadership programs. This course is designed for students that have completed the prerequisite course of study in Vet Tech at Grayson Technical.

### **Internship in Veterinary Technology - 1 Semester (1 ½ units) - Grade 12 (Elective for Veterinary Concentration)**

This course allows students to practice what they have learned during the previous semesters of veterinary technology. Students will work with local veterinarians to study the veterinary office and office techniques more in depth and they will be introduced to everyday situations. This course provides entry-level skills for students and provides the background to pursue a professional degree. Laboratory activities provide students with the hands-on experience and skills. This course is designed for students that have completed the prerequisite course of study in Vet Tech at Grayson Technical.

### **Video Broadcast Journalism**

#### **Video Production I - 1 Semester (1 ½ units) - Grades 11-12 (Required for Video Broadcast Concentration)**

The program seeks to integrate recent trends in the study of mass communications into a class that is appropriate for an advanced level course. It will develop skills in basic theory, practice and operations of equipment related to a television studio, the portable camera, and videotape editing. Through problem-solving activities, projects, and discussions, knowledge of how video/film affects life and society will be demonstrated. This course enhances introductory skills by providing more in-depth and specialized experiences in video equipment operations. Instruction includes switchers, cameras, lighting, audio boards and tape machines.

#### **Video Production II - 1 Semester (1 ½ units) - Grades 11-12 (Required for Video Broadcast Concentration)**

Through problem solving activities, projects and discussions, knowledge of how film/video affects life and society will be demonstrated. Additionally, study will be conducted on recent trends in mass communication. This course enhances prerequisite skills and provides instruction in producing non-narrative videos, and commercials.

**Video Production III – 1 Semester (1 ½ units) – Grade 12 (Elective for Video Broadcast Concentration)**

This course will enhance prerequisite skills and provide instruction in producing narrative videos. Students should be able to perform at an independent level of proficiency. This course builds upon prerequisite skills by requiring students to analyze, evaluate and synthesize the body of video work created during the student’s high school career, and to develop a substantial video portfolio based upon this work for public presentation. This course is designed for students that have completed the prerequisite course of study in Video Broadcast at Grayson Technical.

**Video Production VI - 1 Semester (1 ½ units) – Grade 12 (Elective for Video Broadcast Concentration)**

This course offers the advanced video production student the chance to pursue independent study in video production. The student will produce a number of short videos on selected topics. Students will be able to perform at an independent level of proficiency. This course will allow advanced production students a chance to pursue independent studies in video production. The student will produce a number of short videos on selected topics. Students will perform at an independent level of proficiency. This course is designed for students that have completed the prerequisite course of study in Video Broadcast at Grayson Technical.

**MAXWELL HIGH SCHOOL OF TECHNOLOGY**

Maxwell High School of Technology is a special entity school that provides Gwinnett County Public School juniors and seniors the opportunity to gain knowledge and skills in preparation for high-demand careers. Extensive career exploration is a vital component of all Maxwell programs. Active participation of local businesses and industry contribute strongly to the success of each Maxwell program.

Students may earn a 3 unit concentration that may be applied to career technical diploma or college prep dual diploma requirements. Selected coursework may be used for credit at participating colleges.

All students participate in the “Rising Professionals” program in which they learn skills in conflict resolution, business etiquette, business ethics, job application, resume writing, and interviewing. Maxwell students are also encouraged to participate in community service projects and may earn a community service seal for their diploma.

Every student is eligible to become a member of Maxwell’s active SkillsUSA chapter. SkillsUSA is a national, non-profit organization for students who are enrolled in programs preparing them for technical, skilled, and service careers. SkillsUSA adds to students’ technical training by teaching them leadership skills, teamwork, and character development. Students may compete for Regional, State, and National titles. Chapters of Future Business Leaders of America and Future Farmers of America are also active at Maxwell.

Students will participate in the same program area for the year and attend classes for half of the school day. Transportation is provided to and from each GCPS high school. Contact the local GCPS high School counseling office for an application. Interested students and parents are encouraged to visit the school website [www.maxwellhigh.com](http://www.maxwellhigh.com) for additional information.

### **Auto Collision Repair - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Auto Collision technologists repair and refinish damaged vehicles to the original condition using state-of-the-art equipment and technology. Students develop skills in the areas of structural repair, metal work, painting, auto glass replacement, auto damage appraisal and shop management. Employment opportunities include automotive refinisher, service writer, estimator, parts counter person, and salvage operator. Students should possess mechanical and mathematical aptitude, creativity, and the ability to work on a team. The Maxwell Auto Collision Repair program is an approved member of the Industry Training Alliance for the Inter-industry conference on Auto Collision Repair (I-CAR).

