**Solanco High School**
**585 Solanco Road**
**Quarryville, PA 17566**
**717-786-2151**

**District Administration**

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Dr. Robert J. Dangler, Assistant Superintendent
Mr. Chris Keeler, Supervisor of Special Education

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Mr. David Beard, Assistant Principal
Mr. Jonathon Treese, Assistant Principal
Mr. Anthony S. Hall, Director of Athletics

**High School Counselors**

Ms. Grace Cruz
Mrs. Patti McTaggart
Mrs. Kelly Shumaker

**Lead Teachers**

| | |
|---|---|
| Agriculture | Mrs. Stephanie Balmer |
| Art | Mrs. Candace Rakers |
| Business | Mrs. Stacy Shelton |
| English | TBD |
| Family & Consumer Science | Mrs. Erin Byrnes |
| Guidance | Mrs. Kelly Shumaker |
| Health Services | Mrs. Nicole Bender |
| Mathematics | TBD |
| Media Center | Ms. Cyndi Wasilius |
| Music | Mr. Scott Weyman |
| Science | Mr. Brett Miller |
| Social Studies | Ms. Cindy Sangrey |
| Special Education | Mrs. Danielle Booth |
| Technology Education | Mr. Luis Mendez |
| Wellness & Fitness | Mrs. Morgan Miller |
| World Language | Mrs. Jennifer Eisenberger |

## SECTION I – ACADEMIC PLANNING INFORMATION

The Educational Planning Guide has been designed to assist students in developing four year educational plans. Students have the opportunity to select courses comparable to individual abilities, talents, and career goals. The guidance department and the administration reserve the right to change a student's schedule based on past academic performance and standardized testing results and to accommodate the needs of the student body. Situations may occur when a student will be unable to schedule a particular course. This may be due to prerequisites for certain courses, courses scheduled during the same period, staff and space limitations, class size, or teacher recommendation. Scheduling required core courses takes precedence over scheduling an elective.

## ACADEMIC PLANNING PROCEDURE

School counselors will meet with students in class to explain the educational planning process. Teachers will recommend appropriate selections to the students. Students will use an online registration for courses to input his/her academic requests in the system. Parents are encouraged to review student course request in PowerSchool.

## ADVANCED COURSES

Advanced classes are assigned by recommendation of a team of administrators, counselors, Lead Teachers and teachers. The intent of advanced level classes is to challenge students through the course work. Consideration is given to performance in previous courses plus standardized test scores. Courses are designated as "Advanced" on the school transcript.

## ADVANCED PLACEMENT (AP) COURSES

Advanced Placement courses are offered through The College Board. The high school provides courses in English Literature and Composition, Calculus AB, Calculus BC, Statistics, AP Computer Science A, AP Computer Science Principles, Biology, Chemistry, Physics C, American History, European History, and Spanish Language and Culture/AP Spanish Literature and Culture. Students must have a 3.25 cumulative GPA in the subject area and teacher approval to take an Advanced Placement course. Advanced Placement courses are the only courses assigned a weighted grade for class rank purposes. Advanced Placement courses use the following grade point values:

A = 5.0 B = 4.0 C = 3.0 D = 1.0 F = 0.0

All AP Courses are divided into two parts. A grade is given for the first half at the semester due to the need for GPA and rank for seniors. In order to earn the course distinction of "AP" and the weighted grade a student must successfully complete both semesters of the course. If a student does not complete the second half of the course no "AP" distinction or weight will be received. All AP students must take the semester one (1) final exam.

## AP CAPSTONE

AP Capstone is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses – AP Seminar and AP Research – and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses. The two classes are taken separately, with Seminar being a prerequisite for Research. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma ™. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificates.

## GIFTED PROGRAM

Gifted programming at Solanco High School has been built around the aspects of the Autonomous Learner Model (Betts and Kercher) and is designed to give gifted students the skills to take charge of their own learning. Below is how each aspect of the Autonomous Learner Model has been implemented at Solanco High School:

Orientation: Each gifted student at Solanco is placed within a gifted advisory, ensuring opportunities to interact with their intellectual peers. Team building and socialization activities occur during specialized *Solanco Seminars*, weekly advisory lessons, and lunch groups.

Individual Development: Gifted students can enroll in a *Gifted Independent Study*, attend *Secondary Enrichment Experiences (SEE)* at IU13, and develop specialized skills in conjunction with individual teachers and the guidance office.

Enrichment: Through *Solanco Seminars,* advisory lessons, and collaboration with individual teachers and departments, gifted students are provided various forms of enrichment focused on strength areas and career interests.

Seminars: Focused and topical learning occurs through *Solanco Seminars*, *SEE Seminars*, and specialized gifted courses.

In-depth Study: Specially designed instruction, including gifted courses and academic competitions provide opportunities for thorough study and application of skills. Academic competitions include Odyssey of the Mind, Model UN, Mock Trial, PA Governor's STEM competition, and various quiz bowl-style events.

*These are graded courses offered exclusively to gifted students at Solanco High School:

- *Gifted Applications A & B:* Gifted Applications is an elective class centered around high-level competitions that occur at local, regional, and national levels. Preparation, practice, and ultimately competitions serve as units of study. The purpose of this class is to intellectually challenge gifted students while enhancing real world skills through project- and inquiry-based learning. Additionally, secondary skills such as teamwork, time management, and risk-taking are developed. Competitions include Odyssey of the Mind, the Stock Market Game, Model UN, and Mock Trial. Course # 60999 & 60277 – Full Year – 1.0 credits
- *Gifted Explorations A & B*: The Gifted Explorations course is an elective enrichment course designed to allow gifted students to explore fields of study not offered elsewhere during their high school career. Units have included the study and creation of film, sports, 20th century music, and

animation. Assessment is often done through writing, although every unit contains a large creative project. Course # 90740 – Semester 1 (Fall) / 90741 – Semester 2 (Spring) – each is 0.50 credits.

- *Gifted Independent Study (GIS)*: A student enrolling in a GIS is expected to generate a project idea that they will implement with the help of a faculty mentor. Upon completing the project, students will present their results in a formal setting to a grading committee, who will assess and assign a letter grade. Since there are very few deadlines, time management is an important skill that will be developed/improved through the *GIS* process. Past projects have included the creation and performance of original music, architectural design, a political internship, and research papers, among others. Course # 90712 – Full Year – 1.00 credits

- Grading for Gifted Independent Study is the same as any general education independent study. (See page 8 for description.)

## GRADING

Grades are based upon assessments, in class participation and out-of-class work, as determined by the individual classroom teacher. The basic guideline for grades is as follows:

| | | |
|---|---|---|
| A: | Outstanding | 4.0 |
| B: | Above expectations | 3.0 |
| C: | Meets expectations | 2.0 |
| D: | Below expectations | 1.0 |
| F: | Failure to achieve minimal course requirements. No credit earned | 0.0 |
| I: | Incomplete. An "I" is never assigned as a final grade. Incomplete work due to an excused absence must be made up within ten (10) school days after the conclusion of each quarterly marking period. If the work is not made-up, the student will receive an "F" grade. | |

## HIGH SCHOOL GRADUATION

To be a graduate of Solanco High School, a student must successfully complete the graduation requirements approved by the Solanco Board of School Directors.

A student must earn a minimum of 26.0 credits which includes the following:

| Units of Credit | Course Title |
|---|---|
| 4.0 | English |
| 3.0 | Mathematics |
| 3.0 | Science |
| 3.0 | Social Studies |
| 2.0 | Arts and Humanities |
| 1.5 | Fitness |
| .5 | Wellness |
| 8.0 | Electives |
| 1.0 | an additional credit in English, math, science or |
| 26.0 | social studies at the student's choice |

Courses that may be selected to meet the Arts and Humanities (2.0 credits) requirement may be chosen from the electives in these departments:

| | |
|---|---|
| Agriculture | World Language |
| Art | Music |
| Business | Social Studies |
| English | Technology Education |
| Family and Consumer Science | |

**Credit Requirement**

5.00 credits to advance to 10th grade
12.00 credits to advance to 11th grade
19.00 credits to advance to 12th grade

## HONOR ROLL

The high school program of reporting pupil progress recognizes high scholastic achievement through an honor roll system.

Distinguished Honors: Students who receive a 3.5 quarterly grade point average. No grades below a "B".

Honors: Students who receive a 3.0 quarterly grade point average. No grades below a "C".

## MAKE-UP COURSES

Students who fail a course may earn credits by successfully completing an approved Credit Recovery and/or summer school program. The building principal and counselor must approve taking the remedial course. Students are urged to make-up credits by using Solanco summer school or Credit Recovery but they may enroll in any certified summer school program.

The Make-up Course subject will be recorded on the transcript as a pass/fail course, and the earned credit will appear on the transcript.

Students may not use summer school, tutorial programs or other credit recovery to advance their credits toward graduation.

## RETAKING ACADEMIC COURSES

Students may repeat a previously passed course in cases where they feel they have not adequately mastered the subject material. When a subject is repeated, the grades from both courses will appear on the transcript. The second time that a subject is taken, no additional credit will be awarded. The grade will not be calculated as part of the GPA and rank. The course will be repeated only with the approval of the Lead Teacher, school counselor, and the principal.

The world language department recommends that students who have earned a "D" in their world language course should repeat the course the next year for a stronger foundation before advancing to the next level.

## SCHEDULE CHANGES

**The deadline for making schedule changes will be August 20, 2021.** Changes deemed necessary by the faculty/administration, and those required due to summer credit recovery completion, will be made after that date. Any courses dropped after August deadline, will result in the student being assigned an "F" unless otherwise approved by administration.

