



West Greene Middle-Senior High School

2010-2011

Course Selection Handbook

## OVERVIEW

This Course Selection Handbook is designed to provide students and parents with the information needed to build a schedule of classes that will allow all students to effectively fulfill the West Greene School District's requirements for graduation while fully realizing their maximum academic potential. West Greene High School, in conjunction with The Greene County Career and Technology Center, Waynesburg University, and The University of Pittsburgh, offers all students a diversified, high-quality curriculum that is continually developed and refined by an outstanding team of highly qualified educators. The faculty, staff, and administration at West Greene are thoroughly committed to providing all students with the opportunity to flourish and succeed, providing access to multiple support systems along the way to ensure their success. If you at any time have any questions about the Course Selection Handbook or scheduling process in general, please contact the school for details. Please keep in mind that changes to the content of this handbook and the scheduling process may be necessary based on unanticipated developments. The most updated scheduling information will always be posted on the district website.

## GRADUATION REQUIREMENTS

There are three requirements that must be met in order for a student to graduate from West Greene High School. They are:

1. All credit and course requirements must be fulfilled. This is accomplished via the scheduling process covered in this handbook.
2. Presentation of a senior graduation project. Information regarding the senior graduation project is available in the school's main office.
3. Proficiency on the PSSA test or other alternative assessment. Information regarding this requirement is available in the school's guidance office.

School personnel, parents, and students must work together in order to meet these graduation requirements. School personnel will make every effort to notify parents or guardians when students who are deficient. However, the ultimate responsibility for meeting all graduation requirements rests with the student. **Any student who does not meet the requirements for graduation will not be permitted to participate in graduation activities, including commencement, and will not be awarded a diploma from West Greene High School until such time as all criteria are met to the satisfaction of the superintendent and school board.**

## SCHEDULING

The process of scheduling should be taken very seriously by both students and parents. It is highly recommended that parents and students work together in building a schedule. Consideration must be given to multiple factors, including graduation requirements, course content, and compatibility with the master schedule. Guidance counselors are available to assist and should be consulted regularly to assure that all the necessary requirements are being met. **All students must adhere to the scheduling and credit requirements set forth in this handbook for each school year. Students who do not follow these scheduling and credit requirements will not be able to meet the district's graduation requirements as stated above.**

Scheduling begins in the fall/winter for the upcoming school year. Students will be given a scheduling form and a Course Selection Handbook to review with their parents. The scheduling form must be signed by the student and parent and returned to the guidance office. Because information from the scheduling form will be used for staff assignment and budgeting purposes, it is important that the form be signed and returned on time. If no form is returned, the student will be scheduled last into whatever courses are still available. Schedule changes are permitted and facilitated if possible as per the timing guidelines on page 4 (Withdrawing from a Course). After that, schedule changes are highly discouraged, and will only be approved in emergency situations. All scheduling changes must be approved by the principal. The chart on the following page shows the minimum credit and course requirements at each grade level.

Course	9 <sup>th</sup> grade	10 <sup>th</sup> grade	11 <sup>th</sup> grade	12 <sup>th</sup> grade
Language Arts (4 credits required)	1 credit required: Language Arts 9	1 credit required: Language Arts 10	1 credit required: Language Arts 11	1 credit required: Language Arts 12
Social Studies (4 credits required)	1 credit required: World Cultures	1 credit required: American Civics	1 credit required: Political Science/ Economics	1 credit required: Contemporary History
Science (4 credits required)	1 credit required: Integrated Science	1 credit required: Biology or Applied Biology	1 credit required: Physics or Principles of Technology	1 credit required: Chemistry or Applied Chemistry
Math – course pathways based on 8 <sup>th</sup> grade coursework and teacher recommendations (4 credits required)	1 credit required, may be:  Pre Algebra Algebra IA Algebra IB Algebra Geometry	1 credit required, may be:  Algebra IA Algebra IB Algebra Geometry Algebra II/Tng	1 credit required, may be:  Algebra IB Geometry Algebra II/Tng Pre-Calculus College Algebra College Statistics	1 credit required, may be:  Geometry Algebra II/Tng Pre-Calculus Consumer Math Calculus College Algebra College Statistics
Required Rotation Electives (1 technology, 1.5 health/PE credits required)	1 credit required: Technology Phys Ed Health Technology (Each 9-week course worth ¼ credit)	1 credit required: Phys Ed Technology Phys Ed Drivers Ed. ( Each 9-week course worth ¼ credit)	1 credit required: Health Career Education Technology Phys Ed ( Each 9-week course worth ¼ credit)	1 credit required: Phys Ed or Fitness, ¾ Year  Multimedia ¼ Year
Electives – see following pages for electives offered at each grade level (6.5 credits required)	3 Credits of Electives Required	3 Credits of Electives Required	3 Credits of Electives Required	3 Credits of Electives Required
Total required credits to be scheduled per year	8 credits	8 credits	8 credits	8 credits

#### Important Notes:

- Students must take a minimum of 1 credit per year in all core content areas (language arts, math, social studies, science) and pass all required courses in all core content areas in order to graduate.
- Students are permitted to attend only those classes for which they are scheduled.
- Students must take a full schedule (8 credits) each year unless they are approved for work release.
- Students who wish to accelerate their program of study may do so by obtaining permission from the administration, guidance office, teacher(s), and parent(s). Accelerated programs must adhere to all credit and course requirements, although certain required courses in this situation may be taken in earlier grades.
- Students will not be permitted to “double-up” on core classes to make up for failures until such time as they demonstrate an ability to pass that particular type of class for an entire school year. For example, a freshman who fails Language Arts 9 will not be permitted to take Language Arts 9 and Language Arts 10 the following year to “catch up”. This student must take and pass Language Arts 9 during their next school year, and may then be permitted to take Language Arts 10 and 11 the following year to catch up.
- The administration reserves the right to modify any and/or all credit and course requirements as necessary on a case by case basis.

### WITHDRAWING FROM A COURSE

Upon administrative review and approval, students have 3 school days to withdraw from a 45 day course, or 5 school days from a 90 day course, or 10 days from a 180 day course. Students who are given administrative permission to withdraw after the cut-off date will receive a grade of WF (withdraw failing) and no credits will be awarded. This failing grade will be calculated in the students overall GPA.

### PHYSICAL EDUCATION REQUIREMENTS

Physical education is required by state law and is to be taken by all students who are not excused for medical reasons. Only a medical excuse is accepted as a legitimate reason for not taking physical education. The excuse must be supplied by a licensed medical practitioner. It must be returned to the physical education teacher and will be placed on record. It must state for what period of time and for what reasons the student is to be excused from physical education activities for medical reasons. The student will be given alternative instruction.

### WEST GREENE DUAL ENROLLMENT PROGRAM

West Greene High School offers a dual enrollment program, which allows high school students to achieve college credits while attending high school. The credits achieved from the dual enrollment program serve as high school credits for graduation purposes as well as college credits to be transferred upon graduation. While there is a fee associated with these courses, dual enrollment courses taken in high school cost far less than traditional courses taken on the college campus. Contact the guidance office for pricing details. West Greene is currently partnered with The University of Pittsburgh to offer these courses. California University, which has offered dual enrollment courses in the past, is discontinuing their dual enrollment program and will no longer offer dual enrollment courses starting in the 2010-11 school year. West Greene School District is currently exploring alternative dual enrollment options.

