

# Quaker Valley Middle School Program of Studies

## COMPLIANCE STATEMENT

It is the policy of the Quaker Valley School District not to discriminate on the basis of race, sex, religion, color, national origin, age, handicap or limited English proficiency in its educational programs, services, facilities, activities or employment policies as required by Title IX of the 1972 Educational Amendments, Title VI and VII of the Civil Rights Act of 1964, as amended, Section 504 Regulations of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Section 204 Regulations of the 1984 Carl D. Perkins Act or any applicable federal statute.

For information regarding programs, services, activities, and facilities that are accessible to and usable by handicapped persons or for inquiries regarding civil rights compliance, contact: Quaker Valley School District, 100 Leetsdale Industrial Drive, Suite B, Leetsdale, PA 15056; or the Director of the Office of Civil Rights, Department of Health, Education and Welfare, Washington, D.C.

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# Quaker Valley School District

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June 2018

Dear Quaker Valley Middle School Families:

The mission of the Quaker Valley Middle School is to help students become independent learners and responsible citizens while maintaining high expectations for all students. The teachers and administrators have prepared this Program of Studies to help you understand course offerings here at the middle school. We believe that all students need a solid foundation, with high expectations, and rigorous, engaging classes to prepare them for the challenges of high school and beyond. We will teach each student to read analytically, write coherently, and think critically.

The middle school faculty and staff recognizes that not all students' paths through the middle school years will look exactly the same. Our intention is to make learning relevant and personal for each student. We will connect learning and living to better prepare students for the demands of the 21<sup>st</sup> century.

Please use the attached course descriptions as a guide. The teachers, school counselors, academic specialist, and administrators welcome your views and contributions. Working together we can ensure the best possible path for each student's journey through Quaker Valley Middle School. We look forward to working with you and your child!

Sincerely,

Anthony J. Mooney, Ed. D.  
Quaker Valley Middle School  
Principal

# Quaker Valley School District

## **Shared Vision**

*It is our shared vision to become a thriving community of learners in an environment that embraces a culture of thinking.*

## **Mission**

*The mission of the Quaker Valley School District is to engage and inspire the hearts and minds of every learner every day.*

## **Belief Statements**

- 1) All people want to learn; all people can learn.*
- 2) Every individual has a unique combination of abilities and attributes that when recognized, nurtured and challenged, promote the realization of potential.*
- 3) It is our responsibility to nurture in each learner the qualities that prepare our students to be lifelong learners and ethical, responsible citizens.*
- 4) Communities that invest in youth prosper.*

## ***Philosophy***

Our strength as an educational community stems from students, teachers, parents, staff, administrators, and the Quaker Valley citizens working together with a common mission ... ***educational*** excellence. The entire Quaker Valley community strives to create a secure environment where each student, treated with trust and respect, can assume responsibility for his or her own education.

Quaker Valley Middle School is designed to help students as they leave childhood and enter adolescence. The rapid growth spurts, changes in attitudes and feelings, and the high energy levels are common to students in grades six, seven and eight. There is outward evidence of each individual's need to expand his or her personal world through new interests, new ideas and new responsibilities.

With our teachers serving as a resource and providing direction and encouragement, students will practice and work toward mastering basic reading, writing, listening, speaking, computing, researching, and problem-solving skills. Through meeting the challenges of both short and long-term assignments, students will also practice and develop a sense of self-discipline by acquiring good study habits and completing assignments on time.

The professional staff will use department and team meetings to exchange ideas, needs, and perceptions regarding curriculum and students. This sharing is designed to improve the scope, sequence and articulation of students' schooling. Teachers try to match learning experiences and reinforcement activities with students' readiness, to detect and resolve difficulties, and to share with parents mutual concerns that may affect a child's learning or welfare.

The Middle School program emphasizes basic skill development and exploratory opportunities. In addition, students are expected to increase their own positive self-concepts and to develop traits of good citizenship. The goals that enable our school program to achieve these ends are as follows:

## ***Goals***

### ***Intellectual Development***

To provide opportunities for students to explore and to develop their abilities in the areas of mathematics, science, social sciences and the fundamentals of written and oral communication. Emphasis is placed on the critical thinking processes that include conducting research, analyzing and presenting findings, drawing conclusions, and making decisions.

### ***Aesthetic Growth***

To provide experiences in the humanities that encourages students to develop aesthetically to appreciate cultural differences.

### ***Social Development***

To encourage students to adopt a positive philosophy of life and to assume personal responsibility for their own actions. Students will develop respect for individual dignity and to understand and accept the diversity of others.

**Emotional Growth**

To provide support for students in learning to cope with their experiences, whether positive or negative, and to provide experiences that help students understand and accept themselves.

**Physical Development**

To develop the habits necessary to maintain good health and hygiene, and to develop and reinforce an appreciation of, and skill in, the range of physical motion, from gross body movements to fine motor skills.

**Co-Curricular Involvement**

To provide the opportunity for students to participate in a variety of school supported activities.

**Pupil Services**

The professional staff addresses the individual needs of all students and the differing rates of mental and physical growth that characterize teens and preteens during this phase in their development. Teachers work diligently to match learning experiences and reinforcement activities with each student's readiness at a given time. This personal approach allows teachers frequently to detect and resolve issues before they become serious, and to share with parents any concerns that may affect the education or welfare of their child.

Quaker Valley Middle School has many trained professionals to call upon when necessary, including nurses, school counselors, and psychologists to address students' needs. Classes for students with special needs and programs for those who have experienced failure in the past add to the myriad of supports that exist to help all children succeed academically.

Each student is assigned to one of two school counselors. The counselors work directly with all students in their care. Each counselor visits classrooms regularly throughout the school year, addressing topics specific to student development. The units of study for all grades often include:

- Anti-Bullying & Cyber safety
- Organization and Test Taking Strategies
- Career Education
- Character Education
- Goal Setting

Students may also elect to participate in small focus groups on topics of need or interest that address issues they may face daily. These topics have included; Stress Management, Friendship, Social Skills, and others. School Counselors work directly with teachers, parents, and administration when students are experiencing difficulty. Parents are encouraged to contact their child's counselor if they have any academic, social, and/or emotional concerns or for support or advice as well as information or referral to additional services.

**Special Education**

Students who are identified as exceptional are encouraged to take the maximum number of regular education courses possible. The extent of special education programming is determined for each individual student annually in an Individual Education Program (IEP) planning conference. Assignment to modified courses within the special education department will occur when a student's special needs require programming outside the

regular curriculum. Allocation of services and programs occurs when a multi-disciplinary team evaluation and IEP indicates that such a program is appropriate.

### **Learning Support**

These programs provide academic support for those students who are mentally challenged or in need of learning support. They will receive assistance with regular education courses or direct instruction within a modified course. Regular education teachers will service students identified as requiring minimal support for regular education with modifications and adaptations. This may include back-up instruction by the special education teacher in the recourse rooms. Quaker Valley School District offers Learning in the Natural Classroom (LINC) Program in several courses. In these courses, the regular and special education teacher team-teach the course, providing the necessary adaptations and supports to meet a variety of individual student's needs. Students with exceptional needs will be serviced in a special education resource room where they will receive direct instruction for different core subjects. Curricular/instructional accommodations for exceptional students shall be provided as outlined in the student's IEP.