**NOTE:** Changes to Semester 2 courses must be made prior to the first day of the second semester.

## DUAL ENROLLMENT PROGRAM

Dual Enrollment is an opportunity for high school students to earn college credit while still in high school. In order to be eligible for dual enrollment, a student must have complete 12 high school credits, therefore being considered an 11th grade student. Dual enrollment is available through the fall, spring & summer semesters. Solanco currently partners with Cecil College, HACC, Lancaster Bible College, Millersville University, Thaddeus Stevens Technical College, PA College of Health Sciences, Mansfield West Virginia University.

Student Eligibility: The student will demonstrate readiness for college level work in the interested area of study as determined by the college. The college will determine readiness based on school counselor and/or principal recommendation, available standardized test scores (PSSA, PSAT, SAT), and general academic performance. The college may require placement tests to be completed.

All dual enrollment courses will appear on the students' high school transcript. Students will earn high school credit for college courses they pass. The course will be included in GPA and class rank calculations. Core area courses will be weighted and carry the same weight of an AP course. Elective area courses are not weighted. Earned college credit through this program is accepted at the discretion of the receiving college. A 3 credit college course is equal to 1 Solanco High School credit. Solanco Credit will only be awarded for courses that are 100 level or higher. Solanco High School does not limit the amount of dual enrollment courses a student can take each school year.

# SECTION II – SENIOR OPTIONS

## EARLY COMPLETION PROGRAM

This option is offered to senior class members who would complete all graduation requirements by the end of the first semester of his/her senior year. The following procedures will be followed:

- The student must apply for this option in his/her junior year at the time of course selection.
- A written plan of action must be submitted to the school counselor and the principal.
- By the end of the junior year a meeting will be held to discuss the option and the plan. The meeting will be with the student, parents, school counselor and the principal.
- By November of the senior year proof of the plan must be submitted and approved by the school counselor and the principal.
- The student must demonstrate proficiency as documented by scores on Keystone Exams in Algebra, Literature, and Biology or satisfactorily complete required remediation.
- The student must receive a passing grade in each subject for the first semester of senior year.

- The discipline and attendance record of the student will be reviewed by the administration. If it is determined that the student has not demonstrated good attendance and discipline the request for this option will be denied.

A student who earns the right to exercise this option will be considered a member of the senior class for the second semester but will not attend classes. The student retains the right to participate in senior events like the prom, Baccalaureate and graduation. The student relinquishes his/her opportunity to be the Salutatorian or Valedictorian of the graduating class.

## INDEPENDENT STUDY

Listed below are the criteria for independent study:

- Seniors only.
- Must have advanced through the courses in that subject area.
- **Must submit the request, in writing**, to the counselor with the written approval of the teacher.
- A written **Project Design** must be submitted to the principal. Approval of the design must be received from the teacher and counselor prior to being submitted to the principal.
- All requests and Project Designs must be submitted and approved by the principal.
- All grades for independent study are pass/fail. Those grades will not be used to calculate class rank, GPA, or honor roll.

## INTERNSHIPS

The Career Internship Program is intended to provide Solanco High School juniors and seniors with opportunities to participate in on-site observations of business and professional organizations. This program will provide students with the opportunity to interact with, observe, and assist individuals who are employed in a profession. The intent of the internship is to provide activities that will enable the student to make informed career decisions based on significant knowledge and insights developed during participation.

Criteria:

- Internships are open only to seniors and second-semester juniors.
- The student is responsible for initiating and securing a career internship experience.
- Seniors applying for an internship must demonstrate the following:
  - -a 90% attendance record over three years
  - -a minimum G.P.A. of 2.00 over three years
  - -a good disciplinary record
- Students may not be paid for their internship experience.
- Students will spend a minimum of five hours each week participating in the internship experience.
- Students will schedule the career internship option during the course selection process. Specific details will be arranged with the counselor and principal.
- A pass/fail grade will be awarded for the Career Internship Experience and one (1) credit will be noted on the transcript. Class rank and G.P.A. will not be affected by the internship.
- Internship will be for one (1) semester.
- Agriculture internships will be approved through the agriculture department. Students must be enrolled in the high school agriculture curriculum.

- Students who fail to maintain an acceptable level of performance on the internship based upon attendance, grades and the appraisal by the internship supervisor will receive a "F" grade and will immediately be returned to a full time class schedule. The student must pass all courses in order to graduate.
- Students may not have an immediate family member as a direct supervisor.

## SENIOR WORK PROGRAM

Seniors are offered the opportunity for a partial day Work Study Program. The requirements for this program are:

- The senior must be on track to graduate with all credit requirements being satisfied at the end of the second semester.
- Achieved a 90% attendance rate for the previous three years and maintains this attendance rate while in the program.
- Has documented that he/she has employment.
- Any action resulting in out-of-school suspension may be reason for removal from the program.
- Will satisfy requirements in reading and math as required by the Pennsylvania Department of Education.

Schedule of the program:

- The participants will attend the high school for a partial day and then be dismissed to go to the place of employment.
- In some cases a student could attend classes in the afternoon and work in the morning.

Responsibility for the program:

- Students are responsible for acquiring employment.
- Students must complete necessary forms including signatures of parent and employer.
- If the student loses the employment due to his/her fault then the student will return immediately to a full schedule at the high school. The student must successfully pass all subjects in order to graduate.
- The student is responsible for maintaining passing grades in all classes. Students with any failing grades may be pulled from the program in order to remain in school to focus upon work needed to achieve and maintain passing grades.

## PIAA ELIGIBILITY

According to PIAA regulations, student-athletes must be passing a minimum of 4 credits in order to be eligible for competition. This regulation could affect seniors who are scheduling internships and work-study experiences. The Solanco high school procedure requiring students to have passing grades in all but one class to be eligible are still in effect. The PIAA regulation simply sets a minimum number of classes for a student to be taking. A student taking 4 credits must be passing all classes. A student taking 5+ credits must be passing all but one class.

## SECTION III – NCAA ELIGIBILITY CENTER FOR ACADEMIC ELIGIBILITY NCAA.org

**Division I Academic Eligibility Requirements**

If you enroll in a Division I college and want to participate in athletics or receive an athletic scholarship, you must meet the following academic standards:

- Graduate from high school;
- Complete the 16 core courses listed below;
- Present a minimum required grade-point average in your core courses; and
- Achieve a combined SAT or ACT sum score that matches your core-course grade-point average in the grade point average and test score index

**16 Required Core Courses:**

- Four years of English;
- Three years of mathematics (algebra I or higher level);
- Two years of natural or physical science (including one year of lab science if offered by your high school);
- One extra year of English, mathematics or natural/physical science;
- Two years of social science; and
- Four years of extra courses (from any category above, or foreign language, non-doctrinal religion or philosophy)

-A "partial qualifier" is eligible to practice with a team at its home facility and receive an athletic scholarship during his or her first year at a Division I school and then has three seasons of competition remaining.

-A partial qualifier may earn a fourth year of competition, provided that at the beginning of the fifth academic year following the student-athlete's initial, full-time collegiate enrollment, the student-athlete has received a baccalaureate degree.

-In order to be considered a "partial qualifier," you have not met the requirements for a qualifier but you are required to:

- Graduate from high school;
- Present a grade-point average (based on a maximum of 4.00) and a combined score on the SAT verbal and math sections or a sum score on the ACT.

**Division II**

If you enroll in a Division II college and want to participate in athletics or receive an athletics scholarship, you must meet the following academic standards:

- Graduate from high school;
- Complete the 14 core courses listed below;
- Present a 2.000 grade-point average in your core courses; and
- Achieve a combined SAT score of 820 or a sum score of 68 on the ACT.

**16 Required Core Courses:**

- Three years of English;
- Two years of mathematics (algebra I or higher level);

- Two years of natural or physical science (including one year of lab science if offered by your high school);
- Three years of English, mathematics or natural/physical science;
- Two years of social science; and
- Four years of extra courses (from any category above, or foreign language, non-doctrinal religion or philosophy)

-A "partial qualifier" is eligible to practice with a team at its home facility and receive an athletic scholarship during his or her first year at a Division II school.
-In order to be considered a "partial qualifier" you have not meet the requirements for a qualifier, but you are required to graduate from high school and meeting one of the following requirements:

- Specified minimum SAT or ACT score; or
- Successful completion of a required core curriculum consisting of a minimum number of courses and a specified minimum grade-point average in the core curriculum.

-Details of these general requirements are contained in the following sections.

**Definition of a Core Course**
To meet the core-course requirement, a "core course" is defined as a recognized academic course (as opposed to a vocational or personal-service course) that offers fundamental instruction in a specific area of study. Courses taught below your high school's regular academic instructional level (e.g. remedial, special education or compensatory) can't be considered core courses regardless of the content of the courses.

**Additional information**
Several additional points about the NCAA's initial eligibility requirements should be emphasized:

- These requirements currently do not apply to Division III colleges, where eligibility for financial aid, practice and competition is governed by institutional conference and other NCAA regulations.
- This rule sets a minimum standard only for athletic eligibility. It's not a guide to your qualifications for admission to college. Under NCAA rules, your admission is governed by the entrance requirements of each member school.