The following chart shows dual enrollment course selections and the number of college credits awarded for each course.

#### *University of Pittsburgh*

Communications – 0500	Three Credits
Calculus - 0220	Four Credits

#### Important Notes:

- Not all dual enrollment courses are offered every year. Offerings are based on student interest and teacher qualifications.
- Dual Enrollment courses may also be scheduled as regular high school courses. In this situation, the student would not pay the dual enrollment fee. He/she would complete the course and be given high school credit, but not college credit.

## **CREDITS**

The following chart shows how many credits must be accumulated in fulfilling the necessary requirements for graduation:

Language Arts	4 Credits
Social Studies	4 Credits
Math	4 Credits
Science	4 Credits
Health & Physical Education	1.5 Credits
Technology Coursework	1 Credit
Electives	6.5 Credits
Senior Graduation Project	1 Credit
<b>TOTAL</b>	<b>26 Credits</b>

One credit is awarded at the end of the fourth nine weeks for successful completion of a one credit, full year course. It is important to note that beginning with the freshman class of 2008-2009, awarding half a credit for each semester of a one credit, full year course will no longer occur. Successful completion of a one credit, full year course means that the student must have a passing grade for a minimum of two of the four nine-week grading periods. The student's final grade must also be a passing grade. The final grade will be determined by calculating the average of each of the four nine weeks percentage grades.

One credit is equal to a regular school year consisting of 180 days with a regular school period consisting of 45 minutes. Any credits for courses, such as rotation courses, that do not meet for the entire school year are adjusted to reflect the amount of time spent in the course. For example, a rotation course that only lasts one nine weeks is worth  $\frac{1}{4}$  credit.

Students who fail courses are strongly encouraged to make-up those credit deficiencies by attendance at a summer school program approved by the principal.

## **PROMOTION REQUIREMENTS – HIGH SCHOOL**

Grade level classification at the high school level is determined at the beginning of the school year for the full academic year according to the number of credits accumulated. Specifically, freshmen must accumulate 6 credits and pass all core classes (language arts, science, math, and social studies) to move to sophomore status. Sophomores must accumulate 12 credits and pass all core classes to move to junior status. Juniors must accumulate 18 credits, pass all core classes, and be in a position to graduate by the end of the next academic year in order to move to senior status. Seniors, of course, must accumulate 26 credits as detailed in the chart above in order to graduate.

Any student who does not meet the criteria for promotion may be required to attend summer programs and/or repeat the year at the discretion of the superintendent.

## **ELECTIVES**

In addition to core content course requirements, students are required to schedule three credits of elective courses per year. This allows every student the flexibility to build a schedule that suits their own individual interests and strengths. The scheduling form given to students along with this handbook allows students to list those electives that they are most interested in taking. Ultimately, every student schedule is developed based on input from the student, teachers, counselors, and the administration. The lists on the next two pages show what elective courses are available to students in grades 9-12. All of these elective courses are offered, but only the ones with sufficient student interest will be built into the master schedule.

## 9<sup>th</sup> grade

School Publications  
Theater/Drama Production  
Broadcast Communications  
Creative Writing  
Animal/Plant Science 1  
Exploratory  
Meteorology/Geology  
Woodworking  
Drafting  
Communications  
Transportation  
Manufacturing  
Construction  
Microsoft Applications 1  
Web Communications  
Geography  
Fitness  
Study Hall

Sociology 1  
German 1  
Spanish 1  
Agriculture Education  
Horticulture 1  
Welding  
Band  
Chorus  
Jazz Ensemble  
Piano Instrumental  
Vocal Development  
Art 1  
Home Management  
Foods and Nutrition  
Study Skills  
Health and Wellness  
Math Strategies  
Language Arts Strategies  
Odyssey of the Mind

## 10<sup>th</sup> grade

School Publications  
Theater/Drama Production  
Broadcast Communications  
Journalism  
Creative Writing  
Poetry  
Animal/Plant Science 1  
Animal/Plant Science 2  
Environmental Science  
Exploratory  
Meteorology/Geology  
Woodworking  
Adv. Woodworking  
Robotics  
Drafting  
Communications  
Transportation  
Manufacturing  
Construction  
Microsoft Applications 1  
Microsoft Applications 2  
Web Communications  
Sociology 1  
Study Hall  
Fitness  
Study Island

Language Arts Strategies  
Math Strategies  
Geography  
German 1  
German 2  
Spanish 1  
Spanish 2  
Agriculture Education  
Horticulture 1  
Horticulture 2  
Welding  
Ag Building Trades I/II, Adv. Ag Mechanics  
Band  
Chorus  
Jazz Ensemble  
Piano Instrumental  
Vocal Development  
Art 1  
Art 2  
Home Management  
Child Development  
Foods and Nutrition  
Study Skills  
Health and Wellness  
Odyssey of the Mind  
GCCTC Program

## 11<sup>th</sup> grade

School Publications  
Theater/Drama Production  
Public Speaking/Debate  
Broadcast Communications  
Journalism  
Creative Writing  
Poetry  
Animal/Plant Science 1  
Animal/Plant Science 2  
Environmental Science  
Human Anatomy/Physiology  
Meteorology/Geology  
Woodworking  
Adv. Woodworking  
Robotics  
Adv. Robotics  
Drafting  
Communications  
Transportation  
Manufacturing  
Construction  
Microsoft Applications 1  
Microsoft Applications 2  
Web Communications

Sociology 2  
Anthropology  
Home Management  
Vocal Development  
Probability and Statistics  
Fitness  
German 1  
German 2  
German 3  
Spanish 1  
Spanish 2  
Spanish 3  
Agriculture Education  
Horticulture 1  
Horticulture 2  
Welding  
Ag Building Trades I/II, Adv. Ag  
Mechanics  
Band  
Chorus  
Jazz Ensemble  
Piano Instrumental  
Exploratory  
Music Theory/Composition  
Art 1

Art 2  
Advanced Art  
Child Development  
Foods and Nutrition  
Health and Wellness  
GCCTC Program  
Study Island  
Language Arts Strategies  
Math Strategies  
Odyssey of the Mind  
Study Hall

## Dual Enrollment:

College Communications  
College Chemistry  
College Geology  
Western Civilization  
College Psychology  
College Statistics  
College Calculus  
College Algebra  
Intro to Engineering

## 12<sup>th</sup> grade

School Publications  
Theater/Drama Production  
Public Speaking/Debate  
Broadcast Communications  
Journalism  
Creative Writing  
Poetry  
Animal/Plant Science 1  
Animal/Plant Science 2  
Physics  
Environmental Science  
Nanotechnology/Astronomy  
Physiology/Human Anatomy  
Principles of Technology II  
Meteorology/Geology  
Woodworking  
Adv. Woodworking  
Robotics  
Adv. Robotics  
Drafting  
Communications  
Transportation  
Manufacturing  
Construction  
Language Arts Strategies

Microsoft Applications 1  
Microsoft Applications 2  
Web Communications  
Sociology 2  
Anthropology  
Study Hall  
Study Island  
Probability and Statistics  
Odyssey of the Mind  
German 1  
German 2  
German 3  
German 4  
Spanish 1  
Spanish 2  
Spanish 3  
Spanish 4  
Agriculture Education  
Horticulture 1  
Horticulture 2  
Welding  
Ag. Bldg. Trades/Adv. Ag. Mach.  
Band  
Chorus  
Math Strategies  
Fitness

