

# GREENVILLE HIGH SCHOOL

## COURSE OF STUDY

Grades 7-12



*Revised July 2022*

## INTRODUCTION

This document has been prepared to assist students in planning an effective and realistic high school course of study. It contains information about various curricular choices, individual course selections, and important school policies. A variety of courses are offered to meet the abilities and interests of our students. It is hoped that students and parents/guardians will study the contents of this booklet carefully and consult a school counselor when planning a specific schedule for next year.

Keep this publication throughout the school year so you may refer to it for future planning, school policies, graduation requirements, etc. The information and guidelines contained in the booklet can help you avoid difficulties in completing your academic program.

As students select courses, attention should be given to course requirements, entrance prerequisites, and course sequences. For benefit of each student, observe that Appendices A, B, and C located at the end of the Course of Study demonstrate course sequences and possible options in mathematics, science, and technology and engineering courses. Students should realistically assess your capabilities and ambitions. If students have any doubts or questions concerning a course, he/she is encouraged to discuss those concerns with the appropriate teacher, counselor, or principal.

**Dr. Jeffrey D. Keeling**  
High School Principal

**Mr. Mark E. Karpinski**  
Assistant High School Principal

**Ms. Kristin Richards**  
Guidance Counselor  
Grades 7-9

**Mr. Ryan Wig**  
Guidance Counselor  
Grades 10-12

## EQUAL RIGHTS AND OPPORTUNITIES POLICY

To comply with federal laws, state laws, and State Department of Education regulations concerning equal rights and opportunities and to assure these within our school community, the Greenville Area School District declares itself to be an Equal Rights and Opportunities School District. As an Equal Rights and Opportunities School District it does not discriminate against individuals or groups because of race, color, national origin, religion, sex, or marital status; nor will any person on the basis of any of the foregoing, be excluded from participation in, denied the benefits of, or be subject to discrimination in any educational program, activity or employment under the control of the Greenville Area School District Board of Directors. The District's commitment to non-discrimination extends to students, employees, and prospective employees of the community.

The Greenville Area School District is an equal opportunity education institution and will not discriminate on the basis of sex, race, color, national origin, religion, marital status, or handicap in its activities, program, or employment policies are required by ESL, Title 1X, Title VI, and Section 504. For information regarding civil rights or grievance procedures, contact Brian S. Tokar, Compliance Officer, 9 Donation Road, Greenville, PA 16125, (724) 588-2500.

## GRADUATION REQUIREMENTS

### A: Course Completion:

Requirements for graduation are established by the Greenville Area School District Board of Directors and satisfy the mandated minimums set forth by the Pennsylvania State Department of Education. To be eligible for a diploma, a student must successfully complete a minimum of **25.0 credits in grades 9-12**. The following are basic subjects required of all students:

Subject	Credits
English	4.0
Social Studies	4.0
Science	7.0 total, minimum of 3.0 in each discipline*
Mathematics	
Health	0.6
Physical Education	1.1
Fine or Applied Arts	1.0
Electives	<u>7.3</u>
<b>TOTAL</b>	<b>25.0</b>

\*up to 1.0 credit (math or science) of total 7.0 may be applied from approved and designated computer science courses

### B. Guidelines:

1. Each student should register for and maintain a minimum of **six (6) full-time subjects** in addition to physical education. Full-time subjects meet one (1) period each day of the week.
2. To be eligible for a second (or subsequent) year of an elective subject, a student must obtain at least a “C” final grade in the first or preceding year unless designated otherwise
3. An overall average of “C” in the college preparatory curriculum is considered minimum for staff recommendation to college.

### C. Class Standing Requirements:

The minimum number of credits necessary for grade classification at the beginning of each school year is:

To be in <b>Grade 9</b>	the student must have completed	<b>8<sup>th</sup> grade</b>
To be in <b>Grade 10</b>	the student must have earned	<b>4.0 credits</b>
To be in <b>Grade 11</b>	the student must have earned	<b>10.5 credits</b>
To be in <b>Grade 12</b>	the student must have earned	<b>17.5 credits</b>

### D. Class Rank – Important Note:

Any student that takes any course(s) prior to the established grade level(s) and/or prerequisite(s) will NOT be placed in an advantageous position with their grade level peers in regards to class rank.

## QUALITY POINT AND CLASS RANK COMPUTATION

### Philosophy

This Class Rank System is designed to use the core curriculum of 15 required courses plus five (5) electives for computing Quality Points Average (QPA). This system encourages and rewards a challenging curriculum and keeps all students on the “same playing field” of 20 courses.

### Basic Criteria:

All students are required to take five (5) courses in addition to physical education. Class rank will be based on the QPA of the following credits:

1. 15 credits of core courses as follows:

English	4	
Social Studies	4	
Math	4	}
Science	4	

7 total; minimum of 3.0 in each discipline\*
2. Electives 5 (the 5 courses with the highest Quality Points.)

\*up to 1.0 credit (math or science) of total 7.0 may be applied from approved and designated computer science courses

### Calculation of Quality Points will be done as follows:

All core courses taken at Greenville High School (GHS) in grades 9 through 12 will count toward the total of all quality points earned. Starting with the first semester of a student’s ninth grade year, each semester a total of five (5) courses are selected for class rank purposes. These include all core courses along with the elective(s) with the highest quality points. These courses will not exceed a total of five (5).

1. Final class rank will be based on the total QPA average earned in the 20 credits of course work described above.
2. All courses taken at GHS grades 9-12 will be used to determine GPA. Exceptions will be courses given an “S” or “U”.
3. Courses taken at another high school, summer school, independent study, dual enrollment courses or home schooling will not be included in QPA. These courses will be listed and given credit, but will not be assigned quality points. A grade of A through E will be issued for independent studies and dual enrollment and it will affect GPA.
4. Transfer students must complete three (3) semesters at GHS to have a class rank calculated. If a student needs a rank for college purposes the counselor will contact the college or university and indicate the potential rank.



## **COLLEGE IN HIGH SCHOOL**

The Greenville High School has standing articulation agreements through the College in High School (CHS) programs at the University of Pittsburgh, Seton Hill University, and Thiel College. Students who have met the requirements to enroll in the highlighted CHS courses will have the opportunity to simultaneously earn high school *and* university credit for a reduced tuition rate. Each of these courses is scheduled within the scope of the regular school day and provides students with the tremendous opportunity to affordably begin their college education.

Tuition information is reviewed at the beginning of each academic year by the teacher of each respective CHS course. After a student graduates from GHS, he or she will request a transcript from the respective institution(s) where he or she took CHS coursework. During the admissions process or afterwards, the post-secondary college or university where he or she attends will audit the coursework and may transfer appropriate courses into the student's course of study framework.

## THE VOCATIONAL AND TECHNICAL SEQUENCE OF STUDIES

The *Mercer County Career Center* is a part of our high school and offers the opportunity for high school students to obtain a saleable skill prior to high school graduation. High school counselors will provide necessary information and forms for interested students to enroll in the various Career Center courses. Counseling is also provided regarding the student's choice of programs. Students should read the course descriptions and requirements carefully before applying for a particular course. Additional information about each course is available in the Guidance Office. Typically, students apply during their freshmen or sophomore year and begin the Career Center program in 10<sup>th</sup> or 11<sup>th</sup> grade. Students attend GHS in the morning and the Mercer County Career Center in the afternoon. The combination of these credits will meet the requirements for graduation from GHS. The programs available for high school students at the Career Center are:

### **Automotive Technology**

Automotive Technology allows students to perform a wide range of diagnostics, repairs, and preventative maintenance on automobiles and light trucks. Students will gain the technical knowledge and skills to obtain an entry-level position and/or pursue postsecondary education. The program's curriculum enables students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes the diagnosis and testing of malfunctions in and repair of engines, fuel, electrical, cooling, steering, suspension and brake systems. Students also prepare to obtain certifications for PA Safety Inspection; Emissions Inspection; and Refrigerant, Recovery, and Recycling.

**Phase Level: 2**

### **Carpentry**

Carpentry prepares students to obtain entry-level positions in the construction or wood industries, apprenticeships in trade unions and/or to pursue enrolling in postsecondary institutions for degrees in construction, sales, or management. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual and group projects and activities. The program's instruction includes units on safety, hand and power tools, blueprint reading, framing, interior and exterior finish, construction materials, measuring, estimating, and building codes. Students also study technical mathematics, residential steel-framing, and cabinetmaking.

**Phase Level: 2**

### **Collision Repair and Refinishing**

Collision Repair and Refinishing prepares students to obtain an entry-level position in the auto body repair/refinishing field and/or to pursue postsecondary education. The curriculum enables students to develop technical knowledge and skills through real world, hands-on shop experiences. The program will cover the entire repair and refinishing process from start to finish. The instruction will focus on key areas including workplace skills, safety techniques, vehicle design and construction, structural and non-structural repairs, industry related welding and fabrication, estimating, collision repair procedures, automotive painting, refinishing and detailing. Students will learn all these skills in a state-of-the-art shop with industry standard equipment. Students will be expected to read and understand complex instructions as well as using technology as an industry resource.

**Phase Level: 2**

### **Computer Information Technology**

Computer Information Technology prepares the students to obtain entry-level employment and/or provides the foundation for post-secondary success. The program's curriculum enables the students to develop a basic level of knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on lab experiences. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group activities. The program will provide students experience in the administration and support of computer networks, which includes: user and group management, server security, network sharing, operating systems, user and workstation security, help desk support, computer repair and remote access. Students will focus their study on network technologies, network devices, network management, tools and security. Computer Information Technology students will be expected to read and interpret complex instructions, technical literature and solve a variety of technical problems.

**Phase Level: 2**

### **Computer Programming**

The Computer Programming course focuses on the general writing and implementation of generic and customized programs that drive operating systems. This prepares students to apply the methods and procedures of software design and programming to software installation and maintenance. Computer Programming includes instruction in software design, low- and high-level languages and program writing, program customization and linking, prototype testing, troubleshooting, and related aspects of operating systems and networks. Students will study data types and expressions, designing functions, and graphic and image processing. As well as learn software development process.

**Phase Level: 2**

### **Cosmetology**

Cosmetology trains students to become licensed cosmetologists in specialized or full-service salons. The program's curriculum provides concentrated studies in the professional competency areas unique to the cosmetology field. Students develop a knowledge base through classroom theory lessons and perfect their clinical skills by applying learned knowledge in the program's student-operated salon. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual and group projects, as well as other activities. The programs instruction includes units on shampooing, conditioning, cutting and styling hair; chemical texture services and hair coloring techniques; and providing facials, manicures and pedicures. Personal safety, professionalism, and sanitation and disinfection of equipment and facilities are emphasized. Students also study business management with a focus on managing a salon.

**Phase Level: 2**

### **Culinary Arts**

Culinary Arts prepares students to obtain entry-level employment related to institutional, commercial, or independently owned food establishments and other food industry occupations and/or provides a foundation for students who pursue acceptance into a postsecondary culinary program. The program's curriculum enables students to develop knowledge through classroom theory lessons and acquire culinary skills by applying learned knowledge in the program's fully equipped commercial kitchen and dining room. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects and activities. The program's instruction includes units on use and care of utensils and food preparation equipment; safety; sanitation procedures, nutrition basics, and recipes preparation. Students develop and practice skills through hands-on activities and experiences related to planning, selecting, preparing, and serving of quality food and food products.

**Phase Level: 2**

### **Diesel Technology**

Diesel Mechanics prepares students to obtain entry-level employment and/or to pursue postsecondary education. The program's curriculum enables the students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop

experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety, diesel engine mechanics, suspension and steering, brake systems, electrical and electronic systems, and preventive maintenance. Students develop skills for troubleshooting problems; disassembling, rebuilding, and reassembling engines; applying electrical principles to service electrical/electronic systems; inspecting, repairing or replacing various systems' components; and performing preventive maintenance on medium/heavy vehicle systems.

**Phase Level: 2**

### **Early Childhood Education**

Early Childhood Education allows students to obtain a variety of entry-level child care occupations in day care centers and preschools and/or provides a foundation for students who pursue a postsecondary early childhood education program. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire care giving, teaching, and managing skills by applying learned knowledge in the program's fully equipped preschool. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects and activities. Instruction includes units on growth and development; nutrition; program play activities; child abuse and neglect; learning experiences for children; and laws, regulations, and policies relating to child care services.

**Phase Level: 2**

### **Electrical Occupations**

Electrical Occupations prepares students to apply technical knowledge and skills necessary to install, operate, maintain and repair many electrical systems. These include: electrically energized residential, commercial and industrial systems, DC/AC motors, as well as controls and electrical distribution panels. Instruction emphasizes practical application of circuit diagrams and the use of electrical codes. In addition, the curriculum also includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Other critical components of the program are reading and interpretation of commercial/residential construction wiring codes and specifications, installation and maintenance of wiring, along with service and distribution networks within large construction complexes.