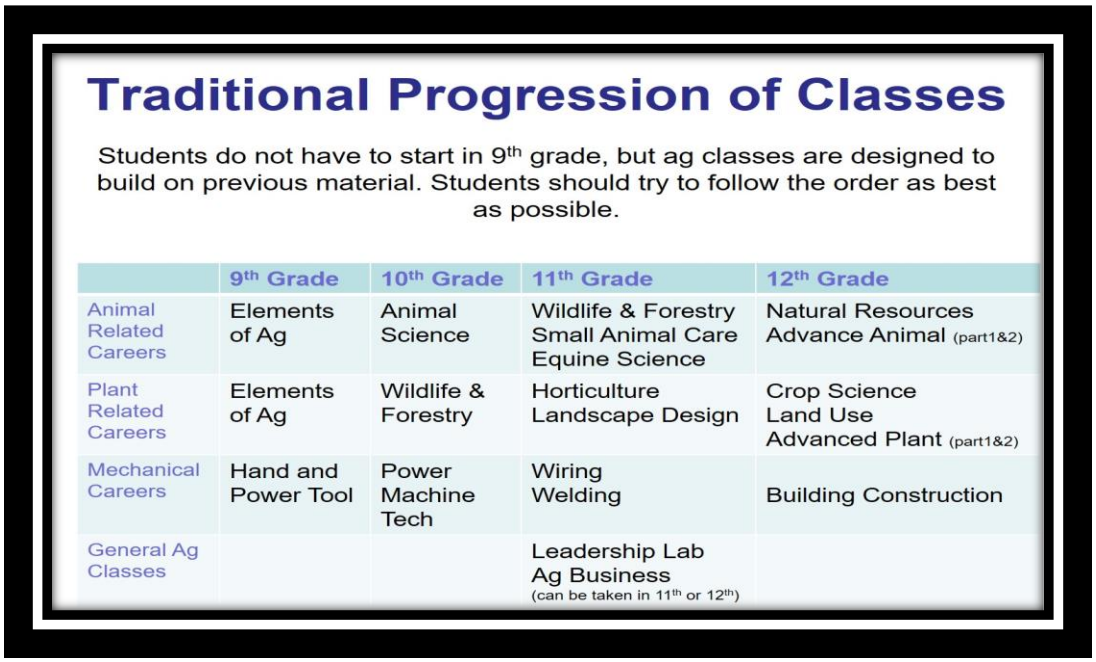
For registration information, visit the NCAA Eligibility Center website at https://web1.ncaa.org/eligibilitycenter/common/ or contact NCAA Eligibility Center at the address and phone listed below:

NCAA Eligibility Center
P.O. Box 7136
Indianapolis, IN 46207-7136

(877) 262-1492
Call Center Hours: 8a.m. - 6p.m. EST Monday-Friday

## SECTION IV – COURSE DESCRIPTIONS

### Agricultural Sciences & Technology
### Career Pathways: Engineering, Science and Technology



**Traditional Progression of Classes**

Students do not have to start in 9th grade, but ag classes are designed to build on previous material. Students should try to follow the order as best as possible.

| | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
|---|---|---|---|---|
| Animal Related Careers | Elements of Ag | Animal Science | Wildlife & Forestry<br>Small Animal Care<br>Equine Science | Natural Resources<br>Advance Animal (part1&2) |
| Plant Related Careers | Elements of Ag | Wildlife & Forestry | Horticulture<br>Landscape Design | Crop Science<br>Land Use<br>Advanced Plant (part1&2) |
| Mechanical Careers | Hand and Power Tool | Power Machine Tech | Wiring<br>Welding | Building Construction |
| General Ag Classes | | | Leadership Lab<br>Ag Business<br>(can be taken in 11th or 12th) | |

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0001 | Hand/Power Tool Technology | 1.00 | 9-10 |

Students will experience the proper use and maintenance of hand and power wood and metal working tools. Hands-on instruction includes the construction of various useful projects. Students will complete a boot jack, tool boxes, foot stool, feed scoop, and additional other projects. This course will include technical as well as practical instruction. Students are required to participate in an online OSHA Safety Certification as the major grade for the 3rd marking period of the year. This course is a prerequisite to take Building Construction Technology the student's junior or senior year.

| | | | |
|---|---|---|---|
| 0002 | Elements of Agri-Science | 1.00 | 9-10 |

This course is designed to give students a basic overview of agri-science. Some areas covered include introductions to plant and animal science, soil science, wildlife, forestry, horticulture, food science, international agriculture and technology. Hands-on activities and FFA contests will accompany most units. Career planning and SAE project development will be integrated into the course. It is **strongly recommended** that all first year FFA members take this course in order to be successful on their SAE.

| | | | |
|---|---|---|---|
| 0003 | Power/Machine Technology | 1.00 | 10 |

Students will be trained in the service and repair of 4 cycle engines which will include disassembly, inspection, overhaul, and reassembly. Additionally, tune-up and minor adjustments of multi-cylinder

engines and systems will be covered. This course will balance classroom instruction with practical application of theories and concepts in the laboratory. Students will be expected to provide their own used engine (preferably Briggs and Stratton) for this course. Engine criteria can be obtained in advance by contacting Mr. Kerstetter (luke_kerstetter@solancosd.org) at any time after course selection process or over the summer. Students are financially responsible for the purchase of any replacement parts required to return their engine to service.

0004 Animal Science 1.00 10

This course includes the selection, nutrition, reproduction, management practices, housing, marketing, and environmental concerns of dairy, beef, swine, sheep, poultry, and horses. Project development will be integrated into the course. Some of the hands-on activities will include handling animals and food labs. Also, meat judging and dairy food judging will be included.

0005 Small Animal Care and Management 0.50 10-12

This course will include the care and management of small animals. The study of pets, laboratory animals, and aquatic animals will be included. Areas of study will include feeding and nutrition, reproduction, selection, and animal health. Labs will complement the course. The handling of live animals is a graded requirement for this class.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|

0008 Equine Science (Horsemanship) 0.50 10-12

This course will include breeds, management, and care of pleasure horses. Additional areas will include functional anatomy, digestion and nutrition, tack use and identification, techniques of horsemanship and methods used in selection and evaluation.

0017 Natural Resources 0.50 10-12

This course will include the study of management of our renewable natural resources. Instruction will include water and air quality, soil conservation, land surveying, and land use planning. Some hands-on activities will include water and air quality testing, site surveying, and the development of a land use plan. This class is designed as a follow-up to *Wildlife & Forestry*, and assumes that students have a background in animal and plant identification.

0019 Horticulture 0.50 10-12

This course will include the study of ornamentals, small fruit and vegetable production, greenhouse crops, and basic floral design. Some activities will include care of the rose garden, development of additional outdoor demonstration areas, and live and dried floral arrangements.

0020 Wildlife and Forestry Management 0.50 10-12

This course will include the study of our renewable wildlife and forestry resources. Instruction will include forestry and woodlot management, fish and wildlife management, and recreational parks management.

Some hands-on activities will include wildlife habitat improvement, construction of wildlife structures, wildlife population studies, timber stand improvement, and recreational parks management.

| | | | |
|---|---|---|---|
| 0026 | Crop Science | 0.50 | 10-12 |

This course will include the care and management of agricultural crops. Selection, cultural techniques, environmental concerns, processing, storage, and marketing of agricultural crops as well as integrated pest management will be included. Some hands-on activities will include crop yield checks, germination testing, fertilization trials, and acreage measurement. (Formerly "Plant Science").

| | | | |
|---|---|---|---|
| 0027 | Land Use & Management | 0.50 | 10-12 |

Students will learn about the importance, development, and properties of soils. Additional topics will include land use and management, soil fertility, fertilizers, and soil conservation. Labs and hands-on instruction will be incorporated into the course. (Formerly "Soil Science").

| | | | |
|---|---|---|---|
| 0028 | Agri-Business Operations | 0.50 | 10-12 |

Basic principles of operating an agribusiness will be taught. Students will acquire marketing, budgeting, investment analysis, cash flow and decision making techniques. Some hands-on activities will include development and marketing of a product, interview, resume writing skills, and international agricultural activities.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0006 | Basic Arc & Gas Welding | 0.50 | 11-12 |

Students will learn basic skills in electric arc, oxyacetylene, and MIG methods of welding and cutting. Students will construct a useful project using the skills taught as their final exam grade. The district will provide all other safety attire and equipment. There is no final exam exemption process available for this course. This course will include technical as well as practical instruction.

| | | | |
|---|---|---|---|
| 0007 | Building Construction | 0.50 | 11-12 |

Students will be taught principles of design, layout, and construction of various types of buildings. Hands-on instruction will cover all aspects of construction from foundation to roof including building layout, concrete and masonry foundations, framing techniques, and roofing methods and materials. This course will include technical as well as practical instruction. The first marking period of the semester involves a construction math unit that requires a basic 4-function calculator. The second marking period will be devoted to the construction of small-scale required projects or perhaps a back yard shed for a student's family or for a community member. The cost of materials would be the responsibility of the party receiving the completed shed. Students MUST have taken and successfully passed any of the following courses to be eligible for this class: Hand and Power Tool Technology, Manufacturing systems I and II, Wood Systems, or Advanced Wood Systems.

| | | | |
|---|---|---|---|
| 0009 | Advanced Animal Science I – Fall | 0.50 | 11-12 |

This course will include the study of veterinary science and its application of basic animal health principles and practices. Advanced Animal Science I will include the study of the place of animals and animal science in the lives of humans and the biological science of animal science. Labs will complement areas of instruction. Note: Students only taking Advanced Animal Science I will not be able to earn college credit for the course. To qualify for earning college credits, students must take both advanced courses and successfully pass a comprehensive exam at the end of the year.

0010 Advanced Animal Science II – Spring 0.50 11-12

This course complements Advanced Animal Science I. Specific areas of study will include the animal industries and animals in society. Specific study of large and small animals will be included. Selected veterinary skill will be addressed. Labs will compliment areas of instruction. Note: This course is intended for students interested in either 2 or 4 years of agricultural study after high school. This course will meet the graduation project requirement Students only taking Advanced Animal Science II will not be able to earn college credit for the course. To qualify for earning college credit, students must take both advanced courses and successfully pass a comprehensive exam at the end of the year.