Jazz Ensemble  
Piano Instrumental  
Vocal Development  
Music Theory/Composition  
Art 1  
Art 2  
Advanced Art  
Home Management  
Child Development  
Foods and Nutrition  
Health and Wellness  
CTC Program  
Exploratory  
Work Release  
Teacher's Assistant  
Dual Enrollment:  
College Communications  
College Chemistry  
College Geology  
Western Civilization  
College Psychology  
College Statistics  
College Calculus  
College Algebra  
Intro to Engineering

The following pages contain course descriptions for all courses available to students in grades 9-12. The first number(s) after the course name indicates the grade level(s) in which the course is offered. Additional information is displayed as follows:

(#C = Number of credits, R = Required for Graduation, or E = Elective, M = May be taken in multiple years, P = pre-requisite)

## LANGUAGE ARTS

### **Language Arts 9 (1C, R)**

Language Arts 9 emphasizes the development of composition and reading skills, as well as vocabulary and critical thinking skills in conjunction with various forms of literature. Students will continue to develop skills in usage and mechanics for application in their narrative, informative and persuasive writing. Students are expected to participate in the classroom discussions. Students will complete independent reading and writing assignments.

### **Language Arts 10 (1C, R, P = Language Arts 9)**

Students in Language Arts 10 read, interpret and discuss selected American literature pieces. They recognize literary devices. Students continue to improve on their writing skills in the areas of narrative, persuasive, and informative writing. Writing instruction will also emphasize correct sentences structure, develop usage and mechanics skills, and improve vocabulary skills. Students continue to develop research skills. Students will complete independent reading and writing assignments.

### **Language Arts 11 (1C, R, P = Language Arts 10)**

Students in Language Arts 11 read and interpret selected English literary classics in a variety of genre. They recognize literary devices. Students master paragraph development and compose multi-paragraph informational, persuasive and personal essays. Writing instruction emphasizes correct sentence structure, mastery of the conventions of writing English, and vocabulary development. Students also develop research skills, including accessing a variety of sources and using research in compositions.

### **Language Arts 12 (1C, R, P = Language arts 11)**

This anthology-based survey of world literature emphasizes reading, analysis and discussion. Writing, vocabulary development, communication and presentation skills are also integral parts of this course. Students will review the basics of usage and mechanics for application in writing, specifically academic and career writing. Students must actively participate in discussion on a regular basis and complete independent reading and research assignments. Students will complete independent reading and writing assignments.

### **Web Communications – School website (9-12) (1C, E, M, P = Student Application and Teacher Approval)**

This course provides students the opportunity to work on our school website and our school newspaper (The Informer). Students will learn basic elements of layout and design, as well as photography. Students will be responsible for capturing photographs, stories and interviews, as well as other related assignments. Students will design layouts for publication on the World Wide Web. Students will work with publishing, graphic, and audio software. The ability to meet deadlines and work as part of a team are key criteria for this course. Students must be willing and able to attend events that occur after normal school hours throughout the year for the purpose of gathering data to provide exposure to the organizations throughout the district. As funding is required for our school publications, students are required to participate in fundraisers throughout the year.

### **School Publications – Newspaper, Yearbook (9-12) (1C, E, M, P = Student Application and Teacher Approval)**

This course provides students the opportunity to work on our school publications. Student will learn basic elements of layout and design, as well as photography. Students will be responsible for capturing photographs, stories and interviews, as well as other related assignments. Students will design layouts for both our yearbook (The Pioneer) and our newspaper (The Informer). Students will work with online publishing programs, as well as other software publishing and graphic design programs. The ability to meet deadlines and work as part of a team are key criteria for this course. Students must be willing and able to attend events that occur after normal schools hours throughout the year. As funding is required for our school publications, students are required to participate in fundraisers throughout the year.

### **College Communications – Dual Enrollment (11-12) (1C, E, P = 3.0 G.P.A. in Language Arts courses)**

This course is intended to introduce students to the fundamentals of research and argument construction. Argument defense is both written and verbal. Topics in this course include an introduction to argument, cross-examination, and criticism of arguments.

### **Theater/Drama Production (9-12) (1C, E, M)**

The objective of this course is to investigate the historical development of theatre, from its origins through the twentieth century. We will explore the evolution of theatre in terms of styles, movements and plays of specific periods and geographic areas. Students should expect to gain an overview of the development of theatre and drama, starting with its origins in ancient ritual and classical antiquity as well as the contemporary impact of modern theatre on popular culture. This course will give students a broad based survey of theatre arts; instills an appreciation of theatre; explores professional aspects of the theatre. Students are expected to participate in all school plays, which involves after school hours.

**Public Speaking/Debate (11-12) (1C, E)**

This communication course is highly recommended for all students. Students will participate in activities that help them choose topics, form outlines, write introductions and conclusions, include details, and practice delivery techniques that make a speech come “alive.”

**Broadcast Communications (9-12) (1C, E)**

This course will provide students with the skills and knowledge to be informed consumers of media in a technological society. The course provides the opportunity for students to learn basic journalistic and technological skills to be used in career choices and television productions. Students will research, gather, and analyze information to create video productions for broadcast to a variety of audiences.

**Journalism (10-12) (1C, E)**

This course is designed for the study and practice of the basic elements of journalism with major emphasis in newsgathering, writing, layout, and dissemination of news through mass media in the form of a newspaper or yearbook. Critical thinking and planning skills will be developed.

**Creative Writing (9-12) (1C, E)**

Students in this course will generate free-writing in a journal, study models of good writing, and experiment with poetry and prose. Students will develop a sense of speaker and audience. They will provide positive support for their fellow writers and learn to revise their work using concrete, sensory details and appropriate choice of diction, syntax, purpose, and audience.

**Poetry (10-12) (1C, E)**

Students in this course will learn techniques of open and closed verse. Emphasis will be placed on analysis of different forms of poetry, the works of noteworthy and famous poets, and writing and reviewing student created poetry.

**Language Arts Strategies (9-12) (1C, E, M)**

Designed for students who may need extra help with reading comprehension and language arts skills. This course provides students with extra time to complete language arts assignments and projects and provides extended access to a language arts instructor who will reinforce language arts concepts and provide tutoring and assistance as needed.

**SCIENCE/TECHNOLOGY EDUCATION****Integrated Science (9) (1C, R)**

Students will demonstrate laboratory skills, classification, and other research skills. This course is divided into the following sections: Biological, Chemical, Environmental, and Physical sciences. Audio Visual aids, lab exercises, and class activities will be used to supplement the textbook.

**Biology/Applied Biology (10) (1C, R, P = Integrated Science 9)**

Areas of content to be covered include, but are not limited to: momentum, scientific laws and theories, functions of cells, environmental issues, health and energy concepts, stable systems, physical and biological indicators, critique of experimental design, using data to make inferences, the use of technology to extend human abilities, use of models to explain scientific and technological concepts, stationary physical patterns, cellular processes, genetic makeup, significance of diverse ecosystems and the relationship and structure of the properties of matter. Students will be expected to complete a number of projects and/or research papers to demonstrate critical and analytical thinking skills. This course is a survey of basic biological processes and practical laboratory experience. Research, writing, and laboratory analysis are requirements.