### **Gifted Support**

Quaker Valley meets the needs of all learners by providing a challenging, stimulating environment that encourages students to grow and develop their academic and creative skills. Academic services are available to all students, whether identified as gifted or not, who demonstrate a need for differentiated instruction to reach their potential. We employ the Levels of Service Model developed by Donald Treffinger and his colleagues to meet each student's demonstrated need with services appropriate to the student's readiness, prior experience, interest, and commitment. In line with theorist Joseph Renzulli, we seek to identify and serve gifted behaviors rather than gifted students. Some services we employ are appropriate for all students; others are appropriate for very few students. The key to maximizing potential is to match to students with the needed educational interventions.

**Level 1** services are open to **all** students with no restrictive pre-requisites and include field trips, guest speakers, in-class enrichment, and curricular differentiation.

**Level 2** services are open to **many** students and are based on specific interests and abilities. This would include most co-curricular experiences including Math Olympiad, Science Olympiad, Wordmasters Challenge, Geography Bee, Spelling Bee, and Calcu-Solve.

**Level 3** services are open to **some** students in small groups or as individuals to address a specific and significant curricular need. These include compacting, guided study, distance learning, and learning contracts.

**Level 4** services are open to **few** students, who require extensive modification to the curriculum in order to progress in their learning including subject or whole grade acceleration, or online coursework.

\*If you feel your child, by virtue of prior academic experience or demonstrated ability is in need of modification to his or her curriculum, please contact Anthony Mooney, at 412-749-5079.

### **Speech and Language Support Program**

Services are provided to students who have communication disorders of impaired language, voice, fluency or articulation to such a degree that academic achievement is affected and the condition is significantly handicapping.

### **Vision and Hearing Support**

Allegheny Intermediate Unit specialists provide services to any student with a vision or hearing disabilities. The intent is to provide the required degree of support to enable students so that they may profit from the regular curriculum.

### **Assessment Programs**

In accordance with the No Child left Behind (NCLB) legislation, all students in grades 6, 7, and 8 will participate annually in the Pennsylvania School Systems of Assessment (PSSA). Students in grade 8 will be examined in mathematics, reading, science and writing, while students in grades 6 and 7 will participate in the reading and mathematics assessments. As always, parents will be notified in writing prior to the testing periods.

### **Course Levels**

All subjects taught at Quaker Valley Middle School are indexed to indicate areas and levels as follows:

**2000** – Intervention and Skill Development

**3000** – Academic

**4000** – Advanced Readiness and Accelerated

**7000** – Courses related to co-curricular activities

**9000** – Exploratory

Most courses are taught at the 3000 and 9000 levels. There are a few courses in the 2000 or 4000 series, and are structured based on the abilities of the students who schedule for these classes. Departments offering courses at the 4000 level have high expectations for the performance of students enrolled in the courses. It is important for both students and parents to know that the material covered in a 4000 level course will be of greater scope and depth than a similar course offered at the 3000 level.

*Below you will find a list of courses offered at the Quaker Valley Middle School for the year 2017-2018. The content within units of study or materials may change due to teacher discretion and/or planning for student need.*

## MIDDLE SCHOOL CURRICULUM

### Language Arts

**Department:** Language Arts

**Course Name:** Language Arts 3160

**Grade:** 6

**Description:** Language Arts 3160 will focus on the development of skills in reading, writing, speaking, and listening. This course incorporates reading comprehension, vocabulary development, the writing process, and grammar skills. Throughout the year, students will read and discuss several genres including fiction and nonfiction in novels, short stories, and poetry. Vocabulary from texts read in class will be studied and applied. In addition, students will use the writing process to create informational, narrative, argumentative, and analytical essays. Lastly, students will complete short and long-term assignments using self-direction and teacher guidance.

**Expectations:** Students in this course will work toward being critical thinkers. Students will consider author's intent and the use of multiple literary devices when reading. As writers, students are expected to compose original works in the expository, narrative, and argumentative modes. Writing devices including transitions, figurative language, and dialogue will be emphasized in various written pieces.

**Department:** Language Arts

**Course Name:** Language Arts 4160

**Grade:** 6

**Description:** Language Arts 4160 will focus on helping students to develop language skills in reading, writing, speaking, and listening. This course will incorporate reading comprehension, vocabulary development, the writing process, and grammar skills. Throughout the year, students will read, discuss, and evaluate several genres including fiction and non-fiction in novels, short stories, and poetry. Readings will be challenging in terms of readability, vocabulary, and length. Vocabulary from class texts and additional resources will be studied and discussed. In addition, students will use the writing process to create informational, narrative, argumentative, and analytical essays. Throughout the writing process, emphasis will be given to the refinement and acquisition of the following writing traits: ideas, voice, organization, sentence fluency, word choice, and mechanics. Lastly, students will complete short and long-term assignments using self-direction and teacher guidance.

**Expectations:** Students in this course will be required to be independent learners who act as critical thinkers. When examining a text beyond simple comprehension, students will consider author's intent, and the use of multiple literary devices. To demonstrate knowledge and comprehension of these aspects of a text, students will be required to compose informed and thoughtful responses to literature. As writers, students will compose original works with an engaging voice in the expository, narrative, and argumentative modes. Writing devices including transitions, figurative language, and dialogue will be emphasized and required in various written pieces.

**Department:** Language Arts

**Course Name:** Language Arts 3170

**Grade:** 7

**Description:** In Language Arts 3170, students will develop as writers and readers. Writing skills will focus on narrative, informative, and argumentative essays, as well as short stories, presentations, and poetry. Students will be expected to develop into clear and concise communicators who are capable of analyzing a variety of texts using the point-proof-analysis method of writing. Students will also be expected to comprehend and analyze grade-level reading materials including short stories, novels, newspaper articles, editorials, and select poetry.

**Expectations:** The students in this course will improve in the areas of writing, reading, listening, and speaking. A major emphasis is placed on developing critical thinking skills, understanding multiple genres of texts and text structures, creating a variety of fiction and nonfiction writings, and presenting to a variety of audiences.

**Department:** Language Arts

**Course Name:** Language Arts 4170

**Grade:** 7<sup>th</sup> grade

**Description:** In Language Arts 4170, students will advance as writers and readers. Writing skills will focus on narrative, informative, and argumentative essays, as well as short stories, presentations, and poetry. Students will advance into clear and concise communicators who are capable of analyzing a variety of texts using the point-proof-analysis method of writing. Students will also be expected to comprehend and analyze higher-level reading materials including short stories, novels, newspaper articles, editorials, and select poetry. Assessments will also include shared inquiry discussions, small group discussions, and higher-level questioning.

**Expectations:** Students entering this class are expected to be clear and concise communicators who are familiar with the point-proof-analysis method of writing. Students will be required to act as critical thinkers who examine a text in a way that goes beyond simple comprehension. As writers, students are expected to compose original works with an engaging voice in the informative, narrative, and argumentative modes.