**Phase Level: 2**

### **Health Care Careers**

Health Care Careers prepares students to obtain entry-level positions in the health field and/or to pursue postsecondary education. The program provides students with health career exploration activities, instruction of basic skills, which are fundamental to all areas of health care, and clinical experiences. Students develop health care knowledge through classroom theory lessons and practice health care skills in a laboratory setting prior to their clinical assignments. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects. The program's core instruction includes units on medical terminology, anatomy and physiology, basic clinical skills, aseptic techniques, OSHA regulations, and infection control.

**Phase Level: 3**

### **Innovation and Entrepreneurial Development**

Innovation and Entrepreneurial Development enables students to learn first-hand about the risks and rewards of starting and operating a small business. The program's curriculum equips students with the knowledge and skills of fundamental business concepts and entrepreneurship. PowerPoint presentations, reading and writing assignments, and hands-on activities provide students with a practical overview. Students will consider the steps involved in turning an idea into a business. For example, learning to identify a passion/hobby that can provide a product or service, researching the market, and weighing the risks of starting a small business. The program's core instruction includes units on economic principles, business plans, business related math skills, technology skills, sales, and marketing techniques. Students engage in various business activities related to each planned unit.

**Phase Level: 2**



### **Logistics – Material and Supply Chain Management**

Logistics and Materials Management is designed to prepare individuals for entry level employment in this industry. Students will learn and perform logistical functions associated with receiving, storing, shipping goods, and the various systems and record keeping for supply chain management.

Students with good attention to detail who enjoy a fast-paced, hands-on, physical workplace would be successful in this program. The curriculum provides instruction in the use of powered material, handling equipment, and OSHA safety and ergonomics. Supply chain management, automated inventory control systems, purchasing, receiving, order selections, packaging, and shipping methods are presented. Academic subjects include business mathematics and communications. The course includes job retention skills and customer relations.

**Phase Level: 2**

### **Precision Production Metals**

Precision Production Metals prepares students to obtain entry-level employment in the machine tool industry, apprenticeships sponsored by unions or manufacturers, and/or to pursue enrollment in postsecondary programs. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program incorporates national skills standards developed by the National Institute of Metalworking Skills (NIMS). Instruction includes units on bench work and the operation of lathes, power saws, grinders, milling machines, drills and computer operated equipment. Students also study the use of precision measuring instruments such as layout tools, micrometers and gauges and blueprint reading. Emphasis is on machining parts for the NIMS performance exams.

**Phase Level: 2**

### **Welding**

Welding prepares students to obtain entry-level employment as a welder or in related positions in all types of small and large companies and/or to pursue enrolling in postsecondary programs such as welding engineering or metallurgy. The program's curriculum enables students to gain a knowledge base through classroom theory lessons. Shop activities allow students to put their classroom learning into hands-on practice of technical skills. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety practices, gas cutting and welding, arc welding in various positions, and types and uses of electrodes and welding rods. Students also learn to fabricate and join metal parts according to diagrams, blueprints, and specifications.

**Phase Level: 2**

For further information on Mercer County Career Center programs and services, please visit their web-site

**<http://www.mccc.tec.pa.us/>**

## **COURSE DESCRIPTIONS**

### **ENGLISH LANGUAGE ARTS CURRICULUM**

#### **Accelerated English Language – Grade 7**

The 7<sup>th</sup> grade accelerated ELA course meets one period per day. Students in the accelerated class will have met admission criteria based on PSSA scores and teacher recommendations. The accelerated course is faster paced, has a higher level of performance expectation and difficulty, and includes additional assignments and projects not included in practical and college prep. The course is literature based using a literature anthology, novels, and supplemental materials. Main topics of instruction are reading strategies, writing, vocabulary acquisition, and grammar as needed. Writing assignments vary but will include quick writes, paragraphs, essays, written book reports, poetry, creative writing, and text dependent analysis essays. The focus is on improving overall reading analysis and interpretation and writing strategies while exposing students to quality literature. This includes making connections between texts and focusing on textual evidence. Students will be required to speak in formal situations, listen critically to others, and respond intelligently as individuals or groups. These students will complete at least one book report or book club project each nine weeks. They will also participate in the Great Books Race reading competition which includes reading additional novels as a team and writing reports on them. PSSA preparation is a part of the course using date to improve skills and direct instruction. Accelerated texts are at a higher reading level. The texts are specific to the accelerated course.

#### **College Prep English Language Arts – Grades 7**

The college prep language arts class for grade 7 is a double period. It is a literature/reading based course that covers reading, writing, grammar, vocabulary acquisition, and literary analysis and interpretation. This includes making connections between texts and focusing on textual evidence. Reading instruction encompasses various reading strategies as they relate to novels, short stories, poetry, drama, and non-fiction selections. Materials including anthology texts, supplemental worksheets and selections, and websites will be used in the instruction. Vocabulary will normally be pulled from the reading selections, but separate vocabulary books may be used at times. Grammar instruction focuses on problem areas for the students but will include basic capitalization, punctuation, comma use, sentence structure, and parts of speech. Students will complete one book report or one book club presentation each nine weeks. Writing assignments will vary but will often be connected to the reading selections. They will include but not be limited to paragraphs, narrative, informative, and argumentative five paragraph essays, quick writes, poetry, and written book reports and text dependent analysis essays. Students will be required to speak in formal situations, listen critically to others, and respond intelligently as individuals or groups. PSSA preparation is a part of the course using date to improve skills and direct instruction. The CP course requires more independent work, a higher level of expectation and difficulty, and a faster instructional pace. College prep uses some different texts than the practical course.

### **Practical English Language Arts – Grade 7**

The practical language arts class for grade 7 is a double period. It is a literature/reading based course that covers reading, writing, grammar, vocabulary acquisition, and literary analysis and interpretation. This includes making connections between texts and focusing on textual evidence. Reading instruction encompasses various reading strategies as they relate to novels, short stories, poetry, drama, and non-fiction selections. Materials including anthology texts, supplemental worksheets and selections, and websites will be used in the instruction. Vocabulary will normally be pulled from the reading selections, but separate vocabulary books may be used at times. Grammar instruction focuses on problem areas for the students but will include basic capitalization, punctuation, comma use, sentence structure, and parts of speech. Students will complete one book report or one book club presentation each nine weeks. Writing assignments will vary but will often be connected to the reading selections. They will include but not be limited to paragraphs, narrative, informative, and argumentative five paragraph essays, quick writes, and written book reports and text dependent analysis essays. Students will be required to speak in formal situations, listen critically to others, and respond intelligently as individuals or groups. PSSA preparation is a part of the course. Data will be used with the goal of raising students' reading and writing skills. Class size is limited so that maximum individual attention is afforded the students.

### **Accelerated English Language Arts Great Books and Debate – Grade 8**

**Great Books** is an accelerated reading course for 8<sup>th</sup> graders who are beyond developmental reading and who wish to read high-quality literature and develop high quality writing and speaking skills. This course will strengthen reading strategies by requiring the student to cite specific passages to support opinions, read closely and compare passages, consider different interpretations of text, and require students to read a selection twice in order to develop an appreciation for the value of reading quality literature twice with shared inquiry discussions. Students will learn to generate and support ideas by considering more than one perspective, weighing text evidence, and arriving at a reasoned conclusion. Great Books teaches discussion is the process by which people talk together to solve a problem or to improve their understanding. This course encourages shared inquiry discussion but results in a final individual conclusion.

**Debate** teaches students that debate is the process in which individuals take opposing viewpoints in order to persuade others of their particular position with clear arguments supported by evidence and persuasive language. Each side must be prepared to challenge the other side's arguments and to defend challenges made in carefully planned and supported rebuttals. Students try to persuade the audience that their side is more workable, practical and desirable. Debaters learn persuasive skills and hone speaking eloquence. The audience has to learn to listen and take notes in order to decide based on what they hear which side presented their side more effectively. In addition to writing and speaking skills, it is good practice for future citizens. "It is better to debate a question without settling it than to settle it without debating it."

### **College Prep English Language Arts—Grade 8**

Students will build their skills in interpreting and analyzing literature text and informational text through close reading, utilizing a variety of reading strategies, with a focus on textual evidence. Students will understand key ideas and details, craft and structure, connections between texts, and figurative language from texts of all kinds. Students will also build vocabulary through independent reading, words to own from assigned reading, and word parts study. Students will complete the writing process for a variety of writing genres using mentor texts as a guide. Assignments may include but are not limited to memoirs, reader response, poetry, informational essays, text dependent analyses, arguments, reflections, brochures, videos, and PowerPoint presentations. Students will learn conventions of Standard English grammar and usage through mini-lessons that will be applied and assessed through their writing, revision, and editing. Students will learn to write with evidence, organization, strong descriptive language, using formal language with a mature voice. Students will practice speaking and listening through classroom discussion and collaboration, as well as formal presentations. Students will build character by analyzing real and fictional characters, their decisions, and how those choices impact their lives and the lives of others.

### **Practical English Language Arts—8<sup>th</sup> Grade**

Students will be assessed to determine their reading level. Based on student strengths and weaknesses, a variety of strategies will be used to increase their abilities to grade level proficiency. The goal is to make all students independent, capable readers.

Students will build their skills in interpreting and analyzing literature text and informational text through close reading, utilizing a variety of reading strategies, with a focus on textual evidence. Students will understand key ideas and details, craft and structure, connections between texts, and figurative language from texts of all kinds. Students will also build vocabulary through independent reading, words to own from assigned reading, and word parts study. Students will complete the writing process for a variety of writing genres using mentor texts as a guide. Assignments may include but are not limited to memoirs, reader response, poetry, informational essays, text dependent analyses, arguments, reflections, brochures, videos, and PowerPoint presentations. Students will learn conventions of Standard English grammar and usage through mini-lessons that will be applied and assessed through their writing, revision, and editing. Students will learn to write with evidence, organization, strong descriptive language, using formal language with a mature voice. Students will practice speaking and listening through classroom discussion and collaboration, as well as formal presentations. Students will build character by analyzing real and fictional characters, their decisions, and how those choices impact their lives and the lives of others.

### **Fundamental English – Grades 7 & 8**

This course is designed for students who are identified as having learning needs. The emphasis is working on writing skills and grammar skills each day, along with PSSA preparation. There is also an emphasis placed on vocabulary and literary language elements, taught through a variety of genres in literature. This course will help the students with oral and written language skills. Fundamental English is a flexible course that allows for individual differences. The program offers targeted skills in context, re-states skills for information and practice, and helps students apply these skills daily in their writing. An emphasis in writing will include informative, argumentative, and narrative approaches to the five paragraph essays, as well as text dependent analysis essays.

**Prerequisite** – Identification by the school psychologist as a student who needs replacement curriculum

### **Fundamental Reading – Grades 7 & 8**

This course is designed for students who are identified as having learning needs. The emphasis of this course rests in reading fiction and non-fiction text within novels, short stories, comprehension skills, identifying main ideas, sequence, story elements (plot, conflict, rising and falling action, climax, etc.), inferences, and meaning in context. Class novels are read and all of their skills are put to use in citing evidence within text.

**Prerequisite** – Identification by the school psychologist as a student who needs replacement curriculum

### **Accelerated English - Grade 9**

This course will cover a wide variety of language and literature specifically designed for the college-bound and those students who wish to pursue accelerated courses through their sophomore, junior, and senior years. Topics include several types of novel, poetry, short stories, research techniques, grammar, vocabulary, Shakespeare, and composition. A research paper is required.

**Prerequisite:** A or B in English Grade 8

**Credit:** 1.0

**Phase Level:** 4

### **Accelerated English - Grade 10**

This course is designed to provide the student with skills necessary for success at an advanced level in studying literature, speaking and writing with vocabulary from texts and SAT vocabulary. Various literary forms will be introduced with emphasis on developing critical and analytical skills in reading and writing. World literature from novels, plays, and short stories will be studied in depth. Formal grammar study will include parts of speech parts of the sentence, phrases, clauses, usage, and punctuation. Two speeches are required in semester 2.

**Prerequisite** - A or B in College Prep or Accelerated English Grade 9

**Credit:** 1.0

**Phase Level:** 4

### **AP English Literature and Composition**

This rigorous college-level course is offered to highly motivated 11<sup>th</sup> and 12<sup>th</sup> graders who are interested in the careful reading and critical analysis of imaginative literature. Students will be strongly encouraged to take the AP English Literature and Composition exam at the end of the course. Students taking the Literature course develop their understanding of how writers use language to provide both meaning and pleasure to their readers. Students learn to analyze and interpret literature; including novels, plays, short stories, essays, and poetry through careful observation of textual detail, establish connections among their observations, and draw on inferences from those connections leading to interpretive conclusion about the work's meaning. Writing instruction focuses on the critical analysis of literature and improving the students' abilities to explain clearly and cogently their understanding and interpretation of the literary works they read. For the course, students will keep a writing log over the course of the year to document their improvement and to engage themselves in thinking about their writing. This class requires a minimum of 10 hours of work per week and is reading and writing intensive. There is also required summer reading.