### **Auto Services I – 2 semesters (1 ½ units each) – Grades 11 -12**

Auto Services I is a challenging program dedicated to preparing students for today's expanding careers in the automobile industry. The program has state-of-the-art equipment which meets the requirements for the Auto Service Excellence (ASE) certification. Students learn about and perform automotive problem diagnosis, service and repair. Basic areas of study include brakes and the electrical/electronic systems. Automotive textbooks, electronic diagnostic tools, simulation modules (electrical, fuel injection, and engine performance topics), and factory-donated vehicles are primary components of this program. Selected course work may articulate with Gwinnett Technical College.

### **Auto Services II - 2 semesters (1 ½ units each) – Grade 12**

Students who successfully complete Auto Services I at Maxwell High School may return the following year to take this course, which builds on the previously learned skills and knowledge. Instructor permission is required to take second-year courses. In-depth study of steering and suspension components and engine performance is included. Students may have the opportunity to participate in an internship setting. Selected coursework may be articulated with Gwinnett Technical College.

### **Commercial Art - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Commercial artists utilize the principles and practices of illustration, design and graphic production as they are used in the field of visual communication. Both conventional and computer-aided methods are explored. Each individual student will have an access to a powerful dual XEON processor IBM computer and learn state-of-the-art software applications such as Adobe Photoshop, Illustrator, InDesign, and other high-end 3D rendering programs. Throughout the course, students also work with different media such as airbrush, watercolor, and color pencil techniques. Fashion design, cartooning, and outdoor advertising are also studied. Students identify basic design elements and principles and learn to apply color theory. They are introduced to lettering and typography. Performance portfolios will be developed and maintained by students.

### **Computer Aided Drafting and Design (CADD) - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Students in the CADD program learn the skills that enable them to prepare detailed drawings for engineering, architectural, and manufacturing purposes. Using sophisticated technology, students learn to complete plans and drawings that indicate how to construct machines, buildings and tools. Skills in blueprint reading, measuring, sketching, multi-view drawing, and parametric modeling are taught. Students learn the software programs AutoCad, Inventor, and Architectural Desktop. Students should possess a strong math background, have an interest in drawing, enjoy working with people, show creativity, and have an eye for detail.

## **Computer Technology - 2 Semesters (1 ½ Units Each) - Grades 11-12**

### **Prerequisite – Computer Applications**

Computer Technology emphasizes using microcomputers and software in a business setting. All students have individual work stations where they learn to apply Windows based word processing spreadsheet, database, data entry, desktop publishing, multimedia, and data communications. Upon completion of the course, students have the necessary microcomputer productivity skills that many employers seek for entry-level positions in their companies.

## **Construction - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Construction is designed to provide students with entry level and advanced skills in carpentry, plumbing, masonry, and electrical wiring. In carpentry, students learn the safe use of tools, blue print reading, house framing, and types and grades of building materials. Electrical wiring symbols, electrical device mounting, and electrical codes form the basis for the electrical wiring unit. In plumbing, students learn to use plumbing tools to install drains, fixtures, and faucets. In masonry, students learn to use the equipment and materials found in this career field. Students should have good math skills and mechanical aptitude, be physically fit, willing to work indoors/outdoors, and be a team player. Career opportunities and explorations are provided by representatives from various construction fields. Experience in this class will provide students with knowledge, skills, and incentive to go into fields such as architectural design, engineering, surveying, and project managing and supervision. Selected coursework may articulate with Gwinnett Technical College

## **Cosmetology - 2 Semesters (1 ½ Units Each) - Grades 11-12**

The Cosmetology program serves as a gateway to becoming a hair stylist, color technician, nail technician, or make-up artist. Biology, anatomy, physiology, and chemistry terms are learned in relation to diseases and disorders of the scalp, hair, skin, and nails. Students learn to shampoo, cut, style, color and condition hair, give facials, apply make-up, and perform manicures and pedicures. Cosmetology students are required to perform their skills on mannequins and other students. Instruction also emphasizes professionalism, ethics, sanitation, salon management, and personality development. Work hours are recorded and are transferable to a postsecondary school in preparation for the State Board of Georgia Examination.