**Department:** Language Arts

**Course Name:** Language Arts 3180

**Grade:** 8

**Description:** In Language Arts 3180, students will refine their skills, striving to be clear and concise communicators in a variety of writing modes. This will be achieved through the generation of essays and other non-fiction writings. Students will also be expected to comprehend grade-level reading materials including short stories, novels, editorials, non-fiction, mythology, and select poetry.

**Expectations:** Students in this course will be required to examine a text for both comprehension and basic analysis. In doing so, students will discuss and think about author's intent, theme, and the use of literary devices. To demonstrate knowledge and comprehension, students will be required to compose responses to literature in the point-proof-analysis method of writing. As writers, students are expected

to compose original works with a consistent voice in the informative, narrative, and argumentative modes.

**Department:** Language Arts

**Course Name:** Language Arts 4180

**Grade:** 8

**Description:** In Language Arts 4180, students will continue to advance as writers and readers. Writing skills will focus on narrative, informative, and argumentative essays, as well as poetry. Students will be expected to discuss, analyze, and compare challenging and complex reading materials including short stories, novels, newspaper articles, and select poetry using the point-proof-analysis method of writing. Students will also be expected to comprehend and analyze high school-level reading materials including short stories, novels, newspaper articles, editorials, and select poetry. These skills will then be tested through both objective assessments and extended writings.

**Expectations:** Students in this course will be required to act as critical thinkers who examine a text in a way that goes beyond simple comprehension. Students will consider author's intent, theme, and the use of multiple literary devices when studying a text. To demonstrate knowledge and comprehension of these aspects, students will be required to compose informed and thoughtful responses to literature using the point-proof-analysis method of writing. As writers, students are expected to compose original works with an engaging voice in the informative, narrative, and argumentative modes. Writing devices including anecdotal leads, subtle transitions, and dialogue will be emphasized and required in various written pieces.

## Mathematics

**Department:** Mathematics

**Course Name:** Math Foundations 6

**Grade:** 6

**Description:** Math Foundations provides students with small group instruction aimed at helping students who need additional exposure to math concepts. This course is very individualized depending on the specific needs of the students but will focus on algebraic readiness.

**Expectations:** Students will be fine-tuning their basic math skills as they prepare for pre-algebra or Math 7. In addition to building a stronger mathematical thinking foundation, students will be asked to think abstractly, problem solve, and apply mathematics to real-world situations.

**Department:** Math

**Course Name:** Math 6 3000

**Grade:** 6

**Description:** The Math 3000 curriculum focuses on five main areas including the number system, expressions and equations, ratio and proportions, geometry, and probability and statistics; pre-algebra

concepts and skills are introduced when appropriate. Reasoning, collaborative thinking, and problem solving are emphasized throughout the course.

**Expectations:** As this course is geared towards preparing students for pre-algebra, students will be expected to expand their algebraic thinking. Students will be asked to think abstractly, problem solve, and apply mathematics to real-world situations.

**Department:** Mathematics

**Course Name:** Math 6 4000 (4260)

**Grade:** 6

**Description:** The Math 6 4000 curriculum is designed for Algebra I readiness. Therefore, it bridges the gap between fifth and sixth grade math while covering pre-algebra topics in-depth. This rigorous, fast-paced course has a wide scope, including substantial amounts of geometry integrated with arithmetic and algebraic topics. The course is largely dedicated to abstract thinking, problem solving, non-calculator skills, and applications of integrated concepts.

**Expectations:** Students will have a thorough understanding of number sense as well as solid foundation of geometry skills. Daily homework assignments should be expected. In each unit there will be at least one quiz followed by a unit assessment at the end of the unit, as well as a cumulative final exam at the end of the course. Activities and applications of skills may follow a unit exam, where appropriate.

**Department:** Mathematics

**Course Name:** Math Foundations 7 (3376)

**Grade:** 7

**Description:** Math 7 is designed to prepare students for Math 8. It is aligned with seventh grade standards and will provide the foundational skills necessary for a Math 8 course which focuses on pre-algebra skills. Basic calculations will be practiced throughout the course, with calculators used at the teacher's discretion. Technical reading and writing will also be emphasized through written explanations and justifications of problem solutions.

**Expectations:** Students are expected to complete daily homework assignments to practice the new skills learned each day. In each unit, there will be at least one quiz followed by a unit assessment at the end of the unit, as well as a cumulative final exam at the end of the course. Activities and applications of skills may follow a unit exam, where appropriate. Students work towards mastery and applications of number skills as well as an understanding of geometric concepts.

**Department:** Mathematics

**Course Name:** Pre-Algebra 3000 (3375)

**Grade:** 7

**Description:** Pre-Algebra is the gateway course for all future mathematics courses. It is the foundation for all higher levels of mathematics. Pre-Algebra has a wide scope, including substantial amounts of geometry integrated with arithmetic and algebraic topics. A solid proficiency in basic calculations is a requirement for the course, as calculators are only permitted at the teacher's discretion.

**Expectations:** Students will have a thorough understanding of number sense as well as solid foundation of geometry skills. Daily homework assignments should be expected. In each unit there will be at least one quiz followed by a unit assessment at the end of the unit, as well as a cumulative final exam at the end of the course. Activities and applications of skills will be included, where appropriate.

**Department:** Mathematics

**Course Name:** Math Foundations 8 (3298)

**Grade:** 8

**Description:** Math 8 focuses on Pre-Algebra and Pre-Geometry skills with an emphasis on Pennsylvania Common Core standards. Math 8 addresses topics including variables, expressions, equations, graphing, integers, plane geometry concepts, linear relationships, and word problem/real-life applications. Calculators will be used at the teacher's discretion. Technical reading and writing will also be emphasized through written explanations and justifications of problem solutions. This course is designed to prepare students for Algebra I.

**Expectations:** Daily homework assignments should be expected. Regular assessments such as tests, quizzes, and open-ended tasks will occur multiple times per month. This course will have a cumulative final exam.

**Department:** Mathematics

**Course Name:** Algebra 1 (4370, 3381)

**Grade:** 6-8

**Description:** Algebra 1 provides traditional math instruction with frequent practice while including avenues for students to communicate and explore algebraic content in ways that illuminate the transitions between concrete and abstract thinking. Successful completion of Pre-Algebra is a prerequisite for this course.

**Expectations:** Students are expected to complete daily homework assignments to practice the new skills learned each day. In each unit, there will be at least one quiz followed by a unit assessment at the end of the unit, as well as a cumulative final exam at the end of the course. Activities and applications of skills may follow a unit exam, where appropriate. Students work towards mastery and applications of linear equations and functions, as well as an understanding of quadratic expressions and equations. The Algebra 1 Keystone Exam is administered at the end of the course.

**Department:** Mathematics

**Course Name:** Geometry (4380)

**Grade:** 7-8

**Description:** Successful completion of Algebra I is a prerequisite for this course. Throughout the course, students will be asked to explain what they are doing; compare and contrast different approaches; analyze a problem; make sketches, graphs, tables, and other models; hypothesize, make a conjecture, and look for counterexamples; and make and prove generalizations. The students will use technology as a tool for visualizing geometric concepts using the app Geogebra.