**Prerequisite:** A or B in Accelerated or College Prep English 10 or 11 and English Department approval.

**Credit** 1.0

**Phase Level:** 4

### **AP English Language and Composition**

This rigorous college-level course is offered to highly motivated 11<sup>th</sup> and 12<sup>th</sup> graders who are interested in learning how to read critically and do rhetorical and stylistic analysis in both fiction and non-fiction. Students will be strongly encouraged to take the AP English Language and Composition exam at the end of the course. In the Language course, students learn that language is a tool people use to create meaning, and that they can use it for their own purposes, whether that be to argue, persuade, describe, define, refute, insist, bemoan, or celebrate. The main goal of this course is to create strong writers who will have the skills to write effectively in their college courses and in their personal and professional lives. Students will read and write many different kinds of essays: argumentative, expository, analytical, personal, and even creative. Essays, articles, non-fiction, and fiction will be studied. For the course, students will keep a writing log over the course of the year to document their improvement and to engage themselves in thinking about their writing. This class requires a minimum of 10 hours of work per week and is reading and writing intensive. There is also required summer reading.

**Prerequisite:** A or B in Accelerated or College Prep English 10 or 11 and English Department approval.

**Credit** 1.0

**Phase Level:** 4

### **College Prep English - Grade 9**

This course is designed to give students a comprehensive review of composition and literature. Students will read from a variety of genres including poetry, short stories, drama, and novels as an introduction to literature. Students will be encouraged to write informally in journals, to persuade, to relate to the course material, and to focus on research techniques for composing an informative paper that is a requirement for the course.

**Prerequisite:** Completion of Grade 8 English Language Arts

**Credit:** 1.0

**Phase Level:** 3

### **College Prep English - Grade 10**

This course will provide sophomores a background in writing, vocabulary, literature, and speech skills. Writing will be expository in nature, and cover all aspects of one (1) and five (5) paragraph theme creation, with a brief introduction to term paper concepts. Reading will include world literature from short stories, novel, and drama including Shakespeare and poetry, along with prescribed vocabulary. Communications skills including voice and body control, organization, research, and oral presentation will comprise the basic elements of public speaking. Formal grammar study will include parts of speech, parts of the sentence, phrases, clauses, usage, and punctuation. Two speeches are required in semester 2.

**Prerequisite** – Completion of Grade 9 English

**Credit:** 1.0

**Phase Level:** 3

### **College Prep English - Grade 11**

English 11 College Prep covers expository and persuasive writing. The student will develop proficiency in the essay. Emphasis will be placed on organization, introduction, conclusion, effective analysis of audience, means of development designed to appeal to the audience, and interesting readable style. Historical periods and genres of American literature will also be covered. Representative selections from poets and short story writers along with dramatists and novelists will be covered. Vocabulary of appropriate level will also be included as part of the literature.

**Prerequisite** – Completion of Grade 10 English

**Credit:** 1.0

**Phase Level:** 3

### **College Prep English - Grade 12**

This course is a basic introduction to the major literature of England as well as a review of basic grammar theory. Students will study key literary selections from Medieval, Romantic, Victorian, and Modern eras. Students will read *Hamlet* and numerous novels. The grammar will focus upon usage, chiefly. The course will involve several short papers, and a research paper.

**Prerequisite** – Completion of Grade 11 English

**Credit:** 1.0

**Phase Level:** 3

### **Practical English - Grade 9**

This course is designed to give the student a comprehensive review of grammar, develop writing skills, and increase vocabulary retention. Readings in the literary works (poetry, short story, and drama, novel) are presented as an introductory view of literature that encourages the student to find additional readings to explore. A research paper is required.

**Prerequisite** – Completion of Grade 8 English Language Arts

**Credit:** 1.0

**Phase Level:** 2

### **Practical English - Grade 10**

English 10 Practical emphasizes communication, literary, and writing skills. Communication skills (poise, confidence, speaking ability, and voice control) will be developed through the practice of oral readings, listening, and speaking. Writing will be composition that concentrates on the construction of well-written sentences and paragraphs. Vocabulary will also be stressed as part of the literature. Readings will be from world literature, including short stories, novels, plays, and poetry. Two speeches are required semester 2.

**Prerequisite** - Completion of Grade 9 English

**Credit:** 1.0

**Phase Level:** 2

### **Practical English - Grade 11**

This course will emphasize reading and thinking skills. Reading skills will be developed with the study of American literature. Plot, conflict, characterization, theme and mood, and background of writers and their works will be studied. Thinking skills will be developed through critical reading. The content will be oriented toward the reasoning processes. Writing and vocabulary will be stressed as part of the literature.

**Prerequisite** - Completion of Grade 10 English

**Credit:** 1.0

**Phase Level:** 2

### **Practical English - Grade 12**

This course utilizes literature which is a mix of Medieval and contemporary British literature. Fables, short stories, plays, and novels are considered likely for the literary component. Students will read *The Taming of the Shrew*. The grammar of the course will focus chiefly on usage. The course will involve several short papers which *may* include some research.

**Prerequisite** - Completion of Grade 11 English

**Credit:** 1.0

**Phase Level:** 2

### **Fundamental English – Grades 9-12**

This course is designed for the student with identified learning needs. Reading, both practical and pleasurable, is taught. Emphasis is placed on comprehensive skills and teaching of literary element through a variety of genres. Practical vocabulary and spelling concepts are covered as well. The course is designed to address individual learning needs and styles.

**Prerequisite** - Identification by the school psychologist as a special needs student who is need of a replacement curriculum which includes specially designed instruction specific to student learning needs.

**Credit:** 1.0

**Phase Level:** 1

### **Wilson Reading**

This course is the Wilson Reading Program and is based on the Orton-Gillingham principles for encoding and decoding sounds. The goals are to improve word attack, reading fluency, comprehension, vocabulary, spelling, and writing skills. The program is an individualized, twelve step sequential program that students progress through at his/her own pace. Students must demonstrate mastery of rules pertaining to word formation and structure to progress to the next level.

**Prerequisite** - Identification by school psychologist

**Credit:** 1.0

**Phase Level:** 1

### **English as a Second Language Support**

English Language Learners are identified through the federally mandated Home Language Survey for all new students. Students whose primary home language is other than English (PHLOTE) are tested with the W-APT and WMLS standardized assessments to identify students with limited English proficiency (LEP). The English as a Second Language (ESL) teacher and school counselor design an educational program for each LEP student based on individual needs with provisions for achieving progress as the student becomes more proficient in English. The ESL curriculum is based on national TESOL Standards and Pennsylvania Academic Standards. The student develops linguistic proficiency in language skills including listening, speaking, reading, and writing English in the areas of Social and Instructional Language, the Language of Language Arts, the Language of Mathematics, the Language of Science, and the Language of Social Studies.

**Credit:** 1.0

**Phase Level:** 2

## **ENGLISH LANGUAGE ARTS ELECTIVES**

### **CHS Argument and Performance**

This course, which is offered to 11<sup>th</sup> and 12<sup>th</sup> grade students, is designed to introduce students to the fundamentals of argument and communication. Students will examine how to win the types of debates routinely addressed by scientists, politicians, lawyers, and other public figures all over the world. In this class, students will work—sometimes singly and sometimes in teams—to construct, present and refute arguments about worldwide current events, local current events, and (occasionally) philosophical principles. They will read a wide variety of complex texts, including scholarly analysis of current events, legal documents, foundational U.S. documents, and seminal works of literature from around the world. They will also read, write, and prepare skits and plays as a part of their debate preparation and also to develop their speaking and performance skills. Students taking this class will become more articulate, and will learn to be sensitive to the intricacies of argument, debate, and discourse. Honors Argument is offered as a College in High School class in cooperation with the University of Pittsburgh. Students may choose to earn three (3) college credits.

**Prerequisite:** A or B in Accelerated or College Prep English 10 or 11 and English Department approval.

**Credit:** 1.0 (ELECTIVE)

**Phase Level:** 4

### **Yearbook Journalism – Grades 10-12**

In this course students define their roles as members of the yearbook staff. Students will understand, practice, and learn skills necessary in conceptualizing reporting, writing, planning photographs, using software packages on a desktop publishing system, and producing a yearbook. The content of the course uses a variety of texts and the hands-on production of the book for printing.

**Prerequisite** - C or better in English and a completed application. Applicants must be willing to spend time outside of class when necessary and accept the completion of the yearbook as a personal responsibility.

**Credit:** 1.0 (ELECTIVE)

**Phase Level:** 3

### **Newspaper Journalism – Grades 9-12**

This is a production course that includes the theory and practice of journalism. Students who enroll in this course plan, create, produce, and distribute the school newspaper, The Troy Times. The course is designed for students who have demonstrated skill and interest in reporting, writing, photography, and lay-out using computer software. Students use terminology and techniques used in the field of journalism and apply the information to news, feature, and editorial writing.

**Prerequisite:** C or better in English. Introduction to Journalism is strongly recommended.

**Credit** – 1.0 (ELECTIVE)

**Phase Level:** 3



## SOCIAL STUDIES CURRICULUM

### *World Geography – 7<sup>th</sup> grade*

This course will focus primarily on the physical and cultural geography of earth. Presently this course is an extension and a completion of the Grade 6 curriculum at Greenville area schools. Grade 7 continues with an examination of the remainder of the world.

### *U. S. History I – 8<sup>th</sup> grade*

This course is designed to provide the student with an understanding of the cultural development of the United States from the period of discovery and exploration to 1865. The course will focus on discover, exploration and colonization of the Americas. It will continue with the road to independence, Independence of the United States, and the building of a new nation. We will examine the War of 1812, the Industrial Revolution and the Westward Movement. We will finish with the events leading up to the Civil War, the Civil War and the reconstruction of the South after the Civil War. Students will analyze the cause and effect relationship to problems that confronted our country during these times.

### *American History II - Grade 9*

This course is designed to provide students with an understanding of the cultural development of the United States from the Civil War to present times. Students will analyze the cause and effect relationship to problems that confront our country.

**Prerequisite** - Completion of U.S. History I

**Credit:** 1.0

**Phase Level:** 3

### *World History I - Grade 10*

In this course, students will go on an enlightening journey from the beginnings of civilization to the Renaissance. This will cover from prehistoric time up to 1500. The students will go beyond a chronology of facts, exploring meaningful patterns across time and place around the world. Students will develop a connection with the meaning and emotion of the human experience. As students come to understand history they will develop a broader and deeper comprehension of their world and the challenges and issues its inhabitants face.

**Prerequisite** – Completion of American History II

**Credit:** 1.0

**Phase Level:** 3

### *World History II - Grade 11*

In this course, students will go on a fascinating journey from the Renaissance through the Modern World. This will cover a period from 1500 to the twenty-first century. The students will go beyond a chronology of facts exploring meaningful patterns across time and place around the world. Students will develop a connection with the meaning and emotion of the human experience. As students come to understand history they will develop a broader and deeper comprehension of their world and the challenges and issues its inhabitants face.

**Prerequisite** – Completion of World History II

**Credit:** 1.0

**Phase Level:** 3

### **CHS American Political Process – Grade 12**

This course is an introductory college-level political science course accredited through the University of Pittsburgh. Students will have the option of earning three college credits through Pitt's College in High School Program. The purpose of the course is to teach students both about the American political system and about broad concepts social scientists use to study politics. The grade in this course is largely based on examinations and a "debate the issues" assignment. Students are expected to be motivated to learn the subject and read at a college level. Twelfth grade students will choose to take either this course or *American Government*.

**Prerequisite:** Grade of B or better in World History II

**Credit:** 1.0

**Phase Level:** 3

### **American Government – Grade 12**

This is a course which details the U.S. Constitution's historical foundations, institutional design, and the evolution of its interpretation via precedents set by events such as landmark cases or Presidential actions. Processes, such as how a bill becomes a law, how the Constitution is amended, and how the Electoral College works, will be understood by students. Economics and politics have a close relationship that will be explored, analyzed, and appreciated throughout the course.

**Prerequisite:** Completion of World History II

**Credit:** 1.0

**Phase Level:** 3

## **SOCIAL STUDIES ELECTIVES**

### **CHS Psychology**

This is an advanced course for students in grades 11 and 12. CHS Psychology is an accredited course through the University of Pittsburgh (PSY 0010) where students may elect to pursue three (3) college credits. The objective of this course is to provide students with an overview of the diverse field of psychology and an appreciation of the way that behavior and mental processes can be studied scientifically.

**Prerequisite:** B or better in English and Social Studies

**Credit:** 1.0 (ELECTIVE)

**Phase Level:** 4

## MATHEMATICS CURRICULUM

Refer to Appendix A for curriculum flowchart

### Common Core Math 7

This accelerated seventh grade math course is designed to give the students a foundation for their future math courses. Students will explore many number sets and apply them to different algebraic concepts such as expressions and equations. The students will also be introduced to topics found in data analysis, geometry, and probability. Course content will be aligned to the Common Core and PA Core Standards for mathematics.

### Common Core Math 8

This accelerated eighth grade math course is designed to give the students a foundation for the study of Algebra, as well as the tools necessary for success on the grade 8 PSSA. Students will explore many different topics in numbers and operations, measurement, geometry, algebraic reasoning, and data analysis. Course content will be aligned to the Common Core and PA Core Standards for mathematics.