**Principles of Technology I (11) (1C, R, P = Biology/Applied Biology 10)**

The Principles of Technology I program was developed to expand the student’s knowledge of force, work and rate principles as they pertain to mechanical, fluid, electrical, and thermal systems. This is accomplished through videotapes, problem solving techniques and hands-on labs, along with classroom instruction through lectures and demonstrations.

**Chemistry/Applied Chemistry (12) (1C, R, P = Principles of Technology I 11)**

Theoretical, mathematical and practical concepts are all presented to give the student a strong background in chemical principles. Topics include matter and energy relationships, nomenclature, reactions and equations, molar relationships, stoichiometry, gases and gas laws, kinetic theory, atomic theory, Quantum theory, Periodicity, chemical bonding, solutions and solubility, acids and bases, and elementary thermodynamics.

**Animal/Plant Science I (9-12) (1C, E)**

Students will learn the basis of soil science, animal science, plant science, forestry, wildlife management, conservation, careers and business. Students learn leadership skills and receive hands on experience on educational experience through field trips and related activities. Students receive practical business management experience through an individualized career experience (SAE- supervised agriculture experience). Students are encouraged to join the FFA organization.

**Animal/Plant Science II (10-12)** (1C, E, P = Animal/Plant Science I)

Advanced animal and plant science is a course that is designed for more in-depth study of the topics covered in Animal/Plant Science I. Content areas include: Anatomy, Nutrition, Genetics, and Career opportunities.

**Physics (10-12)** (1C, E, P = Algebra 2/Trigonometry)

This course is designed to give the students a basic knowledge of the concepts in physics. The topics covered include mechanics, energy, heat, light and sound. Others can be covered as student interest dictates. Concepts will be further explored in the laboratory.

**Environmental Science (10-12)** (1C, E)

A basic study of our natural resources and their importance to the ecosystem will be studied with an emphasis on water, soils, forestry and wildlife. Current environmental issue as well as local laws pertaining to our natural resources will be stressed. This course is a study of PA fishes, wildlife and trees. An emphasis will be placed on the local environmental including specie identification and habitat. Students will learn life cycle information, feeding requirements and methods of wildlife and forestry management.

**Nanotechnology/Astronomy (12)** (1C, E)

Nanotechnology is a one semester course which investigates matter that exists in the size range of 1-100 nanometers. Nanoscale matter will be explored using scanning electron microscopy and optical microscopy for research projects. Topics include: size and scale, structure of matter, size dependent properties, non-classical forces, self-assembly, tools and instrumentation, models and simulations, and nanotechnology and society. Astronomy is a one semester course designed for the student who enjoys observing and exploring the world and universe. Concepts covered include stars and constellations, the solar system, lunar cycles, history of modern astronomy, telescopes, stellar spectra, star formation and death, galaxies, structure of the universe, asteroids, comets, and meteorites.

**Human Anatomy & Physiology (11-12)** (1C, E, P = Biology)

Students will study of the structure and function of the human body. Study begins at the cellular level and continues through the body's organ systems. Dissections for comparisons are a part of the course. Students interested in a basic knowledge of the human body and students pursuing college degrees in science will benefit from the class. The course is highly recommended for students interested in working in the medical field.

**Principles of Technology II (11-12)** (1C, E, P = Principles of Technology I)

The Principles of Technology II program is designed to expand the student knowledge of resistance, energy, power, and force transformers as they pertain to mechanical, fluid, electrical, and thermal systems. This is accomplished through videotapes, problem solving techniques and hands-on labs, along with classroom instruction through lectures and demonstrations.

**College Chemistry – Dual Enrollment (11-12)** (1C, E, P = Algebra I)

Emphasizing the mathematical and reasoning skills needed to be successful in General Chemistry (college-level) and Chemistry for health professions. Fundamental algebraic skills are expected. Topics include: measurement and uncertainty, dimensional analysis, matter and energy, atomic theory and structure, the periodic table and periodicity, nomenclature, formulas and equations, stoichiometry and chemical bonding. The course also includes a significant and extensive laboratory component designed to reinforce concepts discussed in class and enhance laboratory skills.

**College Geology – Dual Enrollment (11-12)** (1C, E)

A survey course in geology that includes such topics as: make-up of the earth, internal and processes occur within or on the earth, rocks and minerals, fossils, earth's origin and evolution. Laboratory work is integral part of the course.

**Meteorology/Geology (9-12)** (1C, E)

Meteorology is a one semester course designed for the student who enjoys investigating natural atmospheric phenomena such as thunderstorms, tornadoes, hurricanes, atmospheric energy, seasons, light, color and optics, humidity, condensation, air pressure, clouds, wind, air masses, and fronts. Weather forecasting will be an integral part of this course. Geology (one semester) is the study of rocks, minerals, and the Earth's structure. It concerns all of earth; its natural hazards, earthquakes, volcanoes and floods, glaciers, natural resources such as crystals, gems, minerals, fossil fuels, and rocks. The history of earth will be reached through fossil collection and investigation.

**Woodworking (9-12)** (1C, E)

This course is designed as an introduction to the woodworking shop. Basic skills include: shop safety, tool identification, material identification and selection, project drawing and planning and proper safe use of tools and equipment. Several required projects will be constructed.

**Advanced Woodworking (10-12)** (1C, E, M, P = Woodworking)

Students work individually on projects based on concepts learned in the Woodworking course.

**Robotics (10-12)** (1C, E)

Students progress through activities designed to teach robot programming, behaviors, systems, control, sensors, feedback, and more. Along the way, they will address key technology and science concepts to build robots using lego NXT robotics to solve engineering problems.

**Advanced Robotics (10-12)** (1C, E, M, P = Robotics) Students work individually on projects based on concepts learned in the Robotics course.

**Drafting (9-12)** (1C, E)

This course introduces basic drafting practices. Emphasis is on instrument use and care, shape and size description, sketching, and pictorials. Upon completion, students should be able to produce drawings of assigned parts.

**Communications (9-12)** (1C, E)

An introduction to the field of communications, with emphasis on the history of communication study, theories important to all areas of communication, the contexts in which communication occurs, and the issues that must be faced by students of communication.

**Transportation (9-12)** (1C, E)

This course introduces the basic operational aspects of power energy and transportation systems using problem solving skills, laboratory environments, and student driven activities.

**Manufacturing (9-12)** (1C, E)

A course that explores the application of tools, materials and energy in designing, producing, using, and assessing manufactured products. Students will explore techniques used to apply technology in obtaining resources and in changing them into industrial materials and finished products.

**Construction (9-12)** (1C, E)

Explore the concepts involved in the construction industry. Areas of focus include blueprinting, tools, machinery, carpentry, masonry, electrical, drywall, painting, plumbing, safety, and business applications.

**Microsoft Applications I (9-11)** (1/4C per 9 weeks, R, M)

This course is the technology required rotation elective as outlined in the chart on page three. Students will create and edit documents such as letters reports, brochures, presentations and newsletters. Students will become competent in inserting and manipulating pictures, sounds, tables and charts.

**Microsoft Apps II (10-12)** (1C, E, P = 9<sup>th</sup> grade Microsoft Applications I)

An advanced level of Microsoft Applications, this is a hands-on course where students use the computer as a tool to solve real business problems. Using Microsoft Excel and Microsoft products, students will use spreadsheets and databases to analyze and retrieve information to generate reports and charts.

**Agriculture Education (9-12)** (1C, E, M)

Instruction in agricultural areas of animal science, plant science, natural resources, and leadership development will be taught. Students should have an interest in FFA activities. Supervised agriculture experiences (SAE) and record keeping will be stressed.