**Expectations:** Students will be expected perform in a more rigorous, accelerated program and be able to manage an advanced level of problem-solving, a greater depth of application, a faster pace, and spend more time on exploration and enrichment topics that may include additional writing assignments. Daily homework assignments should be expected, as well as regular quizzes, tests, and projects. Students are expected to maintain grades above 80% to earn a recommendation for honors Algebra 2.

## Science

**Department:** Science

**Course Name:** Earth Science 3460

**Grade:** 6

**Description:** The sixth grade Earth Science course introduces students to past, present and future forces and conditions that affect our planet. Students learn about weather and climate, plate tectonics, rocks, minerals, earthquakes, volcanoes, and the solar system. Instruction encompasses classroom discussion, thinking strategies and hands-on activities with a focus on improving students' observation and hypothesizing skills. Students will experience hands on learning about weather and climate, astronomy, plate tectonics, earthquakes and volcanoes, and rocks.

**Expectations:** Students will be expected to hypothesize, develop experimental procedures, analyze, draw valid conclusions, and evaluate data. They will also be expected to read and write about science concepts. Students will engage in active investigations and in-depth content including outdoor learning at Fern Hollow Nature Center.

**Department:** Science

**Course Name:** Life Science 3470

**Grade:** 7

**Description:** The seventh grade Life Science curriculum examines life and living things. Investigations will begin at the characteristics of basic organisms and the structure and function of the cell and build towards the more complex life forms such as animals and their reproduction and behavior. Hands-on investigations include using microscopes, observing protists, fungi, and plants, and dissecting various animals. Students will engage in extended discussion on relevant real world Life Science topics. Units are organized around essential questions, which allow for thematic inquiry-based study of life from its most basic forms to its most complex.

**Expectations:** Students in this course will become scientists who can explore, investigate, model and debate science concepts, through reading, writing, discussion and hands-on inquiry. Students will not only understand the science concepts but also develop critical thinking skills, substantiate their viewpoint, and clearly articulate themselves both verbally and in writing. Concepts that students will understand include but are not limited to how structure dictates function and some of the ethical issues created by advancing genetic engineering and biotechnology.

**Department:** Science

**Course Name:** Life Science 4470

**Grade:** 7

**Description:** The seventh grade Life Science curriculum investigates life and living things. Investigations will begin at the characteristics of basic living things and the structure and function of the cell and build towards the more complex life forms such as animals and their reproduction and behavior. Hands-on investigations include using microscopes, observing protists, fungi, and plants, and dissecting various animals. Students will engage in extended discussion on relevant real world Life Science topics. Units are organized around essential questions, which allow for thematic inquiry-based study of life from its most basic forms to its most complex.

**Expectations:** The students in this course will become scientists who can explore, investigate, model and debate science concepts, through reading, writing, discussion and hands-on inquiry. Students will not only understand the science concepts but also develop critical thinking skills, substantiate their viewpoint, and clearly articulate themselves both verbally and in writing. Concepts that students will understand include but are not limited to how structure dictates function and some of the ethical issues created by advancing genetic engineering and biotechnology. In 4000-level Life Science course, students are expected to acquire knowledge quickly with fewer exposures, work independently to complete labs and research projects, and analyze information independently to apply knowledge to unique situations.

**Department:** Science

**Course Name:** Physical Science 3480

**Grade:** 8

**Description:** Physical Science is intended to act as a primary introduction to Physics and Chemistry with an emphasis on the nature of science and scientific problem solving. The course exposes students to the principles of motion, matter's composition, behavior and properties, and its relationship to force and energy. Instruction encompasses classroom discussion, problem solving scenarios and calculations, independent reading, and research. Teacher lectures are reinforced by various student-centered problem solving hands-on activities. Students are also exposed to various daily tasks of a scientist including investigating scientific research topics, analyzing graphs and data, analytical writing, reading and responding to scientific articles, and presenting data and conclusions with their classmates.

**Expectations:** Students are expected to possess and exhibit higher-order thinking skills, algebraic math skills, complete labs and projects, and engage in extended discussion on relevant real world discussion on Physical Science topics. Students will learn proper use of technology for research, graphing, and lab reports. With teacher direction, students will use websites to attain more in-depth information regarding topics for research and lab reports. In 3000-level Physical Science, students are required to rely heavily on mathematical problem solving skills as they explore a variety of science topics using introductory Algebra. Students will also be expected to design, plan and conduct investigations as well as document the results of their investigations using appropriate terminology, tables, graphs and charts, as needed.

**Department:** Science

**Course Name:** Physical Science 4480

**Grade:** 8

**Description:** Physical Science is intended to act as a primary introduction to Physics and Chemistry with an emphasis on the nature of science and scientific problem solving. The course exposes students to matter's composition, behavior and properties, and its relationship to force and energy. Instruction encompasses classroom discussion, problem solving scenarios and calculations, independent reading, and research. Teacher lectures are reinforced by various student-centered problem solving hands-on activities. Students are also exposed to various daily tasks of a scientist including investigating scientific research topics, analyzing graphs and data, analytical writing, reading and responding to scientific articles, and presenting data and conclusions with their classmates.

**Expectations:** Students are expected to possess and exhibit higher-order thinking skills, algebraic math skills, independently complete labs and projects, and engage in extended discussion on relevant real world discussion on Physical Science topics. In addition to several in-class inquiry experiments, 4000-level Physical Science students are required to design a long-term, open-ended scientific experiment and research with a properly formatted bibliography to demonstrate analytical approaches that can be associated with scientific developments. Proper use of technology for research, graphing, and lab reports is required. Students are also expected to independently use websites to attain more in-depth information regarding topics for research papers, lab reports and presentations. In 4000-level Physical Science, students must demonstrate strong math and abstract, analytical thinking skills to be successful in this course. Students should be in Algebra I or a higher math level for optimal success.

## Social Studies

**Department:** Social Studies

**Course Name:** Social Studies 3260

**Grade:** 6

**Description:**

The sixth grade Western Hemisphere curriculum explores a variety of modern cultures and issues throughout the region. Students will learn how to analyze current news articles from a variety of print and online sources. The course utilizes the five themes of geography (location, place, region, movement, and human-environment interaction) to allow students to analyze the importance of each culture. Our studies guide and allow students to apply learning into a broader context of life.

**Expectations:**

The students in the course will increase global competence and become capable of understanding and comparing cultures across the Western Hemisphere. Students are expected to actively participate in classroom discussions, complete assignments in a timely manner, and with maximum effort. Emphasis will be placed on developing analytical thinking, comparisons, communication, and summarization skills.

**Department:** Social Studies

**Course Name:** Eastern Hemisphere 3270

**Grade:** 7

**Description:** The seventh grade social studies curriculum focuses on the nations of the Eastern Hemisphere. It will be studied through the interaction of the five core concepts: social, political, economic, environmental and demographical. As we teach these core concepts we will focus on four major skills: inquiry, primary and secondary sources, data analysis and present information. The students will study the geography, history and culture of the regions. By studying the current events of the Eastern Hemisphere the students will be able to see how connected they are to far away places in this ever shrinking world.

**Expectations:** Students will be expected to analyze graphs, charts, primary sources and all types of news media. Students must be able to present their analysis in multiple ways.