## **Early Childhood Education - 2 Semesters (1 ½ Units Each) - Grades 11-12**

The Early Childhood Education program prepares students for a profession working with young children providing age appropriate education for them. Topics centering on a healthy, safe environment, child development principles, food and nutrition, curriculum development, and the educational instruction of the preschool child are emphasized. Students interested in the Early Childhood Education program should enjoy working with children, have a high energy level, be neat in appearance, demonstrate the ability to get along with others, and must be a good role model for children.

### **Electronics - 2 Semesters (1 ½ Units Each) - Grades 11-12**

#### **Prerequisite – Algebra I or Concepts of Problem Solving and Concepts of Algebra**

Electronics is the study of electrical circuitry used in modern equipment such as computers and home entertainment systems. Circuit theory is proven by use of hands-on laboratory experiments and computer simulations. The electronics students apply electrical and electronic principles to construct and repair residential and industrial electronic equipment. Skills learned include soldering, splicing, and analyzing AC/DC circuits. In addition, solid state electronics and digital circuits are stressed. Students must demonstrate analytical skills and attention to detail.

### **Graphic Communications - 2 Semesters (1 ½ Units Each) - Grades 11-12**

The Graphic Communications program provides a foundation in the creative, pre-press production and printing professions. Students learn basic design and layout, image creation and manipulation, document design, pre-press procedures, plate making, offset press operation and bindery techniques. Multiple projects ranging from print design (using Adobe PhotoShop, InDesign and Illustrator software programs) to web-based graphics (using Adobe Flash animation and DreamWeaver web design software) are produced by students. From initial concept through the design phase and on to final production students receive a hands-on experience. Students are allowed a range of creativity within the structured projects. Basic computer knowledge and skills is an asset in navigating the software this class uses. Students may use this program as a foundation for entering graphic design, pre-press production, promotional, public relations, advertising, offset press operation, bindery or business oriented graphic communications professions.

### **Horticulture - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Greenhouse management, landscape and floral design are emphasized in the Horticulture program. Students study the techniques of flower and plant production, soils, nutrients, and the propagating/transplanting of plants and foliage. Instruction in design techniques for landscaping and drawing to scale of landscape plans are part of this program. Students study the use, growth, and proper care of plants, ground cover, trees, and shrubs for landscaping. The floral design aspect of horticulture will assist in preparing students to enter the floral trade with entry level skills. Business management for the floral and garden center industries is also stressed. Students will experience hands-on applications in the classroom, the greenhouse, and outdoors.

### **Public Safety - 2 Semesters (1 ½ Units Each) - Grades 11-12**

Students enrolled in the Public Safety program are provided instruction in the areas of police work, court protocol, corrections, and private security. Students will also gain experience in speaking, writing and interviewing techniques. Officer safety skills, testimony in a courtroom, crime scene investigation, and careers in law enforcement are part of the program. Close coordination with state and local agencies adds substance to the various areas of study. Students successfully completing the Law Enforcement program will possess skills helpful for transition into postsecondary law enforcement programs.

## **Technical Apprenticeship - 2 Semesters (1 ½ Units Each) - Grades 11-12**

### **Prerequisite - 3 Units in Technical Concentration**

The program provides an opportunity for a student who has selected a career major and completed two semesters in a Maxwell technical program to pursue employment in his/her career major during the senior year in high school. Students will meet with the Apprenticeship Coordinator on a pre-arranged schedule to complete required documentations and assignments. Decision-making, problem solving, and time management skills are essential. Students may take the course to satisfy the one unit technical requirement.

## **Welding - 2 Semesters - (1 ½ Units Each) - Grades 11-12**

This program is designed to develop knowledge and skills in industrial and construction welding with emphasis on metal fabrication, shielded metal arc welding (SMAW), MIG arc welding (GMAW, FCAW), use of TIG welding equipment, welding inspections, employability skills, leadership development, and safety.

### **Healthcare Science Technology**

## **Intro to Healthcare Science Technology - 1 Semester (1 ½ Units Each) - Grades 11-12**

The Medical Services program exposes the student to a wide range of medical career opportunities, assists in narrowing down careers in terms of the student's own aptitudes and interests, and provides the student with the academic knowledge, skills and training for entry level positions or post secondary education in health care services. The program prepares the student for the multiple roles one encounters in life by developing decision-making skills based on explorative and educational experiences. This course is a pre-requisite for all Healthcare Science Technology Programs offered at Maxwell High School of Technology.