**Horticulture I (9-12)** (1C, E)

This course is designed to provide students with basic knowledge of the principles and practices in greenhouse operations. Students will combine classroom activities with practical experiences in raising greenhouse crops. Crop production will include identification, culture, fertilization, climate control, pest management, growing media, growth cycles, plant care and propagation. Structure maintenance skills will also be included. The course is also designed to provide a homeowners background in landscape design, landscape maintenance and turf grass management.

**Horticulture II (10-12)** (1C, E, P = Horticulture I)

Advanced studies of those elements included in Horticulture I, with additional emphasis on a business management component.

**Welding (9-12)** (1C, E, M)

This course is a study of metals and welding. Students will develop skills in both electric stick and mig welding. In addition, oxygen-acetylene welding and cutting skills will also be learned.

**Ag Building Trades/Adv. Ag Mechanics (10-12)** (1C, E, M, P = Welding and Woodworking)

This course is a study of principles and practices in agriculture construction. Students will develop skills in masonry and concrete, framing, roofing, fencing and basic electrical installation. Small engine operation and repair is also learned. Designed for the student who has previous experience in the shop environment. Students will review safety procedures and be involved in individual project work and skill demonstrations.

## SOCIAL STUDIES

### **World Cultures 9** (1C, R)

Explores the origin and development of human culture. The student studies the characteristics of civilizations including systems of government, development of writing, evolution of social strata, customs, the importance of cities, the development economic systems, and specialization of labor. Using creative, critical and historical thinking, the student investigates the similarities and differences of the various cultures and civilizations found throughout the history world.

### **American Civilization 10** (1C, R, P = World Cultures 9)

A thematic study of the 5 major interrelated themes found in 20<sup>th</sup> century American History beginning with the history of the U.S. from Civil War to the present. The five themes are Technology, Economics, Political Systems, Social Reform and Conflict.

### **Political Science/Economics 11** (1C, R, P = American Civilization 10)

This course examines the government (or political system) and how it protects, facilitates, and regulates society through processes and institutions (i.e. rules) that help control both public and private behavior. The class also provides an understanding of basic economic principles, including the law of supply and demand, scarcity, the role of the market place, competition, and consumer choice. The course also includes personal economic decision-making: investments, budget process, job choice, savings and checking accounts.

### **Contemporary History 12** (1C, R, P = Political Science/Economics 11)

A survey course with emphasis on policies as they pertain to the aftermath of the Second World War, which includes: the atomic bomb, containment, the Cold War, Korea, and Vietnam. The course also considers major social and intellectual trends, including the Civil Rights movement, the counterculture, feminism, Watergate, and the recession of the 1970s as well as the energy crisis, Iran hostage scandal, deindustrialization, the Reagan Revolution and the birth of the new Right, the end of the Cold War, war and diplomacy in the Middle East, and the age of terrorism.

### **Sociology 1 (9-10)** (1C, E)

An introduction to concepts related to human social structure and activity.

### **Sociology 2 (11-12)** (1C, E)

Students become more familiar with the basic concepts, principles, and practices of human society. They will gain a better understanding of human behaviors, which we observe daily at home, in school, in our community, and in society in general. Topics for the units include culture awareness, social interaction, media awareness, crime and deviance, conflict management, issues of community, and subcultures.

### **Geography (9-10)** (1C, E)

Study of the Earth's physical features, with particular emphasis on world and U.S. locations of important landmarks.

### **Anthropology (11-12)** (1C, E)

Cultural and social aspects of human behavior; comparison of cultures.

### **Western Civilization – Dual Enrollment (11-12)** (1C, E, P = 2.5 G.P.A.)

Designed for the highly motivated student who will do a much more in-depth study of western history and thought. The student is expected to read extensively in both the college text and associated enrichment articles. Students are expected to research various topics and write extensively. Evaluation is based upon student's participation in discussion, essay tests, and small papers on selected topics associated with the readings.

### **College Psychology – Dual Enrollment (11-12)** (1C, E, P = 2.5 G.P.A.)

A general introduction to the science of behavior. It explores topics such as methods of research, physiological development, motivation, emotions, cognitive process, sensation, perception, personality, behavior disorders, and individual differences. Experimental research as well as practical application is stressed.

## MATHEMATICS

**Special note: \* Indicates course may be required based on teacher recommendation. Four total credits, and one credit per year, are required for graduation.**

### **Pre-Algebra 9** (1C, R\*)

This course is designed to give the student a solid foundation in the skills needed to be successful in algebra. Basic math concepts will be reinforced and algebra concepts will be introduced.

### **Algebra 1A (9-10)** (1C, R\*, P = Pre-Algebra)

This course of beginning algebra explores algebraic skills in a clear, concise and methodical manner. Topics include: expressions, equations, inequalities, proportions, percents and the coordinate plane.

### **Algebra 1B (10-11)** (1C, R\*, P = Algebra 1A)

This course is a continuation of algebraic skills. Concepts include: polynomials, factoring, linear functions, systems of equations, quadratic functions and rational and radical functions.

### **Algebra I (9-11)** (1C, R\*, P = Pre-Algebra)

This course of study is an in-depth exploration of algebraic concepts. The points of emphasis include: expressions, equations, inequalities, proportion, percents, the coordinate plane, polynomials, factoring linear functions, system of equations, quadratic functions and rational and radical functions.

### **Geometry (9-12)** (1C, R\*, P = Algebra I or Algebra IB)

This course is designed to introduce students to important geometric concepts such as parallel and perpendicular lines, coordinate geometry, area, perimeter, volume, properties of geometric figures, similarity and congruence, and reasoning and proof.

### **Algebra II/Trigonometry (10-12)** (1C, R\*, P = Geometry)

This course extends the topics learned in Algebra I. Emphasis is placed on the study of functions and relations. Linear, quadratic, higher degree polynomial, exponential, logarithmic, and rational functions will be studied. Other topics include matrices, probability, statistics, sequences and series. This course will include trigonometry concepts such as trigonometric functions, radians, degrees, Law of Sines, and Law of Cosines.

### **Pre-Calculus (11-12)** (1C, R\*, P = Algebra II/Trigonometry)

This course serves as preparation for Calculus; consequently it is designed for the serious math student considering further study in a math, business, or science field. Topics include systems of linear equations, exponential and logarithmic functions, polynomial equations, applications of trigonometry, conic sections, sequences and series, probability, and limits.

### **Consumer Math (12)** (1C, R\*, P = Geometry, Teacher Recommendation)

This course covers the various math skills needed to manage personal finances as well as those used in the workplace and everyday life, and is designed to provide a students with a comprehensive course in practical, applied mathematics.

### **Probability and Statistics (11-12)** (1C, E)

An introduction to probability and statistics including descriptive statistics, probability distributions, the normal distribution, testing hypotheses, the t-test, and estimates and sample sizes.

### **Math Strategies (9-12)** (1C, E, M)

Designed for students who may need extra help with math skills. This course provides students with extra time to complete math assignments and projects and provides extended access to a math instructor who will reinforce math concepts and provide tutoring and assistance as needed.