Creation of graphs, charts, and critiques will be required. Students will be understand that through technology the world is more connected now than ever.

**Department:** Social Studies

**Course Name:** United States History 3280

**Grade:** 8

**Description:** The eighth grade American History curriculum delves into the study of America's story, from conflict in Western Pennsylvania during the French & Indian War in 1754 to Pittsburgh's role in making the United States into an industrial world power in the early 20th century. The course draws on the social, political, environmental, economic, and demographic core concepts to allow students to analyze the events of American history through multiple lenses. Academic research components, including primary source document analysis and critical writing, are infused into each unit of study. Units are organized around essential questions, which allow for thematic, chronological, and inquiry-based approaches to studying history.

**Expectations:** The students in this course will become historians who can ask and respond to historical questions through reading, writing, and discussion. Major emphasis is placed on developing critical thinking skills, understanding multiple points of view, substantiating arguments with evidence, and clearly articulating oneself in verbal and written formats. After students leave this class, they will have developed an appreciation for history and become engaged in discussing America's story to fully develop an understanding of what it is to be an American citizen.

## World Language

**Department:** World Language

**Course Name:** World Language Exploratory 3568

**Grade:** 6

**Description:** Throughout the year, sixth grade students will participate in the study of two world languages (French and Spanish). At the end of the school year, students will choose the language they wish to continue in seventh and eighth grade.

**Expectations:** Students will be given the opportunity to learn the basic skills of reading, writing, listening and speaking in French and Spanish. Students will demonstrate appreciation of the French and Spanish culture and will apply this knowledge to communication in French and Spanish.

**Department:** World Language

**Course Name:** French 7 (3511)

**Grade:** 7

**Description:** In French 1a, students will begin to acquire proficiency in listening, speaking, reading, and writing in the target language, with major emphasis being placed on oral communication. Students will progressively develop proficiency skills through numerous and varied oral and written exercises set in meaningful and personalized contexts. Students will gain an increased knowledge and appreciation of the Francophone world abroad and in the United States. This is the first half of the high school level one course taught over a two-year period in grades seven and eight.

**Expectations:** Students learn to communicate in French and learn to engage in longer conversations, read and interpret more challenging texts, and understand French-language films and videos. Students are introduced to the diversity of the French-speaking world, with the emphasis on contemporary culture in France, Quebec, the Caribbean and Africa. Opportunities are given to use the French language to learn about history, art, music, social concerns, and civic responsibilities. This course stresses the way in which French speakers communicate with one another, and how some of these French patterns differ from American ones. As students experience the satisfaction of participating in authentic cultural situations, they also become more confident in their ability to use their skills in the wider global community.

**Department:** World Language

**Course Name:** French 8 (3512)

**Grade:** 8

**Description:** In French 1b, students will continue to acquire proficiency in listening, speaking, reading, and writing in the target language, with major emphasis being placed on oral communication. Students will further enhance their study and understanding of the French language from seventh grade through more complex linguistic tasks and verb tenses while working towards more advanced proficiency. This is the second half of the high school level one course taught over a two-year period in grades 7 & 8.

**Expectations:** Students learn to communicate in French and learn to engage in longer conversations, read and interpret more challenging texts, and understand French-language films and videos. Students are introduced to the diversity of the French-speaking world, with the emphasis on contemporary culture in France, Quebec, the Caribbean and Africa. Opportunities are given to use the French language to learn about history, art, music, social concerns, and civic responsibilities. This course stresses the way in which French speakers communicate with one another, and how some of these French patterns differ from American ones. As students experience the satisfaction of participating in authentic cultural situations, they also become more confident in their ability to use their skills in the wider global community.

**Department:** World Language

**Course Name:** Spanish 7 (3570)

**Grade:** 7

**Description:** In Spanish 1a, students will begin to acquire proficiency in listening, speaking, reading, and writing in the target language, with major emphasis being placed on oral communication. Students will progressively develop proficiency skills through numerous and varied oral and written exercises set in meaningful and personalized contexts. Students will gain an increased knowledge and appreciation of the Spanish world abroad and in the United States. This is the first half of the high school level one course taught over a two-year period in grades seven and eight.

**Expectations:** Students learn to communicate in Spanish and learn to engage in longer conversations, read, and interpret more challenging texts, and understand Spanish videos. Students are introduced to the diversity of the Spanish-speaking world, with the emphasis on contemporary culture in Mexico. Opportunities are given to use the Spanish language to learn history, art, music, social concerns, and civic responsibilities. This course stresses the way in which Spanish speakers communicate with one another, and how some of the Spanish patterns differ from English patterns. As students experience the satisfaction of participating in authentic cultural situations, they also become more confident in their ability to use their skills in the wider global community.

**Department:** World Language

**Course Name:** Spanish 8 (3580)

**Grade:** 8

**Description:** In Spanish 1b, students will continue to acquire proficiency in listening, speaking, reading, and writing in the target language, with major emphasis being placed on oral communication. Students will further enhance their study and understanding of the Spanish language from seventh grade through more complex linguistic tasks and verb tenses while working towards more advanced proficiency. This is the second half of the high school level one course taught over a two-year period in grades seven and eight.

**Expectations:** Students learn to communicate in Spanish and learn to engage in longer conversations, read, and interpret more challenging texts, and understand Spanish videos. Students are introduced to the diversity of the Spanish-speaking world, with the emphasis on contemporary culture in Mexico. Opportunities are given to use the Spanish language to learn history, art, music, social concerns, and civic responsibilities. This course stresses the way in which Spanish speakers communicate with one another, and how some of the Spanish patterns differ from English patterns. As students experience the satisfaction of participating in authentic cultural situations, they also become more confident in their ability to use their skills in the wider global community.

## Physical Education/Health

**Department:** Health and Physical Education

**Course Name:** Physical Education 6

**Grade:** 6

**Description:** The sixth grade physical education curriculum will provide students the opportunity to participate in individual, dual and group activities. Emphasis will be placed upon being physically active. The focus will be on skill development through physical activity.

**Expectations:** Students will engage in class activities, discussions. All students will arrive prepared to perform in class.

**Department:** Health and Physical Education

**Course Name:** Physical Education 7

**Grade:** 7

**Description:** The seventh grade physical education curriculum will provide students the opportunity to participate in partner and group activities. Emphasis will be placed upon being physically active. The focus will be on skill development through physical activity.

**Expectations:** Students will engage in class activities, discussions. All students will arrive prepared to perform in class.

**Department:** Health and Physical Education

**Course Name:** Physical Education 8

**Grade:** 8

**Description:** The eighth grade physical education curriculum will provide students the opportunity to participate in group activities. Emphasis will be placed upon being physically active. The focus will be on teamwork and cooperation through physical activity and exercise.

**Expectations:** Students will engage in class activities, discussions. All students will arrive prepared to perform in class.

**Department:** Health and Physical Education

**Course Name:** Fitness 6

**Grade:** 6

**Description:** The sixth grade fitness course will primarily focus on familiarizing students with the wellness center and its equipment. The FitnessGram assessment will be introduced as a baseline and summative test. Students will see first hand the benefits of regular physical activity as they progress through the course. Proper use and care of equipment plus appropriate behavior during fitness classes will be stressed throughout the 9 week course.