0011 Advanced Plant Science I – Fall 0.50 11-12

This course will include the applied and advanced study of crops, plant growth, hybridization and plant breeding. Labs will complement areas of instruction. Note: This course is intended for students interested in either 2 or 4 years of agricultural study after high school. Students only taking Advanced Plant Science I will not be able to earn college credit for the course. To qualify for earning college credit, students must take both advanced courses and successfully pass a comprehensive exam at the end of the year.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|

0012 Advanced Plant Science II – Spring 0.50 11-12

This course will include the applied and advanced study of soils, entomology, plant pathology, tissue culture, and plant nutrients. Labs will complement areas of instruction. Note: This course is intended for students interested in either 2 or 4 years of agricultural study after high school. Students only taking Advanced Plant Science II will not be able to earn college credit for the course. To qualify for earning college credit, students must take both advanced courses and successfully pass a comprehensive exam at the end of the year.

0018 Landscape Design 0.50 11-12

This course will include the design, plant selection, installation, maintenance, and use of plants in the landscape, lawn and turf grass establishment and maintenance will also be included. Some activities will include design of an outdoor landscape, maintenance of existing landscapes, plus selecting and installation of selected plants in a landscape.

0023 Basic Wiring & Electricity 0.50 11-12

Students will learn and demonstrate skills in planning and installing residential electrical systems, including selection and installation of electric motors and controls. This course will include technical as well as practical instruction.

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|---|---|---|---|
| 0029 | Leadership Lab | 0.50 | 11-12 |

Many of the activities/topics included in all the Agricultural Education courses will be expanded upon in this course through Career Development Events/practicum participation. This course is designed to teach professional leadership skills including time management, budgeting, business letters & communication, and handling conflict. Enrollment is recommended for all FFA officers and members interested in having a leadership role in the FFA, as well as leaders from other school organizations.

| | | | |
|---|---|---|---|
| 0022 | Supervised Agricultural Experience | 0.50 | 9-12 |

This course is for the purpose of starting, maintaining, and completing an approved Supervised Agricultural Experience project(s). **This course will meet by appointment throughout the year.** FFA members will automatically be enrolled in this course as per the National FFA Constitution and By-Laws.

## Art
## Career Pathway: Visual Arts Design and Communication

Full Year Courses Grades 9-10
Design I 0049 1.00 credit
Design II 0079 1.00 credit *(prerequisite: Design I)*
Drawing 0038 1.00 credit *(prerequisite: Design I)*
Photography I 0033 1.00 credit
Photography II 0080 1.00 credit *(prerequisite: Photography I)*
Ceramics I 0031 1.00 credit
Ceramics II 0035 1.00 credit *(prerequisite: Ceramics I)*

Semester Courses Grades 11-12
Design I 0077 0.50 credit
Design II 0078 0.50 credit *(prerequisite: Design I)*
Drawing 0092 0.50 credit *(prerequisite: Design I)*
Painting 0024 0.50 credit *(prerequisite: Drawing)*
Photography Level I 0081 0.50 credit
Photography Level II 0082 0.50 credit *(prerequisite: Photography Level I)*
Ceramics I 0042 0.50 credit
Ceramics II 0043 0.50 credit *(prerequisite: Ceramics I)*
Ceramics III 0083 0.50 credit *(prerequisite: Ceramics II)*
Ceramics IV 0084 0.50 credit *(prerequisite: Ceramics III, approval of instructor)*
Sculpture 0048 0.50 credit *(prerequisite: Ceramics I)*
Portfolio I 0094 0.50 credit* *(prerequisites: see all prerequisites listed in description below)*
Portfolio II 0093 0.50 credit* *(prerequisites: see all prerequisites listed in description below)*

*Note: Advanced Portfolio I and Portfolio II candidates *(see descriptions below)* are advised to schedule courses in the following sequence:

Grade 9:
Design I 0049 1.00 credit*
Drawing 0038 1.00 credit** (*Prerequisite: recommendation of Grade 8 Art teacher)*

Grade 9-10:
Ceramics I 0031 1.00 credit**
Photography I 0033 1.00 credit*

Grade 10
Design I 0049 1.00 credit* *(if not completed in Grade 9)*
Drawing 0038 1.00 credit** *(if not completed in Grade 9)*
Photography I 0033 1.00 credit* *(if not completed in Grade 9)*
Design II 0079 1.00 credit* *(prerequisite: Design I)*
Ceramics II 0035 1.00 credit* *(prerequisite: Ceramics I)*

Grade 11
Painting 0039 0.50 credit* *(prerequisite: Drawing)*
Sculpture 0048 0.50 credit** *(prerequisite: Ceramics I)*
Portfolio I 0094 .05 credit** *(prerequisites: see all prerequisites listed in description below)*

Grade 12
Portfolio II 0093 .05 credit** *(prerequisites: see all prerequisites listed in description below)*

***Required Course *Recommended Course*

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**Art**

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0049 | Design I | 1.00 | 9-10 |

Design I is an introductory level full year course for beginning art students to explore the fundamentals of design in two-dimensional and three-dimensional media. The course teaches the elements of art and principles of design as used in historical and contemporary art works. Personal expression is encouraged as students use a variety of two-dimensional and three-dimensional visual arts media and processes. Sketchbooks are a significant part of the course for the development of basic drawing skills and the planning of visual art assignments. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skills necessary for critical evaluation.

| | | | |
|---|---|---|---|
| 0079 | Design II | 1.00 | 10 |

Design II is a full year course that further develops student knowledge and skills in two-dimensional and three-dimensional media. The course extends the study of the elements of art and principles of design as used in historical and contemporary art works. Student work incorporates more advanced use of a variety of two-dimensional and three-dimensional visual arts media and processes. Sketchbooks will continue to be essential for the increased development of drawing skills and artistic ideas. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skills necessary for critical evaluation. **Prerequisite: Design I**

| | | | |
|---|---|---|---|
| 0038 | Drawing | 1.00 | 9-10 |

Drawing is a full-year course that will sharpen student visual perception and the ability to draw from direct observation. Investigation of drawing techniques, media, and aesthetics structured upon a solid

understanding of the elements and principles of design will guide direct observational drawing that incorporates various genres including: still-life, portrait and figure studies, landscape, and architectural interiors/exteriors. Line, shape, value, color, texture, space, perspective, and compositional unity in terms of balance, repetition, variety, emphasis, contrast, and proportion will be explored through direct observation utilizing a variety of traditional and contemporary media. Students will employ accuracy and expression as they progress to an increasingly sophisticated level of fluency in drawing and thematic development. Traditional and contemporary styles and trends in drawing will be explored through visual presentation and research to provide diverse visual references to inform student work. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation. **Prerequisite: Design I grade 9 students need the recommendation of the grade 8 art teacher.**

| | | | |
|---|---|---|---|
| 0033 | Photography I | 1.00 | 9-10 |

Photography I is a full year introductory course in black and white film photography. Students will explore basic photographic skills including camera controls, negative exposure and development, exposing and developing contact prints and enlargements, and presentation. Students will investigate the elements of line, shape, texture, light, motion, and perspective in terms of their relationship to structure, balance, and dynamics—the essential components of excellent composition. Students are presented with an overview of the history of photography through slide presentations to provide numerous and diverse visual references to inform the development of student work. Frequent class critiques offer students an opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skills necessary for critical evaluation of photographic work. **Students must provide their own 35mm manual SLR camera.**

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0080 | Photography II | 1.00 | 10 |

Photography II is a full year course that extends the investigation of black-and-white film photography introduced in Photography I. Students will explore and refine photographic skills including camera controls, negative exposure and development, exposing and developing contact prints and enlargements, and presentation. Students will engage in creative investigation of alternative techniques, processes, and materials. Students will complement studio practice with an increased art historical understanding of the photography medium through slide presentations to provide numerous and diverse visual references to inform the continued development of student work. Frequent class critiques offer students an opportunity to participate in a dialogue that will help them to refine the vocabulary and visualization skills necessary for critical evaluation of photographic work**. Students must provide their own 35mm manual SLR camera. Prerequisite: Photography I**

| | | | |
|---|---|---|---|
| 0031 | Ceramics I | 1.00 | 9-10 |

Ceramics I is a full year course that provides an introduction to ceramics materials, techniques, and aesthetics. Students will produce both sculptural and functional objects. Fundamental explorations will include: clay body components; basic hand-building techniques including pinch, coil, slab, and mold; wheel-throwing techniques; surface decoration, including texture, color, basic glaze composition and methods of application; and the firing process including common kiln types and stages of firing. The design elements and principles of space, proportion, placement, size relationships, weight balance, and volume are stressed to encourage an understanding of three-dimensional form. Traditional and contemporary styles and trends in ceramics will be explored through visual presentation and research to

provide diverse visual references to inform student work. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation.

| | | | |
|---|---|---|---|
| 0035 | Ceramics II | 1.00 | 10 |

Ceramics II is a full year course that extends the investigation of ceramic materials, techniques and aesthetics introduced in Ceramics I. Students will explore more in-depth utilization of the forming processes of hand-building and wheel-throwing to produce sculptural and functional objects that express the visual, tactile, and intellectual possibilities available through the medium of clay. Students will be challenged to explore the relationship between material and the effective communication of ideas. Experimentation with alternative clays and other media will be used to extend and refine communication. Students will research specific periods in ceramic history as well as the work of innovative contemporary ceramic artists. **Prerequisite: Ceramics I**

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0077 | Design I | 0.50 | 11-12 |

Design I is an introductory level semester course for beginning art students to explore the fundamentals of design in two-dimensional and three-dimensional media. The course teaches the elements of art and principles of design as used in historical and contemporary art works. Personal expression is encouraged as students use a variety of two-dimensional and three-dimensional visual arts media and processes. Sketchbooks are a significant part of the course for the development of basic drawing skills and the planning of visual art assignments. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skills necessary for critical evaluation.