### **College Statistics – Dual Enrollment (12)** (1C, E, P = Algebra II/Trigonometry)

Topics include: frequency distribution, percentiles, measure of central tendency and variability, normal distribution and curve, populations and samples, sampling distribution of means, sampling distribution of proportion, null and alternative hypotheses, type I and type II errors, test of means, confidence intervals, decision procedures, correlation, chi-square, simple analysis of variance, and design of experiments.

### **Calculus – (11-12)** (1C, E, P = Pre-Calculus, Teacher Recommendation)

Topics covered in the course include: functions and graphs, limits, trigonometric functions, derivatives, application of the derivative, integral, applications of the integral, exponential and logarithmic functions, and vector operations.

**College Algebra – Dual Enrollment (11-12)** (1C, E, P = Algebra II/ Trigonometry)

This course can be taken in preparation for Pre-Calculus or Statistics by students who need additional practice of Algebra skills. It can serve as a fourth math class for students who have completed Algebra I (or its equivalent), Geometry, and Algebra II/Trig. Topics include fundamental operations, factoring, functions, linear equations and inequalities, systems of linear equations, conic sections, exponential and logarithmic equations.

**Introduction To Engineering – Dual Enrollment (11-12)** (1C, E, P = Algebra II)

Topics include history, methods, functions, disciplines, and ethics of engineering. Students learn ways in which fundamental engineering principles are used to solve theoretical and practical problems. Mathematical and scientific concepts are strongly emphasized. Students may be expected to participate in a national design competition, which may involve after school hours.

**FOREIGN LANGUAGES****German I (9-12)** (1C, E)

German I is intended to introduce students to the German language and culture and to enable students to speak independently in basic conversational German. Major emphasis is placed on the active verbal participation of students in conversation, speech patterns, pronunciation activities, and songs. Grammar is introduced to facilitate proper spoken German. German culture is an important part of German I in order for the students to understand those who speak German.

**German II (10-12)** (1C, E, P = German I)

Students in German II build on the basic vocabulary, speech patterns, and culture in German I. Active verbal participation in German is essential to enhance fluency. German grammar is important to develop fluency and basic language skills. The study of German culture and the influence of German-Americans is a significant part of German II.

**German III (11-12)** (1C, E, P = German II)

Students in this course speak in German and understand spoken German at an advanced level. Class discussion and activities are in German and the course enhances the language skills and culture knowledge of German II and I. The goal of German III is greater fluency and proficiency in the use of German and a greater awareness of the cultural, international, and social contexts in which German is used.

**German IV (12)** (1C, E, P = German III)

German IV involves an advanced study of the language, culture, literature, history, and philosophy of the German people. Selections from the greatest German writers and thinkers are studied and discussed in German. The German language skills of German I, German II, and German III are developed in the study of German geography, thought, and traditions.

**Spanish I (9-12)** (1C, E)

An introduction to the Hispanic language and culture. Proper Pronunciation and comprehension of oral and written Spanish are stressed. Communication will be restricted to the present tense.

**Spanish II (10-12)** (1C, E, P = Spanish I)

This level is a continuation of Spanish I. Listening, speaking, reading, and writing in the target language are further emphasized. Students will begin to communicate in the past tense.

**Spanish III (11-12)** (1C, E, P = Spanish II)

This level is a continuation of Spanish II. Listening, speaking, reading and speaking are developed further. Students will be able to use present, past, and future tenses. Students will begin to explore Hispanic literature and culture. There is an emphasis on active participation.

**Spanish IV (12)** (1C, E, P = Spanish III)

This level is a continuation of Spanish III. Listening, speaking, reading, and writing are highly integrated, and there is an emphasis on grammar. Active student participation in the language at all times is required.

**MUSIC****Band (9-12)** (1C, E, M, P = Teacher Approval)

Instruction will include marching band techniques, concert band techniques, and jazz style of playing instrumental music. Performance at athletic and community events is required and involves after school hours. Opportunities also exist for individual and group performance field trips both during and after school hours.

**Chorus (9-12)** (1C, E, M, P = Teacher Approval)

This course will help students to develop an expressive and beautiful tone quality, sing with good pitch and clear diction, develop correct breathing habits and phrasing, and receive exposure to and performance of high quality vocal literature. Students are expected to perform in a winter and spring concert, as well as the WG graduation ceremony. These performances require after school hours. Opportunities also exist for individual and group performance field trips both during and after school hours.

**Jazz Ensemble (9-12)** (1C, E, M, P = Teacher Approval, Band)

Students will cover elementary and advanced levels of music theory, the history of jazz, and learn the basics of the improvisation. Students will also focus on the performance of jazz music in many different styles and ensemble settings. Depending on instrumentation and ability, students may have the opportunity to participate in large jazz ensembles, small group settings and solo performance. Students are expected to perform in periodic concerts which requires after school hours. Opportunities also exist for individual and group performance field trips both during and after school hours.

**Piano Instrumental (9-12)** (1C, E, M, P = Teacher Approval)

Students will learn how to play the piano in a small group setting. Points of emphasis include music theory as applied to the piano, performance techniques, and sight reading of music. Students will be expected to perform at a recital, which may involve after school hours.

**Vocal Development (9-12)** (1C, E, M, P = Teacher Approval, Chorus)

Students will receive individual instruction in the art of singing. Points of emphasis include posture, breath control, tone production, diction, and music theory as applied to vocal performance. Includes both group and individual singing.

**Music Theory/Composition (11-12)** (1C, E, M)

Designed to introduce the student to the fundamentals, resources, and practices of western music from the 17<sup>th</sup> century to the present day. Through class discussion, listening experiences, assignments, and composition projects, students will develop a foundation of knowledge of the following musical elements: melody, harmony, rhythm, form, and composition.

## ART

**Art I (9-12)** (1C, E)

This course focuses on a comprehensive and chronological study of the visual arts while integrating and applying an advanced vocabulary to the various techniques and processes of creative expression in the arts form. Students will be introduced to a variety of media while incorporating problem solving skills during the production of their art. Assessment involves testing of lecture material, participation in class assignments, sketchbook evaluation, and critiques. Safe use of equipment and tools to produce artwork is a major point of emphasis.

**Art II (10-12)** 1C, E, P = Art I)

Continued comprehensive and chronological study of the visual arts while integrating and applying an advanced vocabulary to the techniques and processes of creative expression in various art forms. Students will continue to work with a variety of media while incorporating problem solving skills during the production of their art. Assessment involves testing of lecture material, participation in class assignments, sketchbook evaluation, and critiques. Safe use of equipment and tools to produce artwork is a major point of emphasis.

**Advanced Art (11-12)** (1C, E, M, P = Art II)

This course is designed for the advanced art student. It will integrate and apply advanced artistic vocabulary to various advanced techniques and processes used in the visually creative expression of the student. An in depth understanding of design concepts and art vocabulary are a necessity for the student to be able to understand the language of advanced art. Oil painting, glass bead making, 2 and 3 dimensional design, and stained glass are some of the various advanced media & processes that may be introduced throughout the year. Focus is on self-expression and production.

## FAMILY & CONSUMER SCIENCES

**Career Education (11)** (¼ C, R)

This is an occupational exploration and readiness program. Students search career clusters and choose at least three areas of interest before taking online math and reading assessments, receiving scores which measure up with skills necessary for chosen occupations. Online remediation is linked to individual students' assessment and work requirements and state academic standards. Upon completion, students will receive a certification for work and access to information about post-secondary opportunities.