**Expectations:** Students will engage in all class activities, discussion and assessments. Priority will be placed upon the level of intensity of participation and applications of principles learned. All student will be expected to change into proper athletic attire.

**Department:** Health and Physical Education

**Course Name:** Fitness 7

**Grade:** 7

**Description:** The seventh grade fitness course emphasizes personal health, by providing students ample opportunity for self evaluation and assessment. Students will complete a pre and post fitness assessment the first week of the course. They will complete a product based assessment on the circulatory system and differentiate between heart rate and target heart rate. Students obtain a vast understanding of how exercise influences the heart/ circulatory system.

**Expectations:** Students will engage in all class activities, discussions and assessments. Priority will be placed upon the level of intensity of participation and applications of principles learned. All students will be expected to change into proper athletic attire.

**Department:** Health and Physical Education

**Course Name:** Fitness 8

**Grade:** 8

**Description:** In QVMS Cross-Fit students continue to self-evaluate and self - assess. They complete the pre and post fitnessgram assessments and maintain a personal portfolio of their scores/accomplishments. Students learn how to become accountable for their health and efforts. They gain more independence in the wellness center. Muscular strength and endurance, along with the FITT (frequency, intensity, time and type) Principle are introduced in this course.

**Expectations:** Students will engage in all class activities, discussions and assessments. They will maintain an well documented and organized portfolio throughout the 9 week course. All students will change into proper athletic attire.

**Department:** Health and Physical Education

**Course Name:** Health 7 (9571)

**Grade:** 7

**Description:** The seventh-grade health curriculum serves as an introduction to personal health practices. Students will learn about the following main topics- nutrition, alcohol and tobacco, and growth and development with a focus on the reproductive systems. This course is meant to give students a firm understanding of how to be personally responsible for their own health and will allow students to make positive decisions regarding their own health. The course draws upon personal evaluations and current information to provide students with preventative health knowledge. Through web-based research, current readings, and discussions, students will possess the expertise needed to implement responsible decisions. Students will take this course one time during one quarter of the school year.

**Expectations:** Students will engage in class activities, discussions, and presentations. Students should be prepared to analyze their own personal health and will be encouraged to look at safe health practices in their own personal lives.

**Department:** Health and Physical Education

**Course Name:** Health 8 (9872)

**Grade:** 8

**Description:** The eighth-grade health curriculum focuses on three main topics of discussion- character building, growth and development, and drug education. Additional topics of focus include- consumerism, media awareness, and communicable diseases. The course intends to integrate the units into an individual's home life to implement an active and healthy lifestyle. Students will acquire skills to devise, employ, and execute a well-balanced plan for health living. The course draws upon personal evaluations and current information to provide students with preventative health knowledge. Through web-based research, current readings, and discussions, students will possess the expertise needed to implement responsible decisions. Students will take this course one time during one quarter of the school year.

**Expectations:** Students will engage in class activities, discussions, and presentations. Utmost emphasis will be placed upon participation and application of learned principles in class. Students should leave the middle school with an all-around knowledge of personal health.

## Art

**Department:** Art

**Course Name:** 6<sup>th</sup> Grade Art 9862

**Grade:** 6

**Description:** The sixth grade course is designed to establish and reinforce proficiency in the foundation of art making. The students start with reviewing the elements of design and the tools of the art room. After the elements have been solidified the students develop their skill-set in utilizing the principles of design. The students will use the elements (Line, Shape, Color, Value, Space, Form and Texture) as their tools to create and the principles (Movement, Rhythm, Pattern, Unity, Emphasis, Contrast, and Balance) as the parameters that guide, outline and define the artwork. While developing the foundations of "how to design" the course will also focus on craftsmanship, composition and understanding of design. These concepts are reinforced through various assessment measures. The course concludes with a focus in art making through the concept of engineering. What does it mean to be a problem solver and more importantly what does it mean to be a CREATIVE problem solver?

**Expectations:** Students will be expected to exemplify proficiency in the elements and principles of design. Students will utilize a high level of craftsmanship and composition as they explore their personal voice throughout the journey of design.

**Department:** Art

**Course Name:** 7<sup>th</sup> Grade Art 9872

**Grade:** 7

**Description:** The seventh grade course is designed to acquire, develop and enhance technical crafting skills so that the student is better prepared to create higher quality art. The course focuses on both two-dimensional and three-dimensional design. Students will begin the process of technical drawing and evolve into creating in the medium of clay. The goal of the course is to fill each student's metaphorical "toolbox" with as many artistic skill sets so that they leave the course with the tools to create personalized art of their choice.

**Expectations:** Students will be expected to develop strong artistic skills in a variety of media and techniques. Students will gain a greater understanding of their personal strengths and weaknesses as they use visual art as a medium for conceptual problem solving.

**Department:** Art

**Course Name:** 8th Grade Art 9882

**Grade:** 8

**Description:** This course is designed to better prepare students for the AP curriculum at the high school. Students may explore drawing, painting, mixed media collage, digital design and 3-dimensional design through in-depth assignments. Students will have the opportunity to navigate the use of several different 2-dimensional mediums such as: acrylic paint, watercolor paint, charcoal, pastels, pencil, collage and mixed media. Students will also have the opportunity to explore the element of form and what happens when the 2-dimensional design leaves the paper and enters real space. Thus, investigating the principles of 3-dimensional design and sculpture. The students will have the opportunity to explore clay through the avenues of both handbuilding and wheel-thrown pottery. All students will be challenged to build upon the skills and proficiencies that they already possess so that they may develop a solid artistic identity, purpose and direction. This course will have a heavy emphasis on 2 and 3-dimensional design and the creation of communicative artwork. Students will be challenged to build upon the skills and proficiencies that they already possess, so that they may develop a solid artistic identity, purpose and direction.

**Expectations:** Students must make the transition from the crafting of things to communication through quality workmanship. Students will obtain the collection of skills required to make something through a series of lessons in a variety of crafts. Each student will develop a personal skill set that is individualized to personal capacity. The course will focus on teaching the students how to use their personal skill-set in the development of a visual thesis. Students will do this by using their skill-set to create pieces of communicative works of art.

**Department:** Family and Consumer Sciences

**Course Name:** Food Science and Nutrition 9864

**Grade:** 6

**Description:** This is an introduction to Family and Consumer Sciences. Students will apply problem-solving skills focusing on food science and basic foods and nutrition. Kitchen basics, essential nutrients and food label reading will be explored. Students will have experience sampling healthy snacks focusing on the basic nutrients.

**Expectations:**

Students in this course will become familiar with kitchen basics, essential nutrients and food preparation skills. Emphasis is placed on helping students develop higher order thinking skills and decision-making skills in order to encourage a healthy lifestyle and lifelong learning.

**Department:** Family and Consumer Sciences

**Course Name:** Consumer Education and Textiles 9874

**Grade:** 7

**Description:** In the consumerism portion of this course, students will be introduced to the banking system. Budgeting, management of income, expenses, savings, checking account and credit accountability along with consumer rights and responsibilities will be explored. Students will also be introduced to the science of textiles and will have hands-on experience learning and practicing sewing skills. Students will also participate in a consumer book study of "The Omnivore's Dilemma" by Michael Pollan.