| | | | |
|---|---|---|---|
| 0078 | Design II | 0.50 | 11-12 |

Design II is a semester course that further develops student knowledge and skills in two-dimensional and three-dimensional media. The course extends the study of the elements of art and principles of design as used in historical and contemporary art works. Student work incorporates more advanced use of a variety of two-dimensional and three-dimensional visual arts media and processes. Sketchbooks will continue to be essential for the increased development of drawing skills and artistic ideas. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skills necessary for critical evaluation. **Prerequisite: Design I**

| | | | |
|---|---|---|---|
| 0092 | Drawing | 0.50 | 11-12 |

Drawing is a semester course that will sharpen student visual perception and the ability to draw from direct observation. Investigation of drawing techniques, media, and aesthetics structured upon a solid understanding of the elements and principles of design will guide direct observational drawing that incorporates various genres including still-life, portrait and figure studies, landscape, and architectural interiors/exteriors. Line, shape, value, color, texture, space, perspective, and compositional unity in terms of balance, repetition, variety, emphasis, contrast, and proportion will be explored through direct observation utilizing a variety of traditional and contemporary media. Students will employ accuracy and expression as they progress to an increasingly sophisticated level of fluency in drawing and thematic development. Traditional and contemporary styles and trends in drawing will be explored through visual presentation and research to provide diverse visual references to inform student work. Frequent class

critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation. **Prerequisite: Design I**

| | | | |
|---|---|---|---|
| 0024 | Painting | 0.50 | 11-12 |

Painting is a semester course that will sharpen student visual perception and the ability to paint from direct observation. Students will develop an increasingly sophisticated understanding of all aspects of color theory including color foundations of value, hue, chroma, color temperature, color mixing and communication of meaning. Investigation of painting techniques, media, and aesthetics will be structured upon a strong foundation of established observational drawing experience. The elements and principles of design will guide direct observational painting that incorporates various genres including: still-life, portrait and figure studies, landscape, and architectural interiors/exteriors. Students will employ accuracy and expression as they progress to an increasingly sophisticated level of fluency in painting and thematic development. Traditional and contemporary styles and trends in painting will be explored through visual presentation and research to provide diverse visual references to inform student work. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation. **Prerequisites: Design I, Drawing**

| | | | |
|---|---|---|---|
| 0081 | Photography – Level I | 0.50 | 11-12 |

Photography-Level I is a semester course that offers students a brief introduction to black-and-white film photography. Students will explore basic photographic skills including camera controls, negative exposure and development, exposing and developing contact prints and enlargements, and presentation. Students will investigate the elements of line, shape, texture, light, motion, and perspective in terms of their relationship to structure, balance, and dynamics—the essential components of excellent composition. Students are presented with an overview of the history of photography through slide presentations to provide numerous and diverse visual references to inform the development of student work. Frequent class critiques offer students an opportunity to participate in a dialogue that will help them to develop the vocabulary and visualization skill necessary for critical evaluation of photographic work. **Students must provide their own 35mm manual SLR camera.**

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0082 | Photography – Level II | 0.50 | 11-12 |

Photography-Level II is a semester course that extends the investigation of black-and-white film photography introduced in Photography-Level I 0081. Students will explore and refine photographic skills including camera controls, negative exposure and development, exposing and developing contact prints and enlargement, and presentation. Students will engage in creative investigation of alternative techniques, processes, and materials. Students will complement studio practice with an increased historical understanding of the photography medium through slide presentations to provide numerous and diverse visual references to inform the continued development of student work. Frequent class critiques offer students an opportunity to participate in a dialogue that will help them to refine the vocabulary and visualization skill necessary for critical evaluation of photographic work. **Students must provide their own 35mm manual SLR camera. Prerequisite: Photography-Level I 0081**

| | | | |
|---|---|---|---|
| 0042 | Ceramics I | 0.50 | 11-12 |

Ceramics I is a semester course that is an introduction to ceramics materials, techniques, and aesthetics. Students will produce both sculptural and functional objects. Fundamental explorations will include: clay body components; basic hand-building techniques of pinch, coil, slab, and mold; wheel-throwing techniques; surface decoration, including texture, color, basic glaze composition and methods of application; and the firing process including common kiln types and stages of firing. The design elements and principles of space, proportion, placement, size relationships, weight, balance, and volume are stressed to encourage an understanding of three-dimensional form. Traditional and contemporary styles and trends in ceramics will be explored through visual presentation and research to provide diverse visual references to inform student work. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0043 | Ceramics II | 0.50 | 11-12 |

Ceramics II is a semester course that extends the investigation of ceramic materials, techniques and aesthetics introduced in Ceramics I. Students will explore more in-depth utilization of the forming processes of hand-building and wheel-throwing to produce sculptural and functional objects that express the visual, tactile and intellectual possibilities available through the medium of clay. Students will be challenged to explore the relationship between material and the effective communication of ideas. Experimentation with alternative clays and other media will be used to extend and refine communication. Students will research specific periods in ceramic history as well as the work of innovative ceramic artists. **Prerequisite: Ceramics I**

| | | | |
|---|---|---|---|
| 0083 | Ceramics III | 0.50 | 11-12 |

Ceramics III is a semester course that offers students an extension of the investigation of ceramic materials, techniques, and aesthetics explored in Ceramics II. Students will engage in more in-depth utilization of the forming processes of hand-building and wheel-throwing to produce sculptural and functional objects that express the visual, tactile, and intellectual possibilities available through the medium of clay. Students will be increasingly challenged to explore the relationship between materials and the effective communication of ideas. Advanced experimentation with alternative clays, combined forming methods, increasingly advanced surface decoration, and additional firing techniques continue to offer diverse options to draw upon to extend and refine communication. Students will engage in in-depth research of specific periods in ceramic history as well as the work of innovative ceramic artists through various resources including museum and gallery visits. Class critiques offer students an opportunity to participate in a dialogue that will help them to refine the vocabulary and visualization skills necessary for critical evaluation of ceramic work. **Prerequisite: Ceramics II**

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0084 | Ceramics IV | 0.50 | 11-12 |

Ceramics IV is a semester course that offers students an intensive extension of the investigation of ceramic materials, techniques, and aesthetics explored in Ceramics III. Students will engage in advanced, concentrated study of Ceramics designed to develop the student's individual style, technique, and personal idiom of expression toward the production of a coherent body of work for portfolio review and exhibition. Students will engage in in-depth research of specific periods in ceramic history as well

as the work of innovative ceramic artists through various resources including museum and gallery visits. Ongoing individual critiques offer students an opportunity to participate in a dialogue that will help them to refine the vocabulary and visualization skills necessary for critical evaluation of ceramic work. Successful completion of this course will require additional studio time outside of class. **Prerequisite: Ceramics III and permission of instructor**

0048 Sculpture 0.50 11-12

Sculpture is a semester course that will increase student understanding of three-dimensional form and space. The design elements and principles of space, proportion, placement, size-relationships, weight, balance, and volume will guide initial classical investigation of the human form through direct observation and manipulative processes with clay. Students may additionally explore additive, subtractive, and substitution processes utilizing a variety of media. Students will employ accuracy and expression as they progress to an increasingly sophisticated level of fluency in sculpture and thematic development. Traditional and contemporary styles and trends in sculpture will be explored through visual presentation and research to provide diverse visual references to inform student work. Frequent class critiques offer students the opportunity to participate in a dialogue that will help them to develop the vocabulary and perceptual skills necessary for in-depth critical evaluation. **Prerequisite: Ceramics I**

0094 Portfolio I 0.05 11-12

Portfolio I is designed to support an intensive investigation of 2D and 3D applications that expands upon the structured explorations established in all required foundational courses. Advanced students will begin in-depth development of a portfolio of work for admissions review at post-secondary competitive professional art schools and university art programs. Student portfolios will reflect breadth, depth, excellence, and the emergence of a personal voice through an emphasis on concept development that allows each student to research and explore enduring ideas, individual interests, and experimental methods. Traditional and contemporary artists/artworks serve to inform student development through discussion, presentation, and interaction at art museums and galleries. Individual and class critiques will be ongoing to promote increased sophistication in the communication of ideas. Portfolio I students will need to devote additional time outside of class to the development of their work. **Prerequisites: Recommendation of instructor, approval of art department lead teacher, recommended successful completion of: Drawing, Ceramics I, Painting, and Sculpture. Advanced sophomore candidates need approval of Art Department Lead Teacher.**

0093 Portfolio II 0.05 11-12

Portfolio II is designed for advanced visual art students to support a continued intensive investigation of 2D and 3D applications that expands upon the structured explorations established in all required foundational courses and in Portfolio I. Advanced students will continue in-depth development of a portfolio of work for admissions review at post-secondary competitive professional art schools and university art programs. Student portfolios will reflect breadth, depth, excellence, and the emergence of a personal voice through an emphasis on concept development that allows each student to research and explore enduring ideas, individual interests, and experimental methods. Traditional and contemporary artists/artworks serve to inform student development through discussion, presentation, and interaction at art museums and galleries. Individual and class critiques will be ongoing to promote increased sophistication in the communication of ideas. Portfolio II culminates in a cohesive body of work that reflects a concentration of concept development and individual voice. Students will present a senior portfolio exhibition and artist's statement. Requirements for Portfolio II will be rigorous; students will

need to devote significant time outside of class to the development of their work. **Prerequisites: recommendation of instructor, approval of art department lead teacher, Portfolio I**

## Business

### Career Pathways: Arts, Business and Social Services

**Computer Careers**

Computer Science Discoveries
Computer Software Applications
Graphic Design
Advanced Graphic Design
Graphic Animation
App Development & Advanced Graphic Animations
AP Computer Science Principles

**Secretarial/Clerical Careers**

Computer Software Applications
Accounting
Personal Finance
Graphic Design
Advanced Graphic Design

**Business Careers**

**(Accounting, Marketing, Business Administration, Finance, International Business)**

Computer Software Applications
Introduction to Business
Personal Finance
Marketing
Entrepreneurship
Accounting
Advanced Accounting
Graphic Design