**Home Management (9-12)** (1C, E)

Students will develop skills needed to meet the needs of the individual and family at home, work and in the community. Emphasis will be placed on the following areas: food preparation and nutrition, financial and resource management, housing, and individual and family development. Careers in Family and Consumer Sciences and FCCLA will also be explored. Assessment is based on participation and performance in the kitchen laboratory as well as individual and group classroom activities. Students may be required to furnish some of their own materials and/or supplies for approved projects.

**Child Development (10-12)** (1C, E, M, P = Home Mgmt., Teacher Approval)

Child Development is a specialized course that prepares students to understand the physical, social, emotional, and intellectual growth and development of children. The course is designed to help young people acquire knowledge and skills essential to the care and guidance of children as a parent or caregiver.

**Foods and Nutrition (9-12)** (1C, E)

This course is designed for students who are interested in understanding the principles of nutrition and food preparation, with a focus on the chemical properties and processes involved in the human diet. Attention will be given to the selection and preparation of nutritious food and personal health.

## PHYSICAL EDUCATION

**Physical Education (9-12)** (¼ C per 9 weeks, R, M)

High School Physical Education is a required program of activities and learning experiences that provide an opportunity to prepare students for their future physical and recreational life. Students will explore activities of lifetime value and develop competence in one or more activities of their own choice. Expectations include participation, preparation, and involvement in a variety of team and individual/dual activities. Specific credit requirements are outlined on page three in this handbook.

**Health (9 & 10)** (¼ C per 9 weeks, R, M)

This course provides information in such a way that it influences students to take positive actions about their own health. Students learn that good health habits can be very beneficial throughout their lives, allowing them the freedom to make healthy and proper decisions that may effect their mental, physical, and social well-being. Areas of emphasis include nutrition, infectious diseases, drug and alcohol awareness, and first aid. Specific credit requirements are outlined on page three in this handbook.

**Fitness (9-12)** (1C, E, M)

Includes fitness screening in the areas of aerobic capacity, flexibility, muscular strength/endurance, and body composition. Expectations include participation, preparation, and improvement.

**Health & Wellness (9-12)** (1C, E)

This course centers on discussion of personality, substance abuse, first aid, anatomy, physiology and how it relates to fitness and conditioning. Other topics include diet and nutrition, sexuality and reproduction, and communicable diseases and non-communicable diseases and their prevention.

## OTHER COURSES

**Drivers Theory (10)** (¼ Credit, R)

This course is designed to make students aware of the processing of information as it pertains to driver performance. Emphasis will be given to the concepts of separating and minimizing risks through the management of time and space in an automobile. Various driving laws of the state and the effects of drugs and driver performance will also be discussed.

**Study Skills (9-10)** (1C, E)

Students learn the organizational, research, and study skills necessary to be successful in high school and graduate. Areas of focus include time management, memory retention, note taking, and test taking skills.

**Study Hall (9-12)** (0C, E, M)

Designed for students who may need a little extra time to complete assignments. Students work independently and are expected to bring class work and/or homework for completion during the study hall period.

**Study Island (9-12)** (1C, E, M)

An online math, reading, and science tutorial program. Students work individually in a computer lab setting reinforcing concepts covered in their math, reading, and science classes. Lessons are aligned to PSSA state testing standards and designed to improve math, reading, and science comprehension.

**Exploratory (9-10)** (1C, E)

Students will explore self-chosen topics of interest in great detail. Aspects of study will include in-depth research, presentations, demonstrations, hands-on experimentation, and inquiry learning.

**PSSA Prep (9-12)** (1C, R/E, M)

Designed for students who demonstrate a need for extra help with reading, math, and/or science comprehension and skills. This course provides students with extended access to a highly qualified instructor who will reinforce language arts, reading, math, and/or science concepts and provide tutoring and assistance in the appropriate area as needed. It is a required course for students who do not score proficient or advanced on PSSA and/or 4-Sight tests, but may also be chosen as an elective.

**Odyssey of the Mind** (1C, E, M, P = Teacher Approval)

Odyssey of the Mind is a program designed to promote creative problem solving activities while adding a competitive element. Activities range from technical building to presenting new outlooks on literary classics. Attendance is required for field trips/competitions that occur during the year both during and after school hours.

**Work Release (12)** (0C, E, P = see below)

Work Release is for seniors who have all of the required credits and/or who are enrolled in the required classes for graduation. Students will not receive a grade or a credit for work release. Students must fill out the necessary paperwork and hand-in monthly work schedules with a work supervisor's signature and pay stubs to the guidance counselor. The application for work release reviews the student's transcript, senior schedule, and requires the guidance counselor and principal's approval.

**Teacher's Assistant (12)** (0C, E, P = Teacher Approval)

Teacher's assistants are expected to report to the teacher and assist as directed by the teacher. These positions will only be approved for students who have met all other credit requirements.

## **GREENE COUNTY CAREER AND TECHNOLOGY CENTER PROGRAM** **(3 Year Program For 10<sup>th</sup>, 11<sup>th</sup>, 12 Grades)**

If a student enrolls in the Greene County Career and Technology Center (GCCTC), they will earn 3 elective credits per year upon passing their program for the year. For students enrolled at the Greene County Career and Technology Center, the following West Greene course requirements are currently waived: 2 credits of social studies, 1 credit of science, and 1 credit of math. Students who fail to complete the entire 3 year GCCTC program are required to complete all classes which have been previously waived. The administration reserves the right to modify these credit requirements as needed. The following courses of study are offered at the GCCTC:

**AUTO COLLISION AND REPAIR TECHNOLOGY**

This program prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic window and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or unibody structures using hydraulic jacks and pulling devices; and file, grind and sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with primer and finish coat.

**AUTO TECHNOLOGY**

This program prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes instruction in the diagnosis and testing, including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems and drive train and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, drive trains, fuel system components and air conditioning and includes the use of technical repair information and the state inspection procedures.

*(Postsecondary Credits awarded at Rosedale Technical Institute)*

**BUILDING CONSTRUCTION OCCUPATIONS**

This program prepares individuals to apply technical knowledge and skills in the erection and installation of buildings and other structures using assorted materials such as metal, wood, stone, brick, glass, concrete and composition substances. Instruction is provided in the basic skills of carpentry, masonry, plumbing, heating, electrical, painting and decorating and a variety of activities associated with building construction. Some of these activities include but are not limited to blueprint reading; cost estimating; the use of a variety of hand and power tools; cutting, fitting, fastening and finishing various materials; and applying technical specifications and knowledge concerning the physical properties of materials. *(Postsecondary Credits awarded at Triangle Tech, Inc.)*

**BUSINESS INFORMATION TECHNOLOGY**

The accounting program is designed to provide technical administrative support to professional accountants and other financial management personnel. Students learn to use generally accepted accounting principles in manual and computerized formats to complete the steps of the accounting cycle for various forms of business ownership; verify and enter details of transactions from source documents into journals; post transactions to accounts; summarize details of separate ledgers by transferring data to general ledgers; balance records and compile various financial statements and reports; prepare withholding, social security and other tax

reports; compute, type and mail monthly statements to customers; complete records through the prior balance; and operate calculators, computers and spreadsheet and accounting application software. Students also receive instruction in business ethics, business law, economics, office procedures and public relations. Students are provided experiences and instruction needed to satisfy initial employment requirements for accounting, computing and data capturing occupations. Those completing the program may be employed as accounting clerks, credit clerks, payroll clerks, statistical clerks, general bookkeepers, bank clerks/tellers, auditing clerks, billing machine operators and inventory clerks. *(Postsecondary Credits awarded at Penn Commercial, Pittsburgh Technical Institute, Laurel Business Institute and PA Institute of Health & Technology)*