### Fundamental Math 7 & 8

This course is designed for the students identified as needing learning Support. The emphasis is on reviewing basic arithmetic skills and the application of these skills. This course is designed to address individual learning needs and styles.

**Prerequisite:** Identification by the school psychologist as a special needs student who needs a replacement curriculum which includes specially designed instruction specific to the student's learning needs.

### Foundations of Algebra

This course contains instruction in meaning, vocabulary, symbolism, use of sets, the structure of the several systems of numbers that appear in Algebra, the laws operating systems in equations, identities, and inequalities, and in computing with algebraic expressions. Solving, graphing, and analyzing linear equations will also be introduced. The course will also contain a review of integer, fraction, and decimal operations. Deductive and inductive reasoning are also stressed as well as test-taking strategies.

**Prerequisite:** Common Core Math 8 course completion and teacher recommendation

**Credit:** 1.0

**Phase Level:** 2

### Keystone Algebra I

This course contains instruction in meaning, vocabulary, symbolism, use of sets, the structure of the several systems of numbers that appear in Algebra, the laws operating systems in equations, identities, and inequalities, and in computing with algebraic expressions. Deductive and inductive reasoning are stressed.

**Prerequisite:** Common Core Math 8 course completion -OR- for students desiring to take the Keystone Algebra I as a 7<sup>th</sup> or 8<sup>th</sup> grader:

1. Successful completion of ALEKS pre-algebra curriculum,
2. PVAAS probability of proficiency on Keystone Algebra I greater than 80%, and
3. Mathematics teacher recommendation from previous math course
4. Concurrent enrollment in applicable grade level Common Core Math 7 or 8 course

**Credit:** 1.0

**Phase Level:** 3

### Practical Keystone Geometry

A study of congruency, similarity, and measurement of plane figures, parallelism, inequalities, circles, regular polygons, and logic. Topics from solid geometry, trigonometry, and analytic geometry also are considered. This course also is an extension of Keystone Algebra I for students who have passed Keystone Algebra I, but did not achieve proficiency on the Keystone Algebra I Exam.

**Prerequisite:** Keystone Algebra I

**Credit:** 1.0

**Phase Level:** 2

### **Keystone Geometry**

A study of congruency, similarity, and measurement of plane figures, parallelism, inequalities, circles, regular polygons, and logic. Topics from solid geometry, trigonometry, and analytic geometry are also considered.

**Prerequisite:** Successful completion of Keystone Algebra I or Keystone Algebra I teacher approval OR successful completion of Keystone Mathematics

**Credit:** 1.0

**Phase Level:** 3

### **Accelerated Keystone Geometry**

A study of congruency, similarity, and measurement of plane figures, parallelism, inequalities, circles, regular polygons, and logic at an accelerated pace and depth. Topics from solid geometry, trigonometry, and analytic geometry are also considered.

**Prerequisite:** B or higher in Keystone Algebra I and Math Department approval

**Credit:** 1.0

**Phase Level:** 3

### **Keystone Algebra II**

This course includes a short review of Algebra I and follows with an in-depth study of quadratic equations and quadratic functions in one and two variables, functions, and equations of higher degree, exponents, determinants, sequences and series, and logarithms.

**Prerequisites:** B or better in Keystone Algebra I

**Credit:** 1.0

**Phase Level:** 3

### **CHS Precalculus**

Precalculus is a full year course in which students will have the opportunity to earn 4 college credits from Seton Hill University (Precalculus - SMA 120). The content covered in Precalculus will address topics ranging from advanced algebra, trigonometry, and foundations for calculus, including limits. This course will be a preparation for CHS Calculus 1. Students will have the option to earn 4 credits from Seton Hill University (Precalculus, SMA 120)

**Prerequisite:** C or better in Keystone Algebra II and C or better in Accelerated Keystone Geometry

**Credit:** 1.0

**Phase Level:** 4

### **CHS Statistics**

Statistics is a full year course in which students have an option to earn 4 college credits from the University of Pittsburgh (Basic Applied Statistics, Stat 0200). The course teaches methods of descriptive and inferential statistics. Topics include data collection and description, correlation and regression, probability, confidence intervals, hypothesis testing, the analysis of variance and contingency tables (chi square).

**Prerequisites:** C or better in Keystone Algebra 2 and Math Department approval

**Credit:** 1.0

**Phase Level:** 4

### **CHS Calculus I**

Calculus is the branch of mathematics that deals with change. This full year course is the standard first course in a college sequence designed for students in mathematics, science, and engineering. Students have an option to earn 4 college credits from the University of Pittsburgh (Analytic Geometry & Calculus 1, Math 0220).

**Prerequisites:** B or better in Precalculus and Math Department approval

**Credit:** 1.0

**Phase Level:** 4

### **CHS Calculus II**

Calculus is the branch of mathematics that deals with change. This full year course is the standard second course in a college calculus sequence designed for students in mathematics, science, and engineering. Students have an option to earn 4 college credits from the University of Pittsburgh (Analytic Geometry & Calculus 2, Math 0230).

**Prerequisites:** B or better in CHS Calculus I and Math Department approval

**Credit:** 1.0

**Phase Level:** 4

### **Advanced Mathematics**

Advanced Mathematics is a full year advanced course covering a wide range of topics such as social choice and election theory, symbolic logic, number theory, concepts of proof, matrix algebra, linear programming, financial mathematics, and statistics. Knowledge of calculus is not a prerequisite for this course.

**Prerequisite:** B or better in CHS Precalculus

**Credit:** 1.0

**Phase Level:** 4

### **Mathematics for the Modern World**

This course is designed to enable the senior to develop arithmetic skills useful as a contributing member of society, as well as a consumer. Following a review of fundamental skills, the course will deal with banking credit, maintaining a home and automobile, budgeting, insurance, taxes, and a variety of other business and personal consumer matters.

**Prerequisite:** Seniors Only

**Credit:** 1.0

**Phase Level:** 2

### **Fundamental Math 9-12**

This course is designed for the students identified as needing learning Support. The emphasis is on the practical applications of Algebra, Geometry and Consumer Math utilizing parallel curriculum, while addressing students' individual learning needs and styles.

**Prerequisite:** Identification by the school psychologist as a special needs student who needs a replacement curriculum, which includes specially designed instruction specific to the student's learning needs.

**Credit:** 1.0

**Phase Level:** 1

\*\*Please refer to the Technology and Engineering Curriculum for additional mathematics credit options.

## SCIENCE CURRICULUM

Refer to Appendix B for curriculum flowchart

### Science 7

This course consists of an accumulation of information, skills, and abilities that will be required of all students in high school level science classes. Students will be introduced to the four major “branches” of science (earth & space, biology, chemistry, and physics) and learn basic skills and acquire knowledge that will be essential when taking those specific courses at the high school level.

### Science 8

This course will focus on the understanding and application of the scientific method and work of established scientists. Specifically, we will be looking at physics, chemistry, life science and ecology, and earth science. Following the course, all students are expected to be able to evaluate basic scientific scenarios and apply the scientific method as a mode of problem solving. This course will ultimately prepare students for success on the 8<sup>th</sup> grade science PSSA.

### Keystone Biology I

Biology utilizes an ecological approach to the study of interrelationships of plants and animals with their environment. Topics covered include: population and community ecology, cellular theory, reproduction, development, genetics and evolution. A laboratory portion of this course will be used to expand learning and reinforce covered subjects.

**Prerequisite** – 8<sup>th</sup> Grade Science

**Credit:** 1.0

**Phase Level:** 3

### General Science I

This course will review and expand upon the concepts from Keystone Biology I. This course is reserved for students who have not scored proficient on the PDE’s Keystone Biology Exam.

**Prerequisite:** Keystone Biology I (or concurrent with Keystone Biology I)

**Credit:** 1.0

**Phase Level:** 2

### General Science II

General Science II is a course that has a strong emphasis on Biology and the environment. Topics covered include population, ecosystems, energy resources, pollution, and human impact. This course is taught through a variety of techniques including lecture, student inquiry and independent research. This course is reserved for students who have either passed Keystone Biology I or completed General Science I.

**Prerequisite:** Keystone Biology I (or concurrent with Biology)

**Credit:** 1.0

**Phase Level:** 2

### Chemistry I

This course is an introduction to the study of matter and changes that it undergoes. Included are atomic theory, bonding, phases of matter reactions, qualitative analysis, quantitative analysis and nuclear chemistry. Attention is given to mathematical concepts with laboratory exercises to verify these concepts.

**Prerequisite** – C or better in Biology and have taken Algebra II (or concurrently) and/or department approval.

**Credit** - 1.0 (5 class periods per week and 2 lab periods per week)

**Phase Level:** 3

### **Physics**

This is a laboratory-centered course with emphasis placed upon the discovery of principles through experimentation. It includes the investigation of selected fundamental aspects of the physical world such as a study of light, sound, motion, time, space, matter, electricity, and radiation.

**Prerequisite:** B or better in Biology, Chemistry, and Algebra II

Precalculus and/or CHS Statistics must be taken concurrently or previously.

**Credit:** 1.0 (5 class periods plus 2 lab periods per week)

**Phase Level:** 4

### **Marine Biology – Grades 10-12**

Marine Biology covers the major topics associated with marine and aquatic life. Students will examine the behavior and anatomy of marine life. The course will progress from discussions and dissections of “simple” to higher order life. Students will gain a broad understanding of marine life forms and functions. The course is helpful to students interested in careers related to ecology, biology, and conservation, or those just interested in ocean life.

**Prerequisite:** C in Keystone Biology I

**Course Length:** 1 semester

**Credit:** 0.5 (5 class periods per week for 18 weeks)

**Phase Level:** 3

### **CHS Woodland Ecology – Grades 10–12**

Woodland Ecology explores the interactions of plant and animal life in woodland communities. Both terrestrial and aquatic systems will be examined. We will concentrate on the life in these systems and energy movement through them. Consideration will also be given to evaluation, management and improvement of forest and aquatic system biology. This course should be considered by students with an interest in ecology and conservation or those just interested in the outdoors. This course is accredited through the CHS program with Thiel College. Students may simultaneously enroll to receive three (3) Thiel College credits (Introduction to Environmental Studies - ENSC 111).

**Prerequisite:** C in Keystone Biology I

**Course Length:** 1 semester

**Credit:** 0.5 (5 class periods per week for 18 weeks)

**Phase Level:** 3

### **CHS Biology II and Lab**

This is a first-year college course covering material expected in an introductory college level biology class. With the successful completion of this class students can earn four (4) credits from Seton Hill University. This is a rigorous course in which students are required to develop, carry out, complete, and present an independent research project as part of the course work. This also includes a submitted formal research paper using APA format. Familiarity with the computer programs PowerPoint, Excel, and Minitab14 is helpful. It requires time, effort and focus.

**Prerequisite:** B or better in Chemistry and Keystone Biology I. Science Department approval and a completed application

\*Note- Students that take CHS Chemistry II and/or CHS Biology II and Lab should take Physics unless mathematics prerequisites are unmet following an official transcript review.

**Credit:** 1.0 (5 class periods and 2 lab periods per week)

**Phase Level:** 4

**College Credits:** 4

### **CHS Chemistry II and Lab**

CHS Chemistry II is an advanced study of General Chemistry. It is taught at a level equivalent to the first semester of college chemistry. Students will have the opportunity to earn four (4) college credits through the University of Pittsburgh in this course. Students need to have a strong math background for this course. Concepts covered include: Quantitative analysis, phases of matter, equilibrium, kinetics, organic nomenclature, thermodynamics, electrochemistry, and qualitative analysis. Laboratory work is also a vital component.

**Prerequisites:** Science Department approval and a completed application. Concurrent or previous enrollment in Precalculus and a grade of "B" or better in Chemistry I

\*Note- Students that take CHS Chemistry II and/or CHS Biology II and Lab should take Physics unless mathematics prerequisites are unmet following an official transcript review.

**Credit:** 1.0 (5 class periods and 2 lab periods per week)

**Phase Level:** 4

**College Credits:** 4

### **CHS Anatomy and Physiology I and II**

This course, which is offered to 11<sup>th</sup> and 12<sup>th</sup> grade students, is a two-semester lecture, project and laboratory-based course which will give students the opportunity to obtain knowledge about human physiology (body functions) and anatomy (body structures). Students will have the opportunity to earn up to four (4) college credits through the Seton Hill College in High School program each semester, for a total of eight (8) credits. The students will concentrate their studies on the human body and the amazing abilities to regulate, protect and heal itself. We will also discuss the consequences that occur when these regulatory abilities fail.

**Prerequisite:** Biology and Chemistry

**Credit:** 1.0

**Phase Level:** 4

**College Credits:** 8

\*\*Please refer to the Technology and Engineering Curriculum for additional science credit options.



## FOREIGN LANGUAGE CURRICULUM

### Exploratory Spanish – 8<sup>th</sup> grade

This is a 12-week course is an introductory Spanish class designed for students in grade eight. The primary emphasis of the course will be the development of oral conversational skills. The students will learn the alphabet, numbers, classroom vocabulary, days of the week, months of the year, commands, vocabulary pertaining to homes, parts of the body, colors, weather expressions, occupations, holiday traditions, songs, and other aspects of Hispanic culture. The students will have class every day for 12 weeks.

### Spanish I

Spanish I is a beginning level language course designed to introduce students to the study of foreign language. They will learn basic pronunciation and communication skills in Spanish. This course requires students to use all four-language arts skills: reading, writing, speaking, and listening. They will learn greetings, closings, numbers, dates, and time telling. They will be able to ask questions and respond to questions about themselves and their environment. An introduction to Hispanic culture will be incorporated into the units covered. It is recommended that students signing up for this course should be enrolled in College Prep English as correct spelling and oral class participation is required.

**Prerequisite:** C or better in English

**Credit:** 1.0

**Phase Level:** 3

### Spanish II

Spanish II is an intermediate level language course designed to develop language proficiency skills that will enable students to communicate effectively when traveling or shopping in a Hispanic community. Students will master Level II grammar structures including the preterit verb tense and present subjunctive mood. This course requires students to use all four (4) language arts skills: reading, writing, speaking, and listening in Spanish. During the second semester, students will be encouraged to speak only Spanish. Good work habits and study skills are highly recommended.

**Prerequisite:** C or better in Spanish I

**Credit:** 1.0

**Phase Level:** 3

### CHS Spanish III

Spanish III is an advanced intermediate course that is approximately the same level of difficulty as an intermediate college class. Students will have the opportunity to earn three (3) credits through the University of Pittsburgh. This course includes a functional review of basic language structures learned in Spanish 1 & 2 and introduces even more complex structures. This course combines content-based language instruction with an interactive task-based approach and focuses on development of all language skills: listening, speaking, reading, and writing. The course has a strong cultural component. Students will communicate in Spanish with their teachers and peers, comprehend reading and listening passages, complete oral exams and presentations, and write short compositions. This class is conducted entirely in Spanish.

**Prerequisite:** C or better in Spanish II

**Credit:** 1.0

**Phase Level:** 4

### **CHS Spanish IV**

Spanish IV is an advanced intermediate course that is approximately the same level of difficulty as an intermediate college class. Students will have the opportunity to earn three (3) credits through the University of Pittsburgh. This course builds and expands the language skills acquired in the first three years of Spanish. Students will continue to refine their language abilities and enhance their vocabulary. The course combines content-based language instruction with an interactive task-based approach and focuses on all relevant language skills: listening, speaking, reading, and writing. Culture is integrated into all aspects of the program. Students will communicate in Spanish with their teachers and peers, comprehend reading and listening passages, complete oral exams and presentations, and write short compositions. This class is conducted entirely in Spanish.

**Prerequisite:** C or better in Spanish III

**Credit:** 1.0

**Phase Level:** 4

## **TECHNOLOGY AND ENGINEERING EDUCATION CURRICULUM**

### ***Technology and Engineering Education***

Refer to Appendix C for curriculum flowchart

### **Innovation and Invention - Grade 7**

In this course, students learn all about invention and innovation. They have opportunities to study the history of inventions and innovations, including their impacts on society. They learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Students apply their creativity in the invention and innovation of new products, processes, or systems. Finally, students learn about how various inventions and innovations impact their lives. Students participate in engineering-design activities to understand how criteria, constraints, and processes affect designs. Students are involved in activities and experiences where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Students also develop skills in researching for information, communicating design information, and reporting results. Students learn how Technology, Innovation, Design, and Engineering interrelate and are interdependent. Invention and Innovation prepares student with opportunities to apply the design process in the invention or innovation of a new product, process, or system.

**Course Length** – 12 Weeks

### **STEM 8 (Engineering All Around)- Grade 8**

Engineering All Around: Science, Technology, Engineering, and Mathematics (STEM) is a course designed to introduce students to the world of technology and engineering, as a first step in becoming technologically literate citizens. Rather than teaching the subjects in isolation, these areas are integrated along with others in a hands-on activity-based setting. Additionally, the course will help students answer the question: "Why the study of science, technology, engineering, and mathematics is important and how these areas collectively impact our daily lives?" Throughout this course utilizing practical real-world connections, students have an opportunity to see how science, mathematics, and engineering are part of their everyday world, and why it is important for every citizen to be technologically literate. This course is also designed to introduce students to systems and processes to develop an understanding of the impact of technology on humans, the environment, and the global community. By investigating systems through their function, design, and development, students will understand what systems are, why they are developed and how 'systems thinking' can be used to describe them. Students engage in activities and experiences where they evaluate the impacts of technology through the lenses of culture, society, economics and the environment.

**Course Length** – 18 Weeks – 4 days per weeks

### **Energy, Power and Transportation Systems - Grades 9-12**

Energy, Power, and Transportation Technology provides a comprehensive study of the basic elements of energy, power, and transportation and how they affect the world in which we live. Ever want to explore, modify, or build devices that move people or goods? This hands-on course focuses on developing a basic understanding of the behavior of land, water, air, and space transportation systems. Students will participate in problem solving activities involving designing, producing, testing, and analyzing transportation systems. Through this process, students will explore the technical subsystems of propulsion, structure, suspension, guidance, control, and support. Students will apply the concepts of math, physics, and problem-solving skills to design, build, and test various projects. Projects include: Model Rockets, Co2 Powered Cars, Boats, Planes, Egg Crash Vehicle, Hot Air Balloons, and Magnetic Levitation Vehicles.

**Prerequisite:** None

**Course Length** - 1 semester

**Credit:** 0.5

**Phase Level:** 2

### **Engineering Our World - Grades 9-12**

Do you like to build things, take them apart, or redesign them? Do you like to build something from a complete pile of miscellaneous materials to complete a designated task? In Engineering Our World, students develop critical thinking and problem-solving skills through hands-on laboratory activities. This course applies a multidisciplinary approach that includes a combination of mechanical, structural, civil, and control engineering fields. This course integrates the engineering design process and the technological problem-solving method with the knowledge of science, mathematics, language arts, social studies, and other disciplines. It provides students the opportunities to research, design, develop, build, test, and evaluate solutions to real life problems related to meeting human needs and wants. Content is drawn from all areas of technology. Projects include: Towers and Support Structures, Bridges, Catapults, Egg Drop, Alternative Fuel Vehicles, Trusses, Earthquake Resistant Towers, Crane Arms, Mini Golf Challenge Solutions, and Package Designs.

**Prerequisite:** None

**Course Length** - 1 semester

**Credit:** 0.5

**Phase Level:** 2

### **Manufacturing Systems- Grades 9-12**

Manufacturing Systems is a course in which students analyze the technical systems, historical evolution and various types of manufacturing. Students will examine the various inputs required for manufacturing, experience a variety of manufacturing processes, produce and investigate manufacturing outputs and evaluate manufacturing impacts. They will participate in the various aspects of research, development and problem solving as they identify, design and produce products in a manufacturing technology laboratory. The students will gain skills in using sophisticated manufacturing technologies such as: Computer Numerical Controlled machines, Computer Integrated Manufacturing, and Rapid Prototyping utilizing 3-D printing and Laser Cutting / Engraving. A great emphasis will be placed on the development and design of products thus utilizing the student's creativity and problem-solving skills.

**Prerequisite:** None

**Course Length** - 1 semester

**Credit:** .5

**Phase Level:** 2

### **Principles of Engineering – Grades 9-12**

This class introduces students to the interdisciplinary nature of 21st-century engineering projects with threads of learning connected to science, technology and mathematics utilizing problem-based learning. The engineering scope, content, and professional practices are presented through practical hands-on and minds-on applications. Students individually and in engineering teams will apply technology, science, and mathematics concepts and skills to solve engineering design problems and innovative designs. This course will employ a team-teaching approach utilizing expertise from the math and science faculty whenever possible. In this course, students will utilize various aspects of modern technology that have revolutionized modern life. These areas will include: Laser Engraving and Cutting, 3-D Printing, Robotics, Computer Numerical Control and Rapid Prototyping, Vinyl Sign Cutting, and Computer Aided Design. An emphasis is placed on two-dimensional geometric construction and the development of three-dimensional solid models. These techniques learned and equipment used is state of the art and are currently being used by engineers throughout the world.

**Prerequisite:** Must have a grade of “B” or higher in grade 8 math and science, and be enrolled in Algebra 1 or have previously taken Algebra 1.

**Course Length:** Full Year

**Credit:** 1.0 Math / Science credit

**Phase Level:** 3

### **Innovation and Design - Grades 9-12**

This class is an inquiry-focused, problem-based course that explores mankind’s ability to grow, change and adapt and ultimately, to survive. Scientific and practical roles and processes of research, exploration, discovery, imagination, brainstorming, and improvement will be presented. Students will follow the engineering design model utilizing design and creation applications and methodologies in a technology-rich environment. A design/problem-solving model will include elements of design and appearance, ergonomics, idea modeling, form, function, and visualization. The 21st century skills of collaboration, critical thinking and communication are embedded in this course as students work individually and with others developing a global perspective, understanding that the communication of design is influenced by cultural and environmental context. Students will innovate and design products and solutions to real-world scenarios, evaluate through an iterative process and then, create their designs through use of digitally controlled prototyping equipment which may include, but are not limited to: Rapid Prototyping and 3D Printing.

**Prerequisite:** None

**Course Length:** Full Year

**Credit:** 1.0

**Phase Level:** 3

### **Engineering and Design – Grades 10-12**

Engineering and Design will offer students the opportunity to understand and apply knowledge and skills required to create and transform ideas and concepts into a product that satisfies specific customer requirements. Students will experience and utilize engineering principals in the creation, synthesis, iteration and presentation of design solutions. Students will coordinate and interact in authentic ways to produce the form, fit and function with appropriate models to completely define a product. Both independent and collaborative work will be carefully analyzed as students perform within an authentic engineering enterprise environment. This course focuses on how engineers apply their creativity, resourcefulness, mathematical, scientific and technical knowledge and skills in the creation or refinement of technological products/systems. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. A key approach will be to continue the employment of a sophisticated equipment that will include: Laser Engraving and Cutting, 3-D Printing, Robotics, Computer Numerical Control and Rapid Prototyping, Vinyl Sign Cutting, and Computer Aided Design. This equipment, along with the incorporation of the iterative design and development process, will be utilized to solve authentic engineering tasks/problems.

**Prerequisite:** Principles of Engineering or Innovation and Design (This is a capstone course that encompasses both disciplines). Also, students that complete the 3 semester Physical Technology courses are eligible for this course.

**Course Length:** Full Year

**Credit:** 1.0 credit

**Phase Level:** 3

### **Media Production I – Grades 9-12**

Spielberg and Hitchcock had to start somewhere! This course introduces students to digital video equipment and aesthetic concepts used by Hollywood filmmakers. From pre-production to post-production, students will work individually and as a group in a hands-on environment. Operating digital video cameras and non-linear editing applications, participants become digital storytellers. Projects include documentaries, commercials, news packages and short films.

**Prerequisite:** None

**Course Length:** Full Year

**Credit:** 1.0

**Phase Level:** 2

### **Media Production 2– Grades 10-12**

Students will write, produce, and edit short films that include narratives that rely heavily on genre specific conventions and effects. The course places an emphasis on video compositing and other digital effects. Students will also engage in electronic news gathering and produce content for school's closed-circuit television station and website.

**Prerequisite:** C or better Media Production I

**Course Length:** Full Year

**Credit:** 1.0

**Phase Level:** 2

### **Independent Study of Media Production – Grades 10-12**

This course offers the student an opportunity to enhance his/her communication skills while being responsible for various production duties required to operate the school's closed-circuit television station. Students will often be engaged in unique projects designed to promote the school district to a variety of stakeholders, continue genre specific film production studies, and be introduced to Adobe After Effects.

**Prerequisite:** A in Media Production 2 and Instructor Recommendation

**Course Length:** Full Year

**Credit:** 1.0

**Phase Level:** 3

### **CHS Web Design and Development – Grades 9-12**

Did you ever wonder how all that great information finds its way onto the Internet? Have you ever wanted to create a web page to communicate and share information with your friends, family, or people with similar interests? In this course, students will explore web page design as a way of communicating and placing information on the Internet. Students will learn how to: begin a web site, add text and titles, use color, prepare photos and graphics for the web, add sounds, animations, and movie files, and include other elements that add to an attractive and informative web page. Students will learn particular skills through teacher generated examples and then apply these skills when designing websites centered on a topic of their choice or particular interests. The knowledge acquired in this course can be applied to various aspects of the digital world including modifying layouts for various social networking sites and customizing online content. An emphasis will be placed on utilizing the students design skills, creativity, and imagination when completing both teacher and student generated activities.

**Prerequisite:** None

**Course Length:** Full Year

**Credit:** 1.0

**Phase Level:** 3

### **CHS Intermediate Web Design and Development – Grades 11-12**

The objective of this course is introducing students to more advanced implementations of both markup as well as scripting languages, in addition, students will be introduced to a graphical interface application that will allow them to explore concepts of server-side web development. A reflective programming language and database application will be used to introduce the server-side web development concepts. Students will play the role of professional designers, planners, developers, graphic artists, and webmasters who create design solutions for client's problems. Students will learn about advanced web design techniques by adding interactivity and animation to their web sites to make them come alive. Students will also explore and develop skills in the following arenas: CSS, JavaScript, PHP and SQL languages and applications. An emphasis will be placed on utilizing the student's design skills, creativity, and imagination when completing both teacher and student generated activities.

**Prerequisite:** CHS Web Design and Development, CHS Introduction to Computer Programming, or CHS Intermediate Programming Using Java

**Course Length** - Full Year

**Credit:** 1.0

**Phase Level:** 4

## ***Virtual Technology Suite***

### **Building Virtual Worlds – Grades 9-12**

Are you into gaming? Building Virtual Worlds is a project-oriented course where you will build immersive interactive virtual worlds. In other words, "GAMES". Students will use the Unreal Tournament Game Engine to create their own virtual gaming worlds. Topics such as movers, terrain, water, emitters, security cameras, jump spots, and game play will be discussed.

**Prerequisite:** None

**Course Length** - 1 semester

**Credit:** .5

**Phase Level:** 2

### **Mobile App Design – Grades 9-12**

It seems as if everyone has an idea for an "app" these days! In this course, you will use professional game design techniques to create playable mobile games that you can add to your game design portfolio. Using GameSalad, you will learn the fundamentals of game balance, apply competition and playfulness, demonstrate a working knowledge of triangularity, and debug using iterative game design.

**Prerequisite:** None

**Course Length** - 1 semester

**Credit:** 0.5

**Phase Level:** 2

### **GameMaker Programming – Grades 9-12**

Learn the concepts taught in a college-level “Programming 101” course, but all of the projects are games! You will receive an introduction to basic programming by building two dimensional (2D) games. GameMaker™, the 2D game engine you’ll be using, is based on a scripting language that builds techniques that can be transferred to any other programming language such as Python, Java and C++. You will finish complete stand-alone executable games that can be played with friends and added to your digital portfolio.

**Prerequisite:** Building Virtual Worlds

**Course Length** - 1 semester

**Credit:** .5

**Phase Level:** 2

### **Unity 3-D Programming – Grades 10-12**

Are you ready to take your programming skills into the next dimension? Learn how to create dynamic Unity™ 3D games using the same industry-standard developing engine as professionals. You will create two fully executable games that can be played on many platforms and added to your digital portfolio.

**Prerequisite:** GameMaker Programming or Mobile App Design

**Course Length** - 1 semester

**Credit:** .5

**Phase Level:** 3

## ***Computer Education***

### **Computer and Information Technology - Grade 7**

A 12-week course in which students will acquire computer technology skills and strategies that are essential for success in life and the workplace. Topics will include

virtual school and work environments, advanced operations and concepts for both hardware and software, digital citizenship concerning social and ethical issues, Internet and computer security, technology productivity tools, technology communication tools, and technology problem-solving and decision-making tools. Emerging technologies will be analyzed based on their influence on daily life and how they are used across different career paths. Students will create projects using emerging technologies and create advanced digital projects using appropriate software/applications for an authentic task.

**Course Length** – 12 Weeks

### **CHS Introduction to Computer Programming: JAVA – Grades 9 - 12**

Have you ever wondered what computer programming is all about? Wanted an easy way to start learning the fundamental concepts of modern, powerful computer languages like Java? If so then this is the course for you! The focus of this course is an introduction to problem analysis and the development of algorithms and computer programs in a modern high-level language. The first semester is an introductory phase into the Java language. Programming fundamentals, control flow, methods, arrays, objects, and reading and writing files will be explored.

The second semester is a transition into “real” programming utilizing the Java Development Kit and the Eclipse programming environment. Students will learn how to utilize Java by creating Apps for phones and tablets. The JDK is an easy-to-use teaching environment for the Java language that facilitates the teaching of Java to first year students. Special emphasis has been placed on visualization and interaction techniques to create highly interactive Apps that encourage experimentation and exploration. The students will have the opportunity to earn 3 credits through the University of Pittsburgh.

**Prerequisite:** Keystone Algebra I and Proficient on Keystone Algebra I Exam

**Course Length:** Full Year

**Credit:** 1.0 \*\*

**Phase Level:** 3

### **CHS Intermediate Programming Using JAVA – Grades 11 - 12**

This is an intermediate course focusing on object-oriented and other fundamental programming concepts utilizing the Java programming language. Students are expected to have some previous programming experience prior to taking this course. The purpose of this course is to introduce the fundamental topics in computer science and improve programming skills with an advanced introduction to programming in Java. This would be a first course for students intending to major in computer science in college. Students will continue to learn how to utilize Java by creating more advanced Apps for phones and tablets. Special emphasis has been placed on object-oriented programming, control constructs, functions and arrays. The students will have the opportunity to earn 4 credits through the University of Pittsburgh.

**Prerequisite:** CHS-0007 Introduction to Computer Programming: JAVA

**Course Length** – Full Year

**Credit** – 1.0 \*\*

**Phase Level:** 4

\*\*Up to 1.0 credit from CHS Introduction to Computer Programming: JAVA or CHS Intermediate Programming Using JAVA may be applied to math/science graduation credit



## FAMILY AND CONSUMER SCIENCE

### Home Economics – 8<sup>th</sup> grade

This is a 12-week class that is required for all 8<sup>th</sup> grade students. Students are introduced to basic banking information. The last 6 weeks of class involve learning cooking procedures, cooking terms, food preparation and meal planning.

### Introduction to Family and Consumer Science

This course is an introduction to home management, money management, meal planning, preparing food, and caring for today's family. A major focus of this course is to prepare students for the home, workplace, and community. We begin the year by looking at housing options, caring and decorating for their home, and managing their money. Family life, child care, and child development are explored in the second semester of the course. Throughout the first and second semester we will learn about cooking techniques and foods. Students will have many opportunities to put what they have learned to use with hands on labs in the kitchen.

**Prerequisite** - None

**Credit:** 1.0

**Phase Level:** 2

### Discovery Foods (offered every 3rd year)

We will start the year by learning about kitchen principles, safety, and recipes. Once we have reviewed the basics we will learn about foods from around the world. What better place to start our culinary trip than right here at home in the USA. We will continue to circle the globe learning about different cultures foods, customs, and traditions. This course will also include foods for special holidays here at home and aboard. Throughout the year we will look at how to be a better consumers and cooks.

**Prerequisite:** C or Better in Family and Consumer Science.

**Credit:** 1.0

**Phase Level:** 2

### Gourmet Foods (offered every 3rd year)

After learning about kitchen principles, safety, and recipes the year begins with a unit on grilling using a gas, charcoal, and electric grills. There's a unit on entertaining and being creative with food. Meal planning can be very important when entertaining in regards to a budget, time, and nutrition. We will spend concentrating in those areas. This course will also include foods for special holidays. The students will learn consumer skills when they design a kitchen and must include the cost of all the basic pieces of equipment. We will review the major food categories, while discussing and cooking our way through the government's new nutritional guidelines of "My Plate".

**Prerequisite:** C or Better in Introduction to Family and Consumer Science.

**Credit:** 1.0

**Phase Level:** 2

### Creative Foods (offered every 3<sup>rd</sup> year)

We will start the year by learning about kitchen principles, safety, and recipes. Once we have reviewed the basics we will turn our attention to learning about the nutrition and how food affects our body positively and negatively. We will examine carbohydrates, proteins, fruits, vegetables, dairy, fats, vitamins, and minerals. The students will research various diets and how effective they are in helping people reach their health goals. The students will also explore how science is influencing our food choices and giving us new dishes. Throughout the year we will observe our countries holidays and examine the foods associated with these holidays. We will end the year by looking at putting a new spin on old family classics.

**Prerequisite:** C or Better in Family and Consumer Science

**Credit** – 1.0

**Phase Level:** 2

## FINE ARTS CURRICULUM

### Art – 8<sup>th</sup> grade

Eighth grade Art is intended to give the student practice in using their artistic abilities in projects designed to bring out their skills and creativity relating to the visual arts over a 12-week period. Projects are given and completed in class that comprise an overview of artistic processes, including: drawing, sculpture, painting, printmaking, calligraphy, design, and book binding.

### Art I

Art I is the first course in the series of Art classes students can take. Art I could include freshman through seniors. Art experiences are provided for creativity and awareness of basic tools and techniques. Basic art elements and principles are explored to improve skills and self-confidence in several media. Project areas include painting, drawing, sculpture, ceramics, printmaking, calligraphy, crafts, homework drawings, and art history. Students do not have to be great artists to succeed in Art I; however, students must have the desire to do their very best.

**Prerequisite:** None

**Credit:** 1.0

**Phase Level:** 2

### Art II

Students are expected to possess basic skills, knowledge, and art vocabulary. Art II will use these skills to further increase knowledge, application techniques, degree of difficulties, and vocabulary in the following areas: drawing, sculpture, printmaking, crafts, calligraphy, design, painting, mixed media, ceramics, and art history. Greater responsibility is placed on the student for displaying creative and independent thinking within the guidelines of the projects.

**Prerequisite:** C or better in Art I

**Credit:** 1.0

**Phase Level:** 2

### Art III

Within the instructional units, students will work on concentrated areas of study. Projects include drawing, painting, sculpture, ceramics, silkscreen, crafts, design, and art history. Students must complete all projects. Art III students are expected to have a genuine interest in studio art and display the self-discipline and maturity necessary to work in an unstructured setting. Students will research information about their assigned “Dirty Dozen” artists and artwork and complete a paper and work of art in their style.

**Prerequisite:** C or better in Art II

**Credit:** 1.0

**Phase Level:** 2

### Art IV

Students should have a strong basis in most art areas. Art IV is a customized course of teacher guided projects as well as an independent art study with in specific media. In Art IV the school year is divided into monthly units: September- Drawing 1; October – Painting 1; November – Printmaking; December – Crafts; January – Sculpture and Ceramics; February and March – Painting 2; April – Drawing 2; and May – independent choices. The students are expected to work every day towards their personal artistic goals. Instruction is centered around each student’s individual needs. Participation by creating an individual display of the student’s art work is a requirement at the annual Spring Art Show.

**Prerequisite:** A average in Art III. B’s may be considered based on the class size availability as well as the strengths and motivation of the individual.

**Credit:** 1.0

**Phase Level:** 2

### **Ceramics 1 – Grades 9-12**

This is an introductory course for students who have had little or no experience working with clay. Four (4) basic clay-forming techniques will be introduced: pinch, modeling, coil and slab. Emphasis will be on the hand building techniques and the history of ceramics, including different artists and art styles. Projects focus/emphasize one hand building technique at a time. Students will also learn a variety of decorative techniques including glazing and acrylic painting their wares. Students will also have an opportunity to throw on the pottery wheel. Although there is a strong emphasis on ceramics, occasional use of different materials may be used to create three-dimensional sculptures. Students will also learn basic drawing and painting skills. Because this is a hands-on course, attendance is very important.

**Prerequisites:** None

**Course Length:** 1 semester – offered in the Fall

**Credit:** .5

**Phase Level:** 2

### **Ceramics 2 – Grades 9-12**

In this second level ceramics class, students will sharpen their hand building and glazing skills. Instruction will include review of skills when working with clay, the stiff slab technique, some throwing on the wheel, and additional decorative and glazing techniques. Students will continue to learn about different Ceramic artists and different art styles. Although there is a strong emphasis on ceramics, occasional use of different materials may be used to create three-dimensional sculptures. Students will continue to work on their drawing and painting skills as well. Because this is a hands-on course, attendance is very important.

**Prerequisites:** C or better in Ceramics 1

**Course Length:** 1 semester – offered in the Spring

**Credit:** .5

**Phase Level:** 2

### **Ceramics 3 – Grades 10-12**

Students will continue to sharpen their hand building skills by continuing to learn challenging ways to use pinch, coil, and slab techniques. They will be introduced to different artists and art movements too, broadening their experience with what they can do with clay. Advanced decorating techniques and new materials will be introduced. New instructions for throwing on the wheel will be given. Students will have the opportunity to throw several times during the semester. Although there is a strong emphasis on ceramics, occasional use of different materials may be used to create three-dimensional sculptures. Students will continue to work on their drawing and painting skills as well. Because this is a hands-on course, attendance is very important.

**Prerequisites:** B or better in Ceramics II

**Course Length:** 1 semester – offered in the Fall

**Credit:** .5

**Phase Level:** 2

### **Ceramics 4 – Grades 10-12**

Students will continue sharpening their hand building skills by continuing to learn challenging ways to use pinch, coil, and slab techniques. Students will be exposed to different ceramic artists, art styles and movements. Students will begin to create their own path of what style of art they like. Advanced decorating techniques and new materials will be introduced. New instructions for throwing on the wheel will be given. Students will have the opportunity to throw several times during the semester. Although there is a strong emphasis on ceramics, occasional use of different materials may be used to create three-dimensional sculptures. Students will continue to work on their drawing and painting skills as well.

**Prerequisites:** A in Ceramics III or B with department approval if class size allows

**Course Length:** 1 semester – offered in the Spring

**Credit:** .5

**Phase Level:** 2

### **Ceramics 5 – Grades 11 -12**

Students should have a strong basis in ceramics and sculpture and their own personal style. Students will continue to sharpen their hand building skills by continuing to learn challenging ways to use pinch, coil, and slab techniques. Students will create complex and challenging projects. Specific projects will be assigned with instruction centered around each student's individual needs. Students are responsible to plan and design their projects including the techniques they will use. Advanced decorating techniques and new materials will be used. Students must show and apply strong work ethics, excellent attendance, self-motivated, self-disciplined, and able to think critically and solve problems. Students are expected to set a positive example to all students enrolled in Ceramics 1-4. Although there is a strong emphasis on ceramics, other materials may be used occasionally to create three-dimensional sculptures. Students will also continue to utilize their drawing and painting skills.

**Prerequisites:** Students must have consecutively completed Ceramics 1-4 and receive teacher approval; Grade of A in Ceramics 4; must be in grade 11 or 12.

**Credit:** 1.0

**Phase Level:** 3

## **MUSIC EDUCATION**

### **Band – 7<sup>th</sup> Grade**

The purpose of the course is to gain musical excellence through an organized musical curriculum. Each student will be able to display an understanding of musical literacy, music theory and performance technique. Group lessons in individual instruments are also given on a weekly basis. This class will require individual practice and after school rehearsals to prepare for performances.

### **Band – 8<sup>th</sup> Grade**

The purpose of the course is to gain musical excellence through an organized musical curriculum. Each student will be able to display an understanding of musical literacy, music theory and performance technique. Group lessons in individual instruments are also given on a weekly basis. This class will require individual practice and after school rehearsals to prepare for performances.

### **Band Enrichment – 7<sup>th</sup> and 8<sup>th</sup> grade**

Junior High Band Enrichment is designed to offer students a diversity of music through group lessons, steel drums, music theory, and small ensemble playing. Students will focus on the techniques of their instruments as well as steel drums. Performance opportunities will include solos and ensemble music as well as concerts.

**Prerequisite:** Members of this class must be in 7<sup>th</sup> and/or 8<sup>th</sup> grade concert band.

### **GENERAL MUSIC – 8<sup>th</sup> grade**

In this 12-week course, student will study basic elements of music: rhythm, melody, music vocabulary, the symphony orchestra, and music history. Students will be exposed to, and work to develop, compositional and critical listening skills. This class will require limited project-based and group work.

### **Chorus – 7<sup>th</sup> and 8<sup>th</sup> grade**

This class meets weekly and is offered for junior high students to gain musical excellence through vocal practice and performance. Students will sing from a variety of choral literature encompassing sacred and secular music as well as differences in style and language. Students will participate in four concerts throughout the year.

### **Chorus Enrichment – 7<sup>th</sup> And 8<sup>th</sup> Grade**

This class meets four days per week outside of the regular chorus schedule in the chorus room. Students practice choral technique and choral literature. Students will also participate in activities involving theory and keyboard study and their application to choral music. Students will evaluate Broadway musical performances via video. The 8<sup>th</sup> grade enrichment students will have the opportunity to plan and implement a music class for the Gateways students at GHS one day per week.

Prerequisite: Member of the Junior High Chorus, not enrolled in Junior High Band

### **Senior Choir - Grades 9-12**

This class meets daily and is offered for senior high students to gain musical excellence through vocal practice and performance. Students will sing from a variety of choral literature encompassing sacred and secular music with differences in style and language. Students will participate in four concerts throughout the year. This ensemble provides an opportunity for students to be a part of a large concert group (80-100 voices). The Greenville Singers and Chamber Singers are select groups of singers chosen from the larger group and are responsible for additional school and community performances.

**Prerequisite:** Audition

**Credit:** 1.0

**Phase Level:** 2

### **Band - Grades 9-12**

Band is designed to offer instruction on brass, woodwind, and percussion instruments. This class will focus on fundamentals of instrumental music including scales, sonic/tonal exercises, articulation, rhythm, technique, and theory. Performance opportunities will include solos and ensemble music as well as concerts. This class will require individual practice and after school rehearsals to prepare for performances.

**Prerequisite:** 8<sup>th</sup> Grade Band or Band Fundamentals

**Credit:** 1.0

**Phase Level:** 2

## **PHYSICAL EDUCATION CURRICULUM**

### **Adapted PE**

Adapted PE is a physical education course created specifically for our Gateways and autistic students. Basic movement concepts will be explored through simple games and activities with the individual needs of each student guiding instruction.

### **Physical Education—7<sup>th</sup> grade**

This class is designed to provide students with the opportunity to engage in physical activities that are developmentally and individually appropriate, which promote health and over-all wellness. Activities will include team and individual sports, personal fitness, cooperative and team building activities. Students are required to bring an appropriate change of clothing and wear athletic shoes to participate in class on a daily basis.

### **Character & Health Education—7<sup>th</sup> grade**

This course addresses the PA Academic Standards for Health, Safety, and PE. Students will be able to identify and explain concepts of health, healthful living, safety and injury prevention, and physical fitness and nutrition. Additional areas addressed are decision-making skills, time management, organization techniques, and components of self-esteem.

### **Physical Education—8<sup>th</sup> grade**

This class is designed to help students acquire skills and knowledge needed for establishing the solid foundation essential to a lifetime of activity. Activities will include personal fitness, invasion and net games, as well as cooperative team building pursuits. Students are required to bring an appropriate change of clothing and wear athletic shoes to participate in class on a daily basis.

### **Physical Education—Grades 9, 10, 11**

A planned program of physical education is taught in each grade. Focusing on the essential content of the PA standards for Health and Physical Education, this course is designed to assist each student in achieving and maintaining a favorable level of fitness and to develop the competencies required for a lifetime of activity. Content varies by grade level but includes elements of personal fitness and weight training as well as team and individual sports. Students are required to bring an appropriate change of clothing and wear athletic shoes to participate in class on a daily basis.

**Prerequisite:** None

**Credit:** PE 9 (0.5); PE 10 (0.3); PE 11 (0.3)

**Phase:** 0

### **Health—9<sup>th</sup> grade**

This semester course addresses the PA academic standards for Health. Students are challenged to analyze and evaluate factors that impact their health and are presented with information that will enable them to make wise choices for a lifetime of healthful living. Essential content includes mental health; diseases and disorders, drug, alcohol, and tobacco use; and relationships, reproduction, and STDs.

**Prerequisite:** None

**Credit:** 0.5

**Phase:** 0

### **Health—10<sup>th</sup> grade**

This course is designed to challenge and educate through a developmentally appropriate curriculum for 10<sup>th</sup> grade students regarding lifetime maintenance of their health and wellness. The main focus is fitness with an emphasis on practical methods of usage in life.

**Prerequisite:** None

**Credit:** 0.1

**Phase:** 0

### **Safety Education— 10<sup>th</sup> grade**

This is a theory course on the safe use of a motor vehicle in all situations including common emergencies of the road. It includes an introduction to the driving task, review of multiple aspects essential to proper control of a vehicle, various environments in which driving takes place, and components of being a responsible driver. Additional concepts covered include consumer education on vehicle purchase and upkeep as well as costs, options, and insurance. Students are also educated about the various distractions that may happen while driving and actions that can minimize the potential negative effects.

**Prerequisite:** None

**Credit:** 0.5

**Phase:** 2

### **Sports Medicine—Grades 10, 11, 12**

This course is an introduction to the many aspects of sports medicine. Instruction on common injuries to all parts of the body will make up the core of the course. Many non-injury topics will also be covered including: athletic injury taping, sports psychology, Title IX, athletic performance analysis, and sports performance enhancers.

**Prerequisite:** None

**Credit:** 0.5

**Phase:** 3

### **Weight Training—Grades 11 & 12**

This class is designed to provide students with an opportunity to increase strength and fitness levels while working towards individual goals. Sports specific lifting and training will serve as the central focus of this course. Students are required to bring an appropriate change of clothing and wear athletic shoes to participate in class on a daily basis.

**Prerequisite:** PE 10

**Credit:** 0.5

**Phase:** 0

## **GUIDANCE**

### **Guidance 8**

This course is designed to help 8<sup>th</sup> grade students prepare for life in regards to their social-emotional, academic, and career development. A variety of presentation methods may be used including speakers, student panels, videos, and classroom discussion. Some of the topics that may be addressed include the following: bullying, communication skills, resiliency, and stereotypes. Career awareness, exploration, and decision-making are a primary focus for this course. All students will create a final career portfolio that will be presented to their classmates.

### **Life Prep - Grade 10**

This course is designed to help sophomores prepare for life in regards to their social-emotional, academic, and career development. A variety of presentation methods may be used such as speakers, student panels, videotapes, and a great deal of classroom discussion. Some of the topics that may be discussed and activities that may be included but not limited to are: teen suicide, relationships, communication skills, team building/working together, and stereotypes. Career awareness, exploration, and decision making are a primary focus of this course. All students will create a resume and interview with a business professional from the community.

**Prerequisite:** None

**Credit:** 0.1

**Phase Level:** 0

### **Academic Support – Grade 9 – 12**

This course is for students needing assistance with learning strategies, organizational skills, homework, and taking tests.

**Prerequisite:** None

**Credits:** 1.0

**Phase Level:** 0

### **Academic Support I – Grades 9-12**

This course is for students with identified learning disabilities and also for non-identified students who have exhibited a need for more structure and study skills strategies and support. It aids with learning strategies, organizational skills, homework, and taking tests.

**Prerequisite** - Recommendation by Special Education Faculty, Guidance Staff, or Administrators

**Credit:** 1.0

**Phase Level:** 0

### **Community Service – Grades 11-12**

GHS values community service and offers academic credit through participation in the Students Offering Service (SOS) program. The service experience can be done within or outside the school and during and/or after school hours. Students may earn this one-time credit by completing 60 hours of volunteer work within one (1) school year. Although credit is limited, the volunteer experience is not; some students continue on a non-credit basis. Application must be made to the Student Accountability and Services Coordinator and approved by a principal prior to beginning community service.

**Credit:** .5

**Prerequisite:** Recommendation by the Student Accountability and Services Coordinator

**Credit:** 0.5

**Phase Level:** 0

### **Thiel College Scholars** (*Concurrent enrollment with GHS before or after school hours, or during summer*)

A cooperative agreement exists with Thiel College for students who choose to leave during high school hours to attend a course at Thiel College. Students must maintain a minimum class load to be eligible. The course chosen must be a supplement to the student's high school program and cannot be used to satisfy high school graduation requirements. Applications are available in the Guidance Office.

## **EDUCATION OF EXCEPTIONAL CHILDREN**

The Greenville Area School District is committed to an educational program that provides all students with the opportunities to develop according to their potential. Inherent in this commitment is the realization that students who qualify for special education services have unique abilities, talents, interests, and needs.

Students are identified for these services by an Individualized Education Program (IEP) team, which includes the parents/guardians, after the team reviews the results of a multi-disciplinary evaluation. Educational placement and specially designed instruction are determined by the student's IEP.

### **Gifted Support**

Students in need of gifted support can receive acceleration as well as involve themselves in a variety of individual or small group activities such as seminars, apprenticeships, mentorships, competitions, field trips, and independent student projects. These activities are tailored to the student's needs, abilities, and interests. Each activity is designed to encourage individual inquiry and problem solving.

At the beginning of the school year, a gifted support teacher meets with students to help plan, coordinate, and monitor those special activities and projects for the year. The gifted support staff conducts periodic meetings for gifted students providing agendas, permission forms, and explanations of activities and upcoming events. The gifted support teachers also provide additional information about new programs, afternoon announcements, and individual homeroom messages. The high school gifted support teachers are actively involved as implementers of continuous progress instruction in the areas of English, social studies, mathematics, and science. This involvement includes: differentiating objectives and activities, structuring activities to reflect Bloom's hierarchy of learning, and attending to differences in learning styles.



### **Fundamental Study Skills – grade 7 – 8**

This is a course for identified learning support students in grade 7 and 8. It is designed to work on the following skills: Test-taking, Context clues, Goal setting, Reference, Note taking, Problem solving, Organizational skills, Test preparation.

Students are assisted in completing assignments and projects on time, preparing for tests and quizzes using provided study materials, keeping an organized notebook, agenda book, and preparation for classes. The teacher will review and practice concepts, provide reading materials, completion of homework assignments and projects, and preparation of tests and quizzes.

### **Learning Support**

Assistance is now provided to students identified as needing learning support through several options: students may receive specially designed instruction in academics, social or functional skills from a Special Education teacher in a regular education classroom or in a resource room. Students may also receive academic tutoring in subjects for whom they are included by reporting to a resource room during an academic support time or a class. As needed, students receive related services including emotional support, speech/language, vision and hearing services, physical and/or occupational therapy.

### **Service Learning I**

This course is a Social Skills Program which is based on the educational approach known as Social-Emotional Learning. The LionsQuest Curriculum is used for this course. SEL is a process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve goals, feel and show empathy for others, establish positive relationships and make responsible decisions. (LQ)

**Prerequisite:** Identification by the school psychologist as an Emotional Support Student and/or a student who needs a social skills curriculum, which includes specially designed instruction specific to student learning needs.

**Phase:** 1

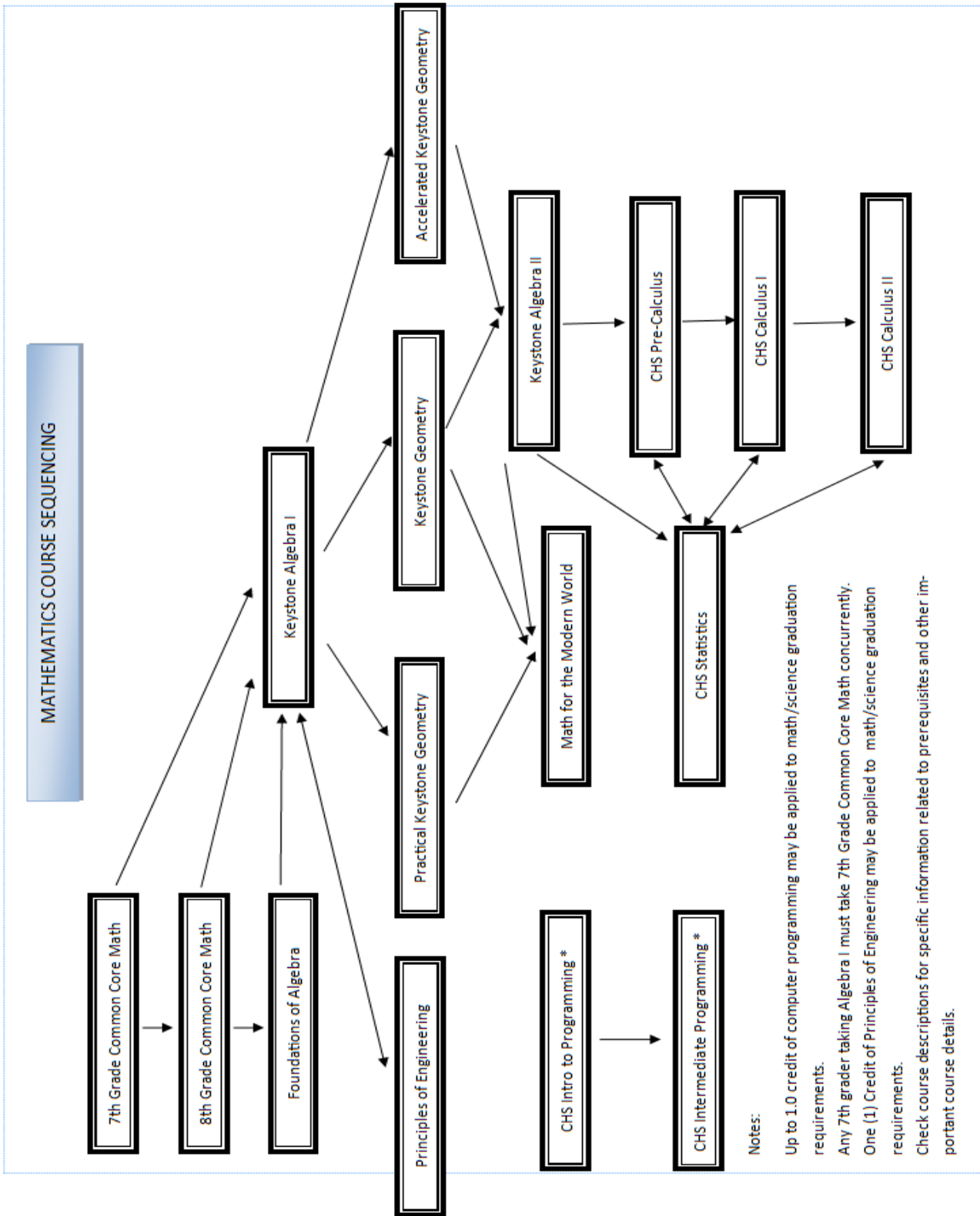
### **Service Learning II**

This course is a Social Skills Program which is based on the educational approach known as Social-Emotional Learning. The LionsQuest Curriculum is used for this course. SEL is a process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve goals, feel and show empathy for others, establish positive relationships and make responsible decisions. (LQ)

**Prerequisite:** Completion of Service Learning I and identification by the school psychologist as an Emotional Support Student and/or a student who needs a social skills curriculum, which includes specially designed instruction specific to student learning needs.

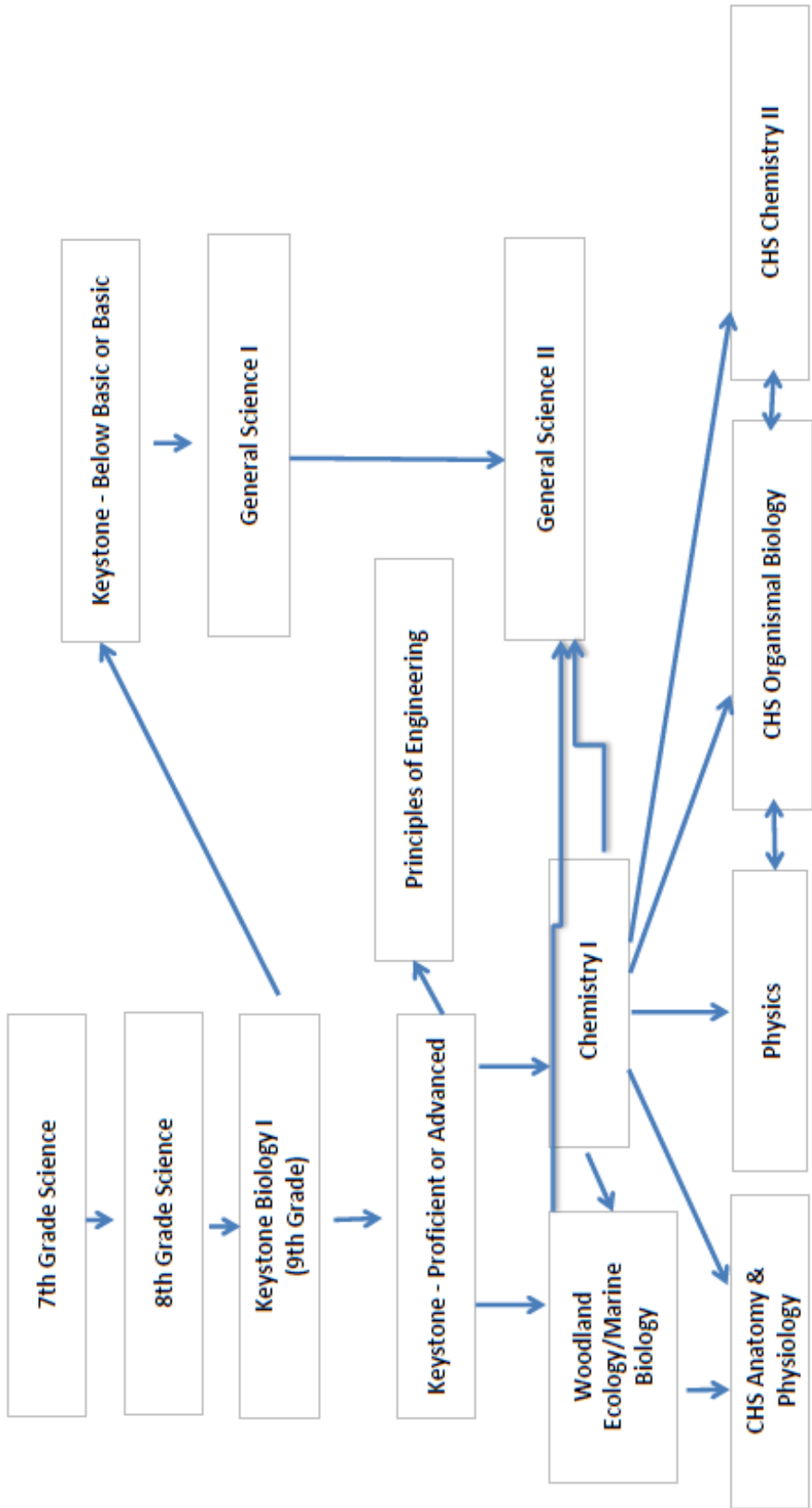
**Phase:** 2

# Appendix A

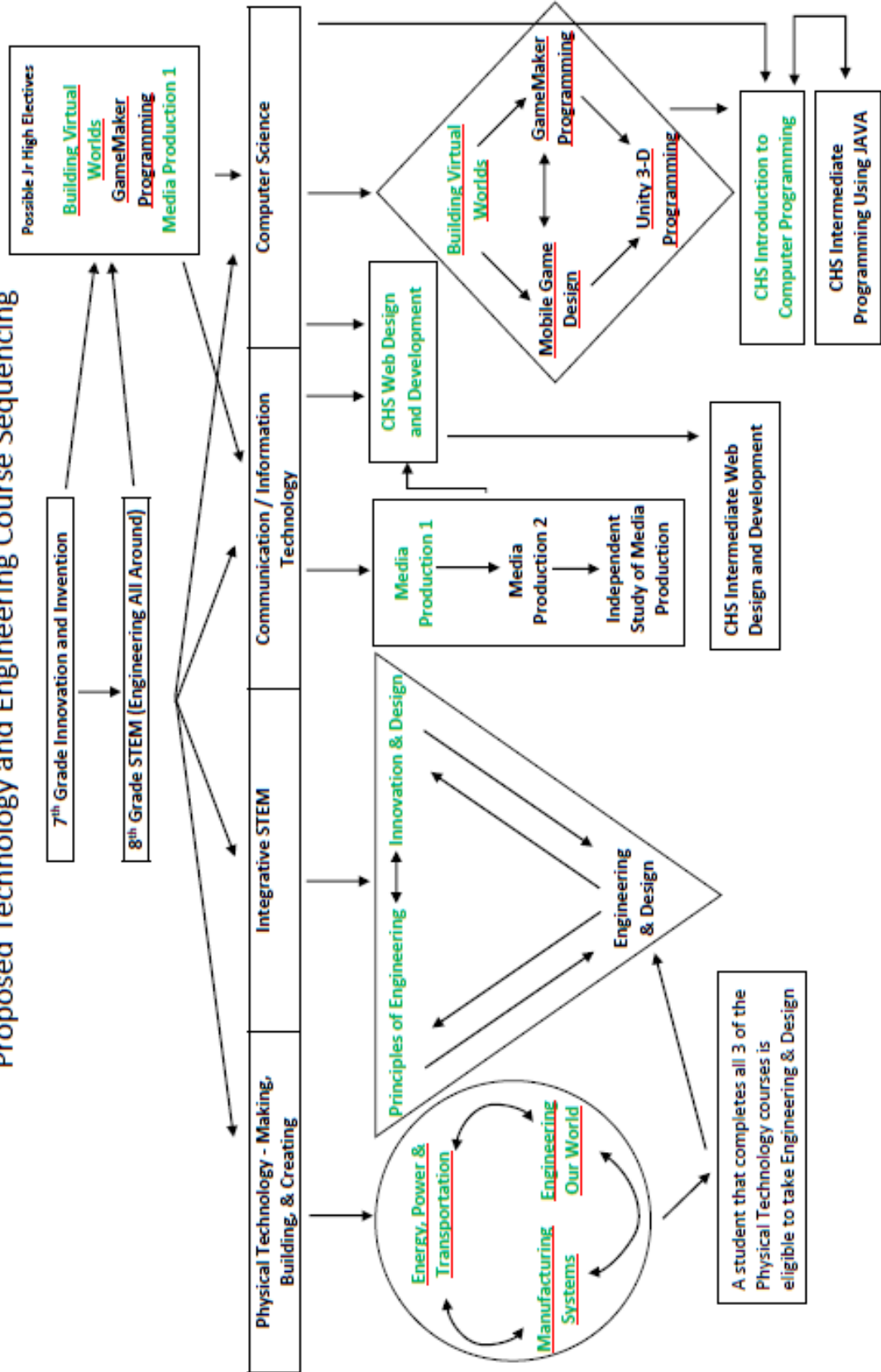


Appendix B

**Science Course Sequencing**  
*7th-9th will be heterogeneous grouping*



# Greenville Jr. Sr. High School Proposed Technology and Engineering Course Sequencing



Notes: Students may take as many courses in a suggested track as they wish. There is no requirement that once a track is entered that they complete all of the courses in that track. Students may move freely from track to track even if the arrows don't indicate it as a suggested move. Course titles in **GREEN** indicate elective courses with no Technology and Engineering prerequisite. Red underlined courses indicate semester courses.