## Business

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0050 | Introduction to Business | 1.00 | 9-10 |

The course provides an overview of the various business disciplines including economics, marketing entrepreneurship, accounting, international business, business ethics and personal finance. Recommended for students interested in learning more about business careers.

| | | | |
|---|---|---|---|
| 0045 | Graphic Design | 0.50 | 9-12 |

Students will use graphic design and page layout software to create professional marketing publications. Marketing concepts with a focus on advertising and promotion will be integrated into the publications. This level will focus on how to use the software, while working on smaller publications.

| | | | |
|---|---|---|---|
| 91187 | Advanced Graphic Design | 0.50 | 9-12 |

Students will use the graphic design and page layout software and the advertising and promotion concepts from Graphic Design to create large publications. The course will be project based. Prerequisite: Graphic Design

| | | | |
|---|---|---|---|
| 0053 | Accounting | 1.0 | 10-12 |

Accounting is the backbone of business. This course will introduce students to the basic accounting cycle. Students will learn double-entry accounting, preparation of financial statements for sole proprietorships and partnerships. Additionally, students will manage ledgers and prepare payroll records. Students will apply the skills acquired by completing a business simulation that requires students to complete the accounting cycle for a business for one monthly. Students will perform the accounting for a partnership and be introduced to special journals and ledgers. Prerequisite for Advanced Accounting.

| | | | |
|---|---|---|---|
| 91188 | Advanced Accounting | 1.0 | 10-12 |

This is an excellent course for students planning to pursue a business career or major in business or accounting at the post-secondary level. Students will learn the accounting functions for a departmental merchandising business. Students will also complete the accounting for plant assets and analyze the end of the fiscal period activity and make necessary adjustments to the general ledger. Students will develop an understanding for a corporation, including stocks and bond issues. Students will prepare financial statements for a corporation with the aid of computers. Students will be introduced to management and cost accounting. Finally, students will complete a comprehensive accounting simulation that will reinforce all accounting concepts. Prerequisite: Accounting

| | | | |
|---|---|---|---|
| 0059 | Personal Finance | 0.50 | 11-12 |

In Personal Finance, the student will learn how to manage a checking account, use credit, file income tax returns, develop budgets, invest savings and purchase insurance. Consumer protection issues will be explored and spreadsheet software will be used to create budgets. This course is not open to students who have completed Introduction to Business.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0063 | Marketing in Today's Society | 0.50 | 11-12 |

Students will explore how marketing is used all around us. Through examination of everyday products, sports, and services, students will gain an understanding for the principles of marketing. Students will be provided with the knowledge needed to plan and formulate their own fictitious business. This course is ideal for students who want to operate their own business or who plan to pursue a career in business. A prerequisite for Entrepreneurship.

| | | | |
|---|---|---|---|
| 0065 | Entrepreneurship | 0.50 | 11-12 |

Students learn about starting a business and what characteristics are required of successful entrepreneurs. Planning, marketing and running a small business is discussed. Students will form and run an actual business that will reinforce the concept learned. The course is highly recommended for students who are considering a business career and hope to own their own business. Prerequisite: Principles of Marketing.

| | | | |
|---|---|---|---|
| 0075 | Graphic Animation | 0.50 | 11-12 |

Students will learn how to make objects move and tell a story through digital animation and the use of graphic animation software. Special effects and coding will be added to enhance the animations and create interactive options for the viewer. This is a great course for students interested in computer science or game development. Prerequisite for App Development & Advanced Graphic Animation

| | | | |
|---|---|---|---|
| 0144 | App Development & Advanced Graphic Animations | 0.50 | 11-12 |

**Students who have completed graphic animation** will be taught advanced animation skills. Students will also learn how to use software to create an app. Students will be able to create animations and apps that incorporate coding. This is a great course for students who are interested in becoming a graphic designer or animator. The projects created in this class involve higher level thinking skills and problem solving skills which result in amazing student created computer generated animations and apps.

| | | | |
|---|---|---|---|
| ##### | Computer Science Discoveries | 1.0 | 9-10 |

This course will introduce students to topics connected to the technologies that we use every day to solve problems. Students will be empowered to create authentic tools such as web pages, physical computer devices, apps and games using basic coding. Students will explore how computers interpret data and generate our digital footprint as well as expand on their understanding of the hardware components that make up the computer system.

*CSD* students explore the following topics during a full year course: problem solving, programming, web development, animations and games, the design process, data and society, and physical computing.

91186 Computer Software Applications 0.50 11-12

This course expands on the student's prior knowledge of software applications and prepares them for successful use in the workplace and college. The students will learn advanced document preparation including business documents, cover letters, resumes and formal letters. Spreadsheet applications will include the creation of spreadsheets, charts and graphs. Project based activities will teach critical thinking while reinforcing already learned skills. Students could use this course to prepare them for MOS certification.

91284 & 91285 AP Computer Science Principles 1.0 9-12

The AP Computer Science Principles course is designed to be equivalent to a first- semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

**English Course Sequence Summary**
**Career Pathways: Arts and Communication**

| | |
|---|---|
| Grade 9: | Advanced English I<br>English I |
| Grade 10: | Advanced World Literature<br>World Literature |
| Grade 11: | Advanced American Literature<br>American Literature |

Note: Four (4) credits of English are required for graduation.

Requirements for Advanced Courses:

1. Teacher recommendation
2. 3.25 cumulative average in subject area.

## English

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0100 | Advanced English I | 1.00 | 9 |

This is an advanced English course for students with high ability and achievement. This course includes a challenging curriculum incorporating literature, composition, traditional and electronic research, public speaking, vocabulary development, and grammar usage. Prerequisite: Teacher recommendation, a PSSA score of 1650 in Reading and 1300 in Writing for English and 3.25 cumulative average in English.

| | | | |
|---|---|---|---|
| 0101 | English I | 1.00 | 9 |

This course is an academic course that serves as a transition from the development of basic communication skills to the appreciation of literature. This course will also include composition writing, public speaking, vocabulary development, grammar and usage, and research skills using traditional and electronic resources. This course will begin to prepare students for college, a technical institute, or the work force.

| | | | |
|---|---|---|---|
| 0105 | Advanced World Literature | 1.00 | 10 |

This course provides a challenging enhancement of skills developed in Advanced English I. A course for students with high ability and achievement, this course stresses international and multicultural literature as well as composition. Research, using traditional and electronic methods, will be required. Vocabulary, public speaking, and grammar and usage continue to be developed in this course. Prerequisite: Teacher recommendation and a 3.25 cumulative average in English.

| | | | |
|---|---|---|---|
| 0106 | World Literature | 1.00 | 10 |

This course provides an academic curriculum that prepares students for post-secondary education as well as school-to-work programs. The curriculum includes a study of international and multicultural literature in addition to composition, public speaking, vocabulary for SAT preparation, and grammar. Students will build on their research skills by completing a project that contains a thesis and documentation of sources.

| | | | |
|---|---|---|---|
| 60872 | Advanced American Literature | 1.00 | 11 |

This course will explore literature beginning with the Native Americans up to the works of authors of science fiction. Students will write in a variety of genres to explore the various authors' styles as well as to develop an individual voice. Research and technological sources will be used through the course to enhance appreciation and exhibit comprehension of the literature and related periods. The mastery of selected vocabulary in preparation for the SAT and PSSA will also be emphasized.

| | | | |
|---|---|---|---|
| 60873 | American Literature | 1.00 | 11 |

This course aims to develop an appreciation of classic American authors and writings, crafted during the country's early settlement years through the period of science fiction. Critical readings and writings will

be utilized to further develop the student's individual voice and style in composition. The mastery of selected vocabulary in preparation for the SAT and PSSA will also be emphasized.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0111 | Acting | 0.50 | 11-12 |

Students will work in a hands-on approach to the world of acting by learning about and demonstrating various styles such as Method and Reader's Theatre. This course will involve individual and group work. It will require the students to be up in front of the class often. This course will give students stronger communication skills.

| | | | |
|---|---|---|---|
| 0113 | Creative Writing | 0.50 | 11-12 |

The course is designed to offer students the opportunity for expression in poetry, descriptive sketches, short stories, narratives, and one-act play writing. Journals and activities to cultivate creativity will precede many of the written assignments. Opportunities for publication will be provided through the literary magazine and various contests. Submission to the Scholastics Writing Competition will be the end product for the fall semester. Publishing of the literary magazine will be a hands-on product of the course, and students will gain the computer/technology skills necessary for the production.

| | | | |
|---|---|---|---|
| 0116 | Modern Novels | 0.50 | 11-12 |

Students will be given a choice of selected, modern novels in which to interpret internally (text) and externally (impact of the piece). Students will gain argumentative skills and be exposed to the interpretations of their peers and scholarly critics. This course will prepare college-bound students for critical analysis.

| | | | |
|---|---|---|---|
| 0117 | Journalism | 0.50 | 11-12 |

This course investigates the elements of news, the composition of news, and the delivery of the news. This is a hands-on course that requires regular research and writing of articles, as well as learning to design and layout a page. Also taught is basic photo composition, the history, and the laws and ethics that govern journalism.

| | | | |
|---|---|---|---|
| 0120 | Modern Short Stories | 0.50 | 11-12 |

This course covers the study of the art and technique of selected masters of the short story from 1900 to the present. Students will read, discuss, and analyze the short story as a specific literary genre. The course includes the writing of compositions and a research project. The culmination of the course will be the writing of an original short story.

| | | | |
|---|---|---|---|
| 0123 | Public Speaking | 0.50 | 11-12 |

This course provides students with the opportunity to develop and deliver speeches. Students will be able to conquer old fears and hone new techniques for speaking. Students will be required to analyze the components of a speech, develop a proper outline, critique speeches, as well as present a minimum of four

speeches. This course will be of special help to students, who go on to college, seek jobs, or who wish to improve their speaking skills in general.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0134 | Early British Literature | .50 | 12 |

This course is a study of British Literature from 449 to the Modern Period including literary classics such as Beowulf, Chaucer, Shakespeare, and the Romantic Age & Victorian Age. This course is best suited for students who wish to enhance their cultural literacy and/or recommended for college bound students. Students who had taken advanced level English courses and who are continuing on to a four year college should consider taking this course. Students will apply critical thinking to the writing of analytical essays that are composed in formal MLA style, developed using the CSQT method, and supported by literary criticism. This course is scheduled only in the fall semester.

| | | | |
|---|---|---|---|
| 0135 | British Literature | .50 | 12 |

This course is a study of British Literature from 449 to the Modern Period including literary classics such as Beowulf, Chaucer, Shakespeare, and the Romantic Age & Victorian Age. This course is best suited for students who wish to enhance their cultural literacy and/or recommended for college bound students. Students who had taken advanced level English courses and who are continuing on to a four year college should consider taking this course. Students will apply critical thinking to the writing of analytical essays that are composed in formal MLA style, developed using the CSQT method, and supported by literary criticism. This course is scheduled only in the fall semester

| | | | |
|---|---|---|---|
| 0131 & 0132 | Advanced Placement English Literature & Comp | 1.00 | 12 |

This college level course will challenge students planning to continue their education in a four year college. AP English centers on the reading, discussion, and interpretation of literature as well as a rigorous approach to composition and literary analysis. Students are expected to have superior writing skills. A student may take the AP English examination at the end of the course. Prerequisite: Teacher recommendation and 3.25 cumulative average in English.

**Family and Consumer Science**
**Career Pathways: Arts, Business and Social Services**

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0301 | Life Skills | 1.00 | 9-12 |

This course will help students develop knowledge and skills that are needed to survive & thrive in the 21st Century. The concepts covered in the course will benefit students as they prepare for life as an adult, employee, family member, and community member. The unit of study topics include problem solving in the community; family & community; design; finance, income, & careers; consumerism; nutrition; & an introduction to child development. Project based learning will be the primary method for students to experience and apply a variety of real life skills.

| | | | |
|---|---|---|---|
| 0302 | Child Development | 1.00 | 10-12 |

This course will help to make students aware of the mental, physical, and financial requirements needed to be a caregiver for a child or children. It begins with several units that focus on the general needs of children, families, and caregivers. The course continues with units that involve prenatal care of mother and child and the development and care of the infant from birth until age one. **Students will be required to participate in the Baby Think It Over program over the length of one full weekend. It will require responsibility for expensive equipment and will be counted as a major project.** The course will continue with a focus on the toddler and preschool age child in key areas of growth (intellectual, physical, social, moral, and emotional). Study will continue through a child's growth in all areas through the pre-teen age group. Special topics will also include caring for exceptional children and child safety and health.

| | | | |
|---|---|---|---|
| 0306 | Family Management | 0.50 | 10-12 |

This course will prepare the student for independent living and family management. The family is discussed and how it survives within the ever-changing global community. The course concentrates on the qualities of strong families, roles, and relationships within families, living on your own, financial responsibility, and other key management skills. Projects include family schedules, car buying and insurance, financial planning, and other projects that attempt to simulate family management.

| | | | |
|---|---|---|---|
| 0307 | Fashion and Fabric | 0.50 | 10-12 |

This is a course for the student who is interested in the world of fashion and wants to develop basic sewing skills and techniques. The course begins with a background on fashion and textile history and then continues with the practical use of sewing equipment. **Students will be required to purchase materials pertinent to at least two sewing projects.** Students' first project will be for charity, following project(s) will be for personal use.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0309 | Nutrition I | 0.50 | 11-12 |

This course is designed to provide students with the knowledge and skills a person needs to be able to make good choices for a nutritional diet. Besides learning how to make nutritional choices, students will learn more about why this is so important for our health now and later. After a brief study of safety in the kitchen, students will learn about the nutrients and their use in our bodies. Additionally, students will spend time learning to interpret food and nutritional information as well as the importance of these skills. Finally, dietary modifications and their ability to improve our health will be covered.

| | | | |
|---|---|---|---|
| 0310 | Nutrition II | 0.50 | 11-12 |

This course is designed to build upon everything covered in Nutrition I to enhance knowledge and skills in this area. Within this class, students will learn about meal planning, food science and our food supply, the global food supply, and the government's role in our food. More importantly, students will learn about how each of these factors have an impact on our own food supply, our own food choices, and our own nutrition. Prerequisite: Nutrition I.

| | | | |
|---|---|---|---|
| 0308 | Foreign Foods | 0.50 | 11-12 |

This course is a cultural travel through foods. Within this class, students will identify a wide variety of different cultural foods found throughout the world. Students will study global locations such as Latin America, Europe, the Mediterranean, the Middle East, Africa, and Asia and prepare foods special to those areas. Students will be required to research the influences of the cuisine made by geography, cultural impacts, and the countries' economics. Prerequisite: Nutrition I.

| | | | |
|---|---|---|---|
| 0305 | Culinary Arts | 0.50 | 12 |

This course introduces students to the career of the culinary trades. Students will study the various aspects of the food preparation industry through classroom and lab work. There will also be emphasis on creativity in food preparation. This course is recommended for any student interested in a career in the culinary trades. Prerequisite: Nutrition I and II.

## GIFTED PROGRAM

*60277 Full Year 1.00 credits*
*60999 Full Year 1.00 credits*
*90740 Semester 1 0.50 credits*
*90741 Semester 2 0.5 credits*
*90712 Full Year 1.00 credits*

60999 & 60277 *Full Year 1.00 credits*
Gifted Application A & B: Gifted Application is an elective enrichment course designed to challenge gifted students while enhancing real world skills through project-based and inquiry-based learning. Additionally, skills such as teamwork, time management, and risk-taking will be developed. This class centers on high-level competitions that occur at the local, regional and national levels. Preparation, practice and the competitions will serve as the instructional units. Assessments will be based upon a rubric containing aspects of the competition process: communication, participation, team work, etc.

*90740 & 90741 Semester 0.5 credits*
*Gifted Explorations A & B*: The Gifted Explorations course is an elective enrichment course designed to allow gifted students to explore fields of study not offered elsewhere during their high school career. Units have included the study and creation of film, sports, 20th century music, and animation. Assessment is often done through writing, although every unit contains a large creative project.
GIS is to be scheduled following a conference with the Gifted Instructor. The conference will occur at the beginning of the school year. This course is offered in both the traditional and blended format.

*90712 Full Year 1.00 credits*
*Gifted Independent Study (GIS)*: A student enrolling in a GIS is expected to generate a project idea that they will implement with the help of a faculty mentor. Upon completing the project, students will present their results in a formal setting to a grading committee, who will assess and assign a letter grade. Since there are very few deadlines, time management is an important skill that will be developed/improved through the *GIS* process. Past projects have included the creation and performance of original music, architectural design, a political internship, and research papers, among others.

**Mathematics Course Sequence Summary**
**Career Pathways: Engineering, Science and Technology**

| | Advanced Math | College Prep | Integrated Math |
|---|---|---|---|
| 9th | Advanced Algebra 2<br>0496 | Algebra 1<br>0413 | Algebra 1<br>0413 |
| 10th | Advanced Geometry 0563<br>*AP Stat<br>**AP Computer Science A | Algebra 2<br>0564 | Integrated Algebra 2<br>0565 |
| 11th | Advanced Trig/Calculus<br>60879<br>*AP Stat<br>**AP Computer Science A | Geometry 0415<br><br>*AP Stat<br>**AP Computer Science A | Integrated Geometry<br>0568 |
| 12th | AP Calculus AB<br>0441 & 0442 and/or<br>AP Calculus BC<br>0557 & 0558 and/or<br>AP Statistics<br>0443 & 0444 and/or<br>College Algebra<br>0436 & 0437<br>and/or<br>College Algebra/HACC<br>60672<br>** AP Computer Science A | Trig/Pre-Calc 0570<br><br><br>*AP Stat<br>**AP Computer Science A | Integrated Algebra 3<br>0572 |

Electives may be taken **concurrently** not in place of the required courses in 10th or 11th grade
* AP Statistics 0443 & 0444 ** AP Computer Science A 91263 & 91286

Notes:

1. Three (3) credits of Mathematics are required for graduation.
2. Beginning with the class of 2022, all students must pass the Keystone Algebra I Exam to graduate.
3. Geometry and Algebra II are two (2) distinct courses which may be taken simultaneously in order to better prepare the student for college.
4. AP Statistics is an elective. Students in 10th and 11th grade may take it simultaneously with another math class. Seniors may take it as their fourth year of math.
5. **AP Computer Science A is an elective. Taking this class does not replace a math class nor count as a 4th year of math credit.**

To Enter and remain in Advanced Math Courses, students are required to have:

1. Teacher recommendation.
2. A Proficient or Advanced Score on the Keystone Algebra I Exam
3. 3.00+ (B or higher) cumulative grade point average in math.

## Mathematics

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0496 | Advanced Algebra II | 1.00 | 9 |

This is the 9th grade offering in the accelerated sequence for those students who successfully complete Adv. Algebra I in the 8th grade. Emphasis in this course is placed on real and complex numbers, linear and quadratic equations, systems of equations, series and sequence, and polynomial functions and logs. Students must have their own scientific or graphing calculator. Prerequisite: 8th grade Adv. Algebra I, teacher recommendation, 3.00 cumulative average in subject area and a proficient or advanced score on the Advanced Algebra I Keystone.

| | | | |
|---|---|---|---|
| 0412 | Algebra II | 1.00 | 9 -10 |

The topics covered in Algebra II are Quadratic Functions and Graphs, Polynomial Functions and Graphs, Variation Functions and Graphs, Rational Functions, Powers and Roots, Exponential and Logarithmic Functions, Probability and Sequence and Series. Prerequisite: Algebra I and teacher recommendation. This course may be taken simultaneously with Geometry.

| | | | |
|---|---|---|---|
| 0413 | Algebra I | 1.00 | 9-10 |

This course focuses on the real number system and the basic skills essential for problem solving. Students will solve and graph systems of linear equations and inequalities, simplify and graph polynomial expressions, basic data analysis and probability. Prerequisite: Any student entering the high school who has not earned an Algebra I credit.

| | | | |
|---|---|---|---|
| 0563 | Advanced Geometry | 1.00 | 10 |

This branch of mathematics is concerned with plane figures such as angles, triangles, and quadrilaterals. It considers relationships that are true in a plane and extends these relationships to similar ones that are true in 3 dimensions. The students will also be introduced to concepts of analytic geometry. Prerequisite: A "B" or better average in Advanced Algebra II, teacher recommendation, a proficient or advanced score on the Algebra I Keystone. Students must have their own scientific or graphing calculator.

| | | | |
|---|---|---|---|
| 0415 | Geometry | 1.00 | 10-11 |

This course deals with two dimensional and three dimensional figures. We will be comparing figures for congruency and similarity. Volume and surface area will also be covered. Geometry will aid in the development of logical reasoning. Prerequisite: Algebra II.

| | | | |
|---|---|---|---|
| 0565 | Integrated Algebra II with Trigonometry | 1.00 | 10 |

This course is designed to investigate algebra topics with a focus on systems of equations, quadratic functions and polynomials. Students will utilize available technology while exploring applications of course topics, roots, powers, exponential and logarithmic functions, probability, statistics and right triangle trigonometry. Prerequisite: Algebra 1 at the high school.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0443 & 0444 | Advanced Placement Statistics* | 1.00 | 10-12 |

AP Statistics is a full year course aimed at developing analytical and critical thinking skills as you learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. A graphing calculator is required. This course will satisfy the graduation project. College credits could be earned pending the satisfactory performance on the Advanced Placement Exam. Prerequisite: Algebra II, teacher recommendation and 3.00 cumulative average in math and English.

| | | | |
|---|---|---|---|
| 60879 | Advanced Trigonometry and Introduction to Calculus | 1.00 | 11 |

Emphasis in this course is on the following functions: logarithms, trigonometry and an introduction to pre-calculus topics, limits and continuity, derivatives and applications of derivatives. This course is not meant to replace college calculus. Prerequisite: Advanced Geometry, teacher recommendation, a 3.00 average in Math and a proficient or advanced score on the Algebra I Keystone. Students must have their own graphing calculator.

| | | | |
|---|---|---|---|
| 0570 | Trigonometry and Pre-Calculus | 1.00 | 11-12 |

This course will begin with an intensive study of trigonometry and then proceed to advanced topics such as vectors and logic, conics, statistics and probability, with a focus on projects. Students will also begin a study of many topics of traditional pre-calculus courses including limits and continuity. Prerequisite: Geometry

| | | | |
|---|---|---|---|
| 0568 | Integrated Geometry | 1.00 | 11 |

This course deals with two and three dimensional figures, congruence, volume, surface area, problem solving which incorporates algebraic and geometric concepts. Prerequisite: Integrated Algebra II

| | | | |
|---|---|---|---|
| 0436 | College Algebra – Part I | 0.50 | 12 |

This course will be an extension of Trig and Pre-Calculus at a more in-depth level. It is recommended for the college bound senior not planning to major in math or science. Topics covered will include fundamental algebraic operations, exponents and radicals, functions and graphs. Students are encouraged to have their own graphing calculator. Prerequisite Advanced Trig/Calc., (may also be taken concurrently with Trig/Pre-Calc by **prior permission of the instructor**).

0437 College Algebra – Part II 0.50 12

This course will continue the topics covered in College Algebra – Part I and also include systems of equations, higher degree equations and inequalities, logarithms, and matrices. Students are encouraged to have their own graphing calculator. Prerequisite: College Algebra – Part I. College credit could be earned pending satisfactory performance on the college level examination program exam (CLEP test)

60880 Calculus 1.00 12

Emphasis in this course is on the following functions: trigonometry, functions, graphs of a function, limits and continuity and introduction to derivatives including related rates and other applications. Integrals will be introduced. This course is not meant to replace college calculus. Students are encouraged to have their own graphing calculator. Prerequisite: Trigonometry and Pre-Calculus

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|

0572 Integrated Algebra III 1.00 12

The course is designed to cover topics in algebra. The course will focus on conic sections, matrices, quadratic functions, all aspects of trigonometry modeling, rational functions, variation, exponential functions and logarithmic functions. It is strongly recommended that the students have their own scientific calculator. Prerequisite: Integrated Algebra 2 and Integrated Geometry

0441 & 0442 Advanced Placement Calculus AB* 1.00 12

Calculus AB is a full year course in single-variable calculus that includes techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus. It is equivalent to at least a semester of calculus at most colleges and universities, perhaps to a year of calculus at some. Algebraic, numerical, and graphical representations are emphasized throughout the course. . A graphing calculator is required. This course will satisfy the graduation project. College credits could be earned pending the satisfactory performance on the Advanced Placement Exam. Prerequisite: Advanced Trig/Calculus – Part II, teacher recommendation, and 3.00 cumulative average in subject area.

0557 & 0558 Advanced Placement Calculus BC* 1.00 12

Calculus BC is a full year course in single-variable calculus that includes all the topics of Calculus AB (techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus) plus additional topics in differential and integral calculus (including parametric, polar, and vector functions) and series. It is equivalent to at least a year of calculus at most colleges and universities. Algebraic, numerical, and graphical representations are emphasized throughout the course.
**Prerequisite: an "A" or a "B" in Advanced Trigonometry and Calculus**

91263 & 91268 Advanced Placement Computer Science A 1.00 10-12

The course introduces students to computer programming with fundamental topics that include problem solving, design strategies and methodologies, organization of data, approaches to data processing, analysis of potential solutions and the ethical and social implications of computing. The course

emphasizes both object-oriented and imperative problem solving and design. Students must have a solid understanding of mathematical reasoning and the concepts of algebra including function notation. **This course may be taken in addition to the required courses in mathematics. Prerequisite: an "A" or "B" in Algebra 2.**

## Music
## Career Pathways: Arts and Communication

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0450 | Band | 1.00 | 9-10 |

Band is designed to give students a comprehensive understanding of music through performance experience. Membership is based on playing ability and the need to maintain well-balanced instruction. The band meets every day. Attendance at out-of-school performances is required.

| | | | |
|---|---|---|---|
| 0456 | Chorus | 1.00 | 9-10 |

Chorus is designed to give students a comprehensive understanding of music through a performance experience. No tryouts are held for the group – interest is the only prerequisite. Chorus is held every day. The chorus performs at the Holiday Concert, the Spring Choral Concert and the Spring Combined Concert.

| | | | |
|---|---|---|---|
| 0460 | Orchestra | 1.00 | 9-10 |

Orchestra is designed to give students a comprehensive understanding of music through performance experience. No auditions are required of string players. However, wind and percussion players are selected on the basis of the individual's ability and the need to maintain well-balanced instrumentation. Attendance at out-of-school performances is required.

| | | | |
|---|---|---|---|
| 0461 | Piano Keyboarding | 1.00 | 9-12 |

This course is designed for any student with no previous piano or instrumental experience. Students will learn basic staff notation, simple piano chording, scales, major/minor keys and key signatures, and basic piano literature found in the interactive workbook. This class is self-driven and allows you to move at your own pace. This class is a yearlong class that incorporates both Piano Keyboarding I and Piano Keyboarding II.

| | | | |
|---|---|---|---|
| 0459 | Chorale | 1.00 | 10 |

**Admission is by audition only**. This select vocal ensemble provides a comprehensive understanding of music through performance experiences including the Winter, Spring Choral and Spring Combined Concerts as well as several other programs selected by the members of the group. Chorale meets every day and focuses on sightreading, quartet singing and a capella singing.

| | | | |
|---|---|---|---|
| 0464 | Music Appreciation | 0.50 | 11-12 |

This course is a survey of music history. We cover music from the Medieval, Renaissance, Baroque, Classical, Romantic, Twentieth Century periods and some current Twenty First Century music. The focus

is on learning how to analyze music through the use of the seven essential elements of music and appreciate music in the time in which it was written.

| | | | |
|---|---|---|---|
| 0465 | Music in the Theater | 0.50 | 11-12 |

This course will look at the ways in which music and drama have interacted and will cover a brief reference to opera and the oratorio, the adding of music to plays, the beginning of the "modern" musical, and the latest movements in musical theater. Students will study libretto, songs, discuss the relationship between them, watch select shows, and listen to recordings of shows. There are also elements of student performance embedded in the class.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0466 | Music Understanding | 0.50 | 11-12 |

This course is a survey of basic and intermediate level music theory. Topics that are covered may include note reading, intervals, chords, keys and key signatures, scales, ear training, note dictation and individual compositions. This course is recommended for students who are considering further study of music. Some prior musical experience is highly recommended. Prior approval of music department is suggested.

| | | | |
|---|---|---|---|
| 0449 & 0451 | Band/Chorus | 1.00 | 9-12 |
| 0482 & 0458 | Orchestra/Chorale | 1.00 | 9-12 |
| 91331 & 91332 | Advanced Placement Music Theory | 1.00 | 10-12 |

The AP Music Theory course corresponds to one-to-two semesters of typical, introductory college music theory coursework that covers topics such as musicianship, theory, and musical materials and procedures. Musicianship skills, including dictation and listening skills, sight singing