## **HSTE-I Nursing Essentials - 1 Semester (1 ½ Units Each) - Grades 11 -12**

In the Certified Nursing Assistant program students will be trained in clinical skills required to provide bedside nursing care to the sick and injured. Some of the skills are assisting the patient with hygiene, ambulation, and nutrition. Students will be provided a clinical opportunity at local medical and or nursing care facilities. This program contains all the State required components for the students to be eligible to be tested for their certification as a Certified Nursing Assistant upon successful completion of all requirements. Students must have successfully completed HSTE I or the equivalent.

## **HSTE-I Emergency Services - 1 Semester (1 ½ Units Each)**

Emergency Services is a course in the Therapeutic Services Career Pathway. This course is designed to introduce students to emergency medical care by providing an overview of EMS operations; medical, legal, and ethical issues that impact emergency care; anatomy and physiology; emergency packaging and transferring of patients. Upon completion of this course and prerequisites students who successfully master these standards may be eligible to sit for First Responder exam. Students must have successfully completed HSTE I or the equivalent.

## **HSTE-I Application of Healthcare Science Technology - 1 Semester - (1 ½ Units Each)**

The Medical Services program exposes the students to a wide range of medical career opportunities, assist in narrowing down careers in terms of the student's own aptitudes and interest, and provides the student with the academic knowledge, skills and training for entry level positions or post secondary education in health care services. Master if these standards through project based learning, technical skills practice, and leadership development activities of the career and technical student's organization (SkillsUSA) will provide students with a competitive edge for either entry into the global marketplace and/or the post-secondary institution of their choices to continue their education training. Students must have successfully completed the HSTE I or the equivalent.

## **TECHNOLOGY EDUCATION**

To earn a Technology/Career-Preparatory Diploma, students must complete three courses within one Technical area of concentration plus one related course. Technology Education offers a concentration of courses that qualify for the Technology/Career-Preparatory. Careful course planning is required to achieve the concentration. See your counselor/teacher/advisor for further information on planning for the Technology/Career-Preparatory Diploma.

### **Introduction to Technology - 2 Semesters - Grades 9-10**

This course introduces the three technology education clusters (energy and power, production and communication) and emphasizes increased capability with a greater variety of tools, materials, processes, career awareness and reinforcement of basic skills and core competencies. Students will be instructed using a modular delivery system for computer-aided drafting, computer-aided publishing, computer numerical control, robotics, fluids, automation, lasers and alternative energy. Students will work in individual, team, and group activities.

### **Mechanical Drafting - 2 Semesters - Grades 9-12**

This course is designed to introduce analytical and critical thinking skills in the context of technical drafting. The student will study the principles of drafting using various materials, instruments, and drafting tools. Drafting techniques are developed and applied to the production of mechanical drawings. Emphasis is placed on laboratory process, including both manual drafting skills and computer aided drafting (CAD) techniques.

### **Architectural Drafting and Design - 2 Semesters - Grades 10-12**

#### **Prerequisite - Mechanical Drafting**

Architectural Drafting and Design introduces the student to the residential and commercial design concepts through analytical design analysis. This course is designed to familiarize the students with the fundamentals of quality design and the construction of residential models utilizing mechanical drafting and/or CADD. Architectural Design Students apply architectural design concepts to development of computer projects. The student will advance in the area of residential design and commercial development. This course is designed to develop advanced manual drafting techniques and expand computer aided drafting (CAD) skills.



## **Electronic Systems - 2 Semesters - Grades 10-12**

### **Prerequisite - Algebra I Recommended**

This course introduces students to the fundamental theories and laws of electricity and electronic systems. The student is engaged in critical thinking and problem solving processes in the context of electricity and electronic systems. Theory, operations and applications are explored further in the electronics field. Students learn about basic components, their characteristics, and theory of operation. Career opportunities are explored.

## **Engineering Tech: Construction – 1 Semester - Grades 10-12**

### **Prerequisite - Technology Education Teacher Recommendation**

This course is an advanced opportunity to develop and use critical thinking and analytical skills in the area of structural/construction engineering. In addition, the student will work independently, as a class member, and as a small team member in a modular setting. The student will have the opportunity to be involved in problem solving processes in many different areas of technology. Some of the areas include: Structural Engineering; Robotics, Laser and Satellite Communication; Computer Aided Drafting; Radio Communications; Aerodynamics; Flight and Aviation; Computer Numerical Control; Weather and Meteorology; Transportation and Computer Animation. The course also prepares the student to make more meaningful career and educational decisions in choosing to continue his/her training at the secondary level or to pursue postsecondary education in a technical school or college.