**Expectations:** The seventh grade family and consumer science course is designed to empower students to become productive members of their family and community. Students will incorporate problem-solving skills, cooperative learning and literacy. Students in this course will learn to become responsible consumers now and in the future. Hands-on activities focus on financial and resource management. Students will utilize skills learned to design and create a sewing project.

**Department:** Family and Consumer Science

**Course Name:** Culture and Cuisine - Regional and International 9884

**Grade:** 8

**Description:**

Students will apply their food planning and preparation skills along with their consumer skills previously learned into this course. Students will participate in a project creating a presentation using technology on the culture of a selected United States region. Regional culture, cuisine, evolution of foods, trends and recipes will be researched along with community services and programs. The focus will be on the traditions, cooking styles and food customs of other countries as well as the United States.

**Expectations:**

Students in this course will improve their problem solving, decision-making and critical thinking skills with individual and collaborative group work. Researching questions through reading and writing will be a major emphasis. Students will acquire public speaking skills, technology presentation skills, recipe planning, budgeting and recipe preparation. After leaving this course, students will have developed an appreciation for the culture and cuisine in the region where they live, as well as other cultures in the United States and around the world.

**Department:** Technology Education

**Course Name:** Exploring Engineering & Design 9861

**Grade:** 6

**Description:** In *Exploring Engineering & Design* students develop an understanding of the progression and scope of technology through exploratory experiences. In group and individual activities, students experience ways in which technological knowledge and processes contribute to effective designs, abilities, and skills to create solutions to technological problems. Students participate in design activities to understand how criteria, constraints, and processes affect designs. Brainstorming, visualizing, modeling, constructing, testing, and refining designs provide firsthand opportunities for students to understand the uses and impacts of innovations. Students develop skills in communicating design information and reporting results. This course is a cornerstone for a middle school technology education program.

**Expectations:** *Exploring Engineering & Design* builds on K–5 experiences and develops student understanding of the scope of technology and the repetitious nature of technological design and problem-solving processes. Likewise, students will be able to communicate their ideas verbally and visually and document the development of their plans through visual representation, journals, and portfolios. Teaming, peer mentoring, and individual actions contribute to student achievements. Students learn how technology, innovation, design, and engineering interrelate and are interdependent.

**Department:** Technology Education

**Course Name:** Invention and Innovation 9871

**Grade:** 7

**Description:** *Invention and Innovation* provides students with opportunities to apply the design process in the invention or innovation of a new product, process, or system. In this course, students will learn all about invention and innovation. They will have opportunities to study the history of inventions and innovations, including their impacts on society. They will learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Students will 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 information, communicating design information, and reporting results.

**Expectations:** Invention and Innovation builds on K-6 experiences as well as those in Exploring Engineering & Design and develops a student's understanding of the scope of technology and the repetitious nature of technological design and problem-solving processes. Likewise, students participate in engineering design activities to understand how criteria, constraints, and processes affect designs. Students will be involved in activities and experiences where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Students will also develop skills in researching information, communicating design information, and reporting results. Invention and innovation provides the foundation for future studies in the sequence. Students learn how Technology, Innovation, Design, and Engineering interrelate and are interdependent.

**Department:** Technology Education

**Course Name:** Exploring Systems; How Things Work 9881

**Grade:** 8

**Description:** *Exploring Systems; How Things Work* is intended to teach students how technological systems work together to solve problems and capture opportunities. A system can be as small as two components working together (technical system/device level) or can contain millions of interacting devices (user system/network level). We often break down the macro systems into less complicated microsystems in order to understand the entire system better. However, technology is becoming more integrated, and systems are becoming more and more dependent upon each other than ever before. Electronics systems are interacting with natural (i.e., bio) systems as humans use more and more monitoring devices for medical reasons. Electrical systems are interacting with mechanical and fluid power systems as manufacturing establishments become more and more automated. This course gives students a general background on the different types of systems but concentrates more on the connections between these systems.

**Expectations:** *Exploring Systems; How Things Work* builds on K-7 experiences as well as those in *Exploring Engineering & Design* and *Invention and Innovation* to develop student understanding of the scope of technology and the repetitious nature of technological design and problem-solving processes. 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. As the capstone middle school technology education course, *Systems; How Things Work* provides the foundation for future studies in the technology education sequence. Students learn how technology, innovation, design, and engineering interrelate and are interdependent.

**Department:** Instructional Technology

**Course Name:** Computing Education I 9693

**Grade:** 6

**Description:** Computing Education teaches students to recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, so that they act in ways that are safe, legal and ethical. Students will use a variety of technologies within a design process to

identify and solve problems by creating new, useful or imaginative solutions. Students will communicate clearly and express themselves creatively for a variety of purposes using digital media. Finally, students will develop and employ computational thinking strategies for understanding and solving problems in computer science.

**Expectations:** Students in grade 6 will gain a better understanding of digital citizenship and how to be an effective & responsible online learner. Major emphasis will be placed on computer science as students work in a collaborative environment using problem solving skills to address a series of puzzles, challenges and real-world scenarios. Students will also learn the importance of using digital media to communicate messages.

**Department:** Instructional Technology

**Course Name:** Computing Education II 9793

**Grade:** 7

**Description:** Computing Education teaches students to recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, so that they act in ways that are safe, legal and ethical. Students will use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students will communicate clearly and express themselves creatively for a variety of purposes using digital media. Finally, students will develop and employ computational thinking strategies for understanding and solving problems in computer science.

**Expectations:** Students in grade 7 will work in a collaborative environment as they build on their coding experience while programming animations, interactive art & games. Students will also be introduced to the broader social impacts of computing through a series of design challenges while finding solutions to problems. Students will work in teams as they learn about entrepreneurship and will have the opportunity to identify a need that they care about, prototype and test solutions with real users to get feedback and drive further interaction. Students will continue to utilize digital media tools to communicate their ideas.

**Department:** Instructional Technology

**Course Name:** Technology Integration 9893

**Grade:** 8

**Description:** Computing Education teaches students to recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, so that they act in ways that are safe, legal and ethical. Students will use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students will communicate clearly and express themselves creatively for a variety of purposes using digital media. Finally, students will develop and employ computational thinking strategies for understanding and solving problems in computer science.

**Expectations:** Students in grade 8 will focus largely on computer science and the importance of data in solving problems and will learn how computers can help automate the steps in this process. Students will also explore the role of hardware platforms in computing & how different sensors can provide more

effective input & output compared to traditional methods. Students will continue to use digital media to communicate their ideas.

**Department:** Library Media

**Course Name:** MakerSpace: Maker Centered Learning

**Grade:** 6

**Prerequisite:** None

**Description:** The 6<sup>th</sup> grade maker-centered learning class will provide students with the opportunity to develop and showcase their creativity, problem-solving, curiosity, collaboration and innovation mindsets. Students will engage in a variety of experiences where they can identify a problem or opportunity for innovation, understand the constraints of the endeavor, creatively prototype various solutions. By engaging in this design process, students will develop a sense of agency and personal ownership in the creation process. Students will be introduced to various tools of the makerspace and will explore the concepts of inventing and innovating by looking closely at objects, systems, or concepts; exploring their complexity; and finding opportunities to improve or innovate. Through the making process, students will collaborate, problem-solve, and create projects and ideas that are personal and meaningful.