### **CHILD AND ADULT CARE SERVICES**

This program prepares individuals for a variety of occupations in child care and guidance often under the supervision of professional personnel in child or day care centers. This program includes instruction in growth and development; nutrition; program planning and management; safety; behavior guidance; play activities; child abuse and neglect; parent-child personal relationships; learning experiences for children; and laws, regulations and policies relating to child care services. *(Postsecondary Credits awarded at Westmoreland County Community College)*

### **COMPUTER NETWORKING TECHNOLOGY**

This program focuses on the design, implementation and management of linked systems of computers, peripherals and associated software and prepares individuals with the technical skills required to support networks and network users. This program includes instruction in networks technologies and standards: system design, architecture, operating systems, security, communications protocols, client support, messaging services, network management, troubleshooting and server optimization. Those completing the program may be employed as a network administrator, network specialist, network technician, webmaster, client services analyst (end user) or network operator. Opportunities are available to obtain certification in A+ and Network+. *(Postsecondary Credits awarded at Pittsburgh Technical Institute, Laurel Business Institute, Penn Commercial, and PA Institute of Health & Technology)*

### **COSMETOLOGY**

This program prepares individuals to apply technical knowledge and skills related to experiences in a variety of beauty treatments including the care and beautification of the hair, complexion and hands. The 1250 hour curriculum includes hands-on training in giving shampoos, rinses and scalp treatments; hair styling, setting, cutting, dyeing, tinting and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations are also emphasized. Instruction is designed to qualify pupils for the PA State Board of Cosmetology Exam and to work as licensed hairstylists. Additional programs include: Nail Technology - 315 hours and Esthetics (Skin Care) - 300 hours. *(Postsecondary Credits awarded at Douglas Education Center and Laurel Business Institute)*

### **CULINARY ARTS**

This program prepares students for employment related to institutional, commercial or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instruction skills are provided to individuals desiring to become employed in all areas of the food service industry at entry level. Opportunities are available to obtain certification in ServSafe. *(Postsecondary Credits awarded at The Art Institute of Pittsburgh, Pittsburgh Technical Institute, Penn Commercial and Westmoreland County Community College)*

### **DRAFTING & DESIGN**

This program prepares individuals to apply technical knowledge and skills as each relates to gathering and translating of data or specifications including basic aspects of planning, preparing and interpreting mechanical, architectural, chemical, structural, civil, pneumatic, marine, electrical/electronic, topographical and other drawings and sketches used in various engineering fields. Instruction is designed to provide experiences in drawing and CAD; the use of reproduction materials, equipment and processes; the preparation of reports and data sheets for writing specifications; the development of plan and process charts indicating dimensions, tolerances, fasteners, joint requirements and other engineering data; the development of models; and drafting multiple view assembly and sub-assembly drawings as required for manufacture, construction and repair of mechanisms. *(Postsecondary Credits awarded at Penn Commercial, Pittsburgh Technical Institute, and Triangle Tech, Inc.)*

### **ELECTRICAL OCCUPATIONS**

This program prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program. *(Postsecondary Credits awarded at Dean Institute of Technology and Triangle Tech, Inc.)*

## HEALTH ASSISTANT

A cluster program with a combination of subject matter and experiences designed to prepare individuals for entry-level employment in a minimum of three related health occupations under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, etc. Volunteer work at a local long-term nursing home enables students to develop interaction skills with the elderly population. Opportunities are available to obtain certification in Home Health Aide, CPR and First Aid. *(Postsecondary Credits awarded at Laurel Business Institute, Douglas Education Center and PA Institute of Health & Technology)*

## PRECISION MACHINING

This program prepares individuals to apply technical knowledge and skills in all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling and feeds and speeds of machining. Emphasis is placed upon bench work and the operation of lathes, power saws, shapers, milling machines, grinders, drills and computer operated equipment (CNC and CIM). Instruction also includes the use of precision measuring instruments such as layout tools, micrometers and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares students to operate all types of hand and computer controlled machines. Opportunities are available to obtain certification in NIMS (National Institute for Metalworking Skills). *(Postsecondary Credits awarded at Westmoreland County Community College)*

## WELDING/FABRICATION

This program prepares individuals to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders and chemical baths for surface cleaning; positioning and clamping; and welding standards established by the American Welding Society, American Society of Mechanical Engineers and American Bureau of Ships. *(Postsecondary Credit awarded at Dean Institute of Technology, Triangle Tech, Inc. and Westmoreland County Community College)*

**Greene County Career and Technology Center programs** are developed to follow the State guidelines for Programs of Study. Programs of Study incorporate secondary education and postsecondary education elements; include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education; may include the opportunity for secondary education students to acquire postsecondary education credits and lead to an industry-recognized credential or certificate at the postsecondary level or an associate or baccalaureate degree. The following chart shows the courses that CTC students will be expected to take. Questions about CTC programs may be directed to the guidance office at West Greene, or the guidance office at the CTC.

### PROGRAM OF STUDY – SUGGESTED ACADEMIC SCOPE AND SEQUENCE

Secondary School				
SUBJECT	Grade 9 (Hours)	Grade 10 (Hours)	Grade 11 (Hours)	Grade 12 (Hours)
<b>ENGLISH</b>	English 9	English 10 College Prep English I	English 11 College Prep English II	English 12 College Prep English III
<b>MATH</b>	Algebra I, II Geometry	Algebra I, II Geometry	Geometry Trigonometry Probability & Stat/Trig	Trigonometry Pre-Calculus - Calculus Probability & Stat/Trig College Algebra
<b>SCIENCE</b>	General Science 9 Biology I	Biology I, II Chemistry I	Chemistry I, II Physics Biology I, II Principles of Technology I, II	Physics, Human Anatomy, Physiology Principles of Technology I, II Zoology/Biology Academic Biology
<b>HUMANITIES</b>	US/PA Civics World Cultures	American Civilization American History US History	European History History of Western Civilization Political Science	Government/Economics Psychology/Sociology
<b>OTHER</b>		Foreign Language I	Foreign Language II	Foreign Language III

## SUMMARY

While this student handbook does provide a great deal of useful information regarding course selection and scheduling, it does not include references to and/or descriptions of *ALL* school policies and procedures. Parents and students are encouraged to contact the school at any time for clarification questions regarding course selection and scheduling. Ultimately, **it is the responsibility of the student to be aware of and abide by all school policies and procedures and procedures regarding scheduling.** It is the sincere goal of the West Greene School District, through the implementation of the scheduling procedures outlined herein, to create and nurture a learning environment where all students are able to achieve at their maximum potential.



## *PIONEERING EXCELLENCE*

### School Information

Superintendent – Thelma J. Szarell  
MSHS Principal – Anthony Paull  
Assistant Principal – Jason Pappas  
High School Guidance Counselor – Kimberly Tohey  
Middle School Guidance Counselor – Melissa Berry

Address: West Greene Middle-Senior High School  
1352 Hargus Creek Road  
Waynesburg, PA 15370  
Phone: 724-499-5191  
Fax: 724-499-5492  
Website: [www.wgsd.org](http://www.wgsd.org)