## **Engineering Tech: Communications - 1 Semesters Grades - 11-12**

### **Prerequisite - Technology Education Teacher Recommendation**

This course is designed to meet the needs of the student advanced in the area of communications engineering and serves as an extension to the previous Engineering Technology courses. The student will have the opportunity to be involved in additional problem solving processes with communications technologies. The course continues to prepare the student to make more meaningful career and educational decisions in choosing to continue his/her training at the secondary level or to pursue postsecondary education in a technical school or college.

## **Engineering Tech: Manufacturing – 1 Semester – Grades 10-12**

### **Prerequisite – Technology Education Teacher Recommendation**

This course is designed to meet the needs of the student advanced in the area of manufacturing engineering and serves as an extension to the previous Engineering Technology courses. The student will have the opportunity to be involved in additional problem solving processes involving the manufacturing process. The course continues to prepare the student to make more meaningful career and educational decisions in choosing to continue his/her training at the secondary level or to pursue postsecondary education in a technical school or college.

## **Engineering Tech: Transportation – 1 Semester – Grades 10-12**

### **Prerequisite – Technology Education Teacher Recommendation**

This course is an advanced opportunity to develop and use critical thinking and analytical skills in the area of transportation. The student will have the opportunity to be involved in additional problem solving processes in the field of transportation and engineering. The course continues to prepare the student to make more meaningful career and educational decisions in choosing to continue his/her training at the secondary level or to pursue postsecondary education in a technical school or college.

## **Communications Technology - 2 Semesters - Grades 10-12**

This course is designed to develop analytical and thinking skills in the area of communications. Students will focus on communication systems such as: data communication, audio and video, optic, technical design and graphic production. Students will work as a group and independently with an emphasis on research, materials, equipment, and technological processes related to the communications industry. Students will study additional concepts in communication systems such as: data communication, audio and video, optic, technical design, and graphic production. This course also prepares the student to make more meaningful career and educational decisions. Career opportunities are explored.

## **Power and Energy - 1 Semester - Grades 9-12**

This course familiarizes the student with the various sources of power. It begins with the study of early sources of power and includes most recent developments of power and energy technology. Students are introduced to the fundamentals of engines and their construction, operation, and applications. Emphasis is placed on alternative energy sources.

## **WORK-BASED LEARNING**

### **Apprenticeship/Internship - 2 Semesters - Grades 11-12**

**Pre-requisite: Must be at least 16 years of age**

Students will practice key roles in a workplace setting where a school-site mentor and a work-site mentor help a student explore a career of interest that has been supported by academic coursework. Students will complete an in-depth portfolio capturing their experience at their work-site as well as highlights of academic achievement, community involvement and occupational research. This program is designed for students who plan to continue their education at a post-secondary institution. It is recommended that students complete a total of 2,000 hours of work during their secondary and post secondary education in their chosen career field to complete the apprenticeship program. In order to be an Apprentice in Education, a student must successfully complete 1 unit of Careers in Education.

## **OTHER ELECTIVE COURSES**

### **Careers in Education - 2 Semesters - Grades 11-12**

**Prerequisites: 80% or above GPA, Excellent Attendance and Discipline Record, Teacher Recommendations, and FEA Membership**

CIE, Careers in Education, is unlike any other course students have had the opportunity to experience. The class is comprised of highly motivated juniors and seniors who have an interest in pursuing education as a future career. The course includes college level introduction curriculum as well as basic foundations of teaching which some state colleges and universities accept upon course completion for college credit or field experience hours. The course includes team-building activities, personal skill-building, developmental stages, learning styles, cooperative learning, classroom management techniques, ethics, as well as many other topics crucial to the field of education. After an intensive training process, students will enter a classroom of their interest to work directly with a teacher and students. This field experience is usually four days a week with the other day specified for continued classroom training. The class is unlike any other course due to the responsibility given to each student who participates. Students who think they want to become a teacher, coach, or administrator should definitely apply for this course.

### **SAT Prep - 1 Semester - Grades 11-12**

This course reviews the content for both the critical reading and math sections of the SAT. The focus of the critical reading section is building vocabulary, critical reading and critical thinking skills that will serve the student beyond simply preparing for the test. The math instruction concentrates on problem solving, reasoning and conceptual understanding. The course approaches test preparation by teaching students to think critically and to apply a variety of strategies for solving both verbal and math problems presented in SAT format.

### **Library Science I - 2 Semesters - Grades 10-12** **Prerequisite - Recommendation of Media Specialist**

Library Science I is an introduction to the classification, location and use of media center resources and the utilization of instructional equipment. Library science and information literacy skills are taught through media activities.

### **Library Science II - 2 Semesters - Grades 10-12** **Prerequisite - Library Science I and Recommendation of Media Specialist**

Library Science II is an in depth study of the classification, location and use of media center resources and the utilization of instructional equipment. Advanced library science and information literacy skills are taught through media activities.

### **Library Science III - 2 Semesters - Grades 10-12** **Prerequisite - Library Science I, II and Recommendation of Media Specialist**

This course is designed to meet the needs of advanced library science students. Independent units and projects are designed for the individual student.

### **Peer Facilitation II - 2 Semesters** **Prerequisite - Recommendation of Counselor**

This course enhances skills learned in Peer Leadership and provides practice in modifying instructional methods and materials, enabling communication, and demonstrating appropriate social interaction skills.

### **Adapted Careers - 4 Semesters - Grades 10-12**

These courses introduce students to the career planning process. Students will apply skills learned by exploring careers, filling out application forms, preparing resumes, demonstrating interview techniques, job keeping and job changing skills. Career opportunities such as apprenticeships are explored. Students enrolled in these courses are pursuing an Individualized Education Diploma.

### **VPP Careers - 4 Semesters - Grades 10-12**

These courses introduce students to the career planning process. Students will apply skills learned by exploring careers, filling out application forms, preparing resumes, demonstrating interview techniques, job keeping and job changing skills. Career opportunities such as apprenticeships are explored. Students enrolled in these courses are pursuing an Individualized Education Diploma and are in the VPP program.

### **Gifted Directed Study - 8 Semesters - Grades 9-12**

**Prerequisite - This course is for identified gifted students.**

Under the supervision of a gifted program teacher, students complete and present an individual research project planned and developed through extensions of AKS. Curriculum areas available include language arts, mathematics, science, social studies, fine arts, modern languages, classical languages, and general electives. Students expand their individual interest and creativity while learning to develop adult behavior such as self motivation, planning, prioritizing, and task completion.

### **Affective Skills - Up to 8 Semesters - Grades 9-12**

**Prerequisite: Special Education recommendation and must have a need documented on IEP.**

This course addresses the social and emotional needs of students. Areas stressed are appropriate behavior in the classroom, problem solving, and peer relations. Appropriate techniques and methods to support regular classroom performance are also addressed. The end result is for students to display positive attitudes, to be recognized and accepted by others, and behave in a socially acceptable manner.

### **Gifted Internship - Up to 4 Semesters - Grades 11-12 (Numerical Grade)**

**Prerequisite - This course is for identified gifted students.**

Students spend a portion of the school day in an in-depth career exploration with a mentor in the community. As interns, students gain specific knowledge of a career as they experience the day to day routine. They expand their social and intellectual skills through interaction with a successful role model in a career area in which the students are personally interested. At the end of the semester, presentations by students highlight the career and their work experiences. Career curriculum areas include those associated with language arts, mathematics, science, social studies, fine arts, modern languages, classical languages and general electives.

### **Postsecondary Options Elective Courses (Numerical Grade) Postsecondary English - 2 Courses Postsecondary Social Studies - 1 Course, Postsecondary Fine Arts - 2 Courses, Postsecondary Business Education - 2 Courses**

**Prerequisite - Eligibility For Postsecondary Options Program**

College level **elective** studies in the designated subject area are offered as cooperative courses through a Georgia public college, university, or technical institution. Carnegie unit credit is determined at the following rate; each 7.5 quarter hours equals 1 Carnegie unit, each 5 semester hours equals 1 Carnegie unit. See Glossary for further information regarding Joint Enrollment Program.

### **Study Skills - Up to 8 Semesters - Grades 9-12 (Numerical Grade)**

**Prerequisite - Students must be registered by a Special Education Teacher and must have such need documented on his/her IEP.**

This course is designed to assist eligible special education students with appropriate techniques and methods to support regular classroom performance. This course includes, but is not limited to organizational skills, time management, memory techniques, and test-taking tips.