## Music/Performing Arts

**Department:** Music Department

**Course Name:** 6<sup>th</sup> Grade Band 7662

**Grade:** 6

**Description:** 6<sup>th</sup> Grade Band is the third course in the comprehensive band program in the Quaker Valley School District. It is an advanced elementary level performing class. Students are expected to practice their instruments a minimum of four days a week (20-30 minutes). *Private lessons are strongly encouraged for all band participants.* Students will continue their refinement of basic musical skills (Tone production, music reading, technical facility, and general musicality) through the practice, rehearsal, and performance of complex band music. Students discuss and constructively comment on their own performances and on the performances of the band. *The Quaker Valley Bands are considered to be among the best in the Pittsburgh area!*

**Expectations:** Classroom participation, individual practice, playing quizzes & tests, concert participation.

**Department:** Music Department

**Course Name:** 7<sup>th</sup> Grade Band 7672

**Grade:** 7

**Description:** 7<sup>th</sup> Grade Band is the fourth course in the comprehensive band program in the Quaker Valley School District. It is an intermediate level performing class. Students are expected to practice their instruments a minimum of four days a week (25-30 minutes). *Private lessons are strongly encouraged for all band participants.* Students will continue their refinement of intermediate level

musical skills (Tone production, music reading, technical facility, and intermediate level musicality) through the practice, rehearsal, and performance of complex band music. Students discuss and constructively comment on their own performances and on the performances of the band. *The Quaker Valley Bands are considered to be among the best in the Pittsburgh area!*

**Expectations:** Classroom participation, individual practice, playing quizzes and tests, concert participation.

**Department:** Music Department

**Course Name:** 8<sup>th</sup> Grade Band 7682

**Grade:** 8

**Description:** 8<sup>th</sup> Grade Band is the fifth course in the comprehensive band program in the Quaker Valley School District. It is an advanced intermediate level performing class. Students are expected to practice their instruments a minimum of four days a week (20-30 minutes). *Private lessons are strongly encouraged for all band participants.* Students will continue their refinement of advanced intermediate level musical skills (Tone production, music reading, technical facility, and advanced intermediate level musicality) through the practice, rehearsal, and performance of complex band music. Students discuss and constructively comment on their own performances and on the performances of the band. *The Quaker Valley Bands are considered to be among the best in the Pittsburgh area!*

**Expectations:** Classroom participation, individual practice, playing quizzes and tests, concert participation.

**Department:** Music

**Course Name:** String Orchestra 7663

**Grade:** 6

**Description:** 6<sup>th</sup> Grade Orchestra at Quaker Valley Middle School is offered as a continuation of the strings music program begun in elementary school. Students will develop skills as musicians and further study of music theory and notation, history, and performance practice. The mission of the program is to increase awareness of the aesthetic value of music and cultivate an appreciation and understanding that will create a lifelong interest in music making and listening.

**Expectations:** Students in this course will become producers and consumers of music through practice, performance and evaluation. Major emphasis is placed on string technique, reading music, and musicianship.

**Department:** Music

**Course Name:** String Orchestra 7673

**Grade:** 7

**Description:** 7<sup>th</sup> Grade Orchestra at Quaker Valley Middle School is offered as a continuation of the strings music program begun in elementary school and continued through 6<sup>th</sup> grade at the middle school. Students will develop skills as musicians and further study of music theory and notation, history, and performance practice. The mission of the program is to increase awareness of the aesthetic value of

music and cultivate an appreciation and understanding that will create a lifelong interest in music making and listening.

**Expectations:** Students in this course will become producers and consumers of music through practice, performance and evaluation. Major emphasis is placed on string technique, reading music, and musicianship.

**Department:** Music

**Course Name:** String Orchestra 7683

**Grade:** 8

**Description:** 8<sup>th</sup> Grade Orchestra at Quaker Valley Middle School is offered as a continuation of the strings music program begun in elementary school and continued through 6<sup>th</sup> and 7<sup>th</sup> grade at the middle school. Students will develop skills as musicians and further study of music theory and notation, history, and performance practice. The mission of the program is to increase awareness of the aesthetic value of music and cultivate an appreciation and understanding that will create a lifelong interest in music making and listening.

**Expectations:** Students in this course will become producers and consumers of music through practice, performance and evaluation. Major emphasis is placed on string technique, reading music, and musicianship.

**Department:** Music

**Course Title:** Chorus

**Grade:** 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> 7661 7671 7681

**Description:** Students will learn a repertoire of two, three, and four part music in various musical styles and genres, to be performed at two concerts throughout the school year.

**Expectations:** Students will improve upon their sight-reading skills using tonal and rhythm solfege exercises. Students will be instructed in the proper technique of choral singing, including breathing, embouchure, posture, voice placement, pitch and blend. Students will develop an understanding of the structure of vocal music, and be able to critically analyze a composition's texture, tonality, key, mood, as well as its historical significance, if applicable.

**Department:** Music

**Course Title:** Digital Music 7660

**Grade:** 6

**\*Course is not offered every year.**

**Course Description:** Students will learn basic techniques of songwriting.

**Expectations:** With the use of the laptop computer, *Noteflight.com*, and *musictheory.net* websites, each student will write an original musical composition. The students will listen to and evaluate music of other composers, compositions of other students, as well as their own work. All students will arrive at a basic understanding of songwriting.

**Department:** Music

**Course Name:** Digital Music 7770

**Grade:** 7

**Course Description:** Students will learn advanced techniques of composition and songwriting.

**Expectations:** With the use of the laptop computer, *Noteflight.com*, and *musictheory.net* websites, each student will write an original musical composition. The students will listen to and evaluate music of other composers, compositions of other students, as well as their own work. All students will arrive at an intermediate understanding of composition and songwriting. At the end of the nine-week period each student will have available a “published” copy, as well as an mp3 file of their work (if they choose).

**Department:** Music

**Course Name:** Impulse Drumming 8

**Grade:**

8

**\*Course is not offered every year.**

**Description:** The students will learn beginner skills on Drum set. Students will learn to play a variety of drumming styles such as rock, pop, and jazz.

**Expectations:** Students will be able to perform basic drum set skills by the end of the nine-week period. Drum sets are provided in class, however the students must provide their own sticks and ear plugs.

**Department:** Music

**Course Name:** School Of Rock - Guitar 7870

**Grade:**

8

**\*Course is not offered every year.**

**Description:** Students will be able to perform and demonstrate basic guitar skills such as playing notes and chords. There will be an exploration into classical guitar, lead, rhythm, and alternative guitar styles. Students will also discover the differences of reading music versus reading TAB. Also, students have a possibility of working in an “ensemble” atmosphere by combining their efforts and performing together as a group.

**Expectations:** Students will be able to perform basic guitar skills by the end of the nine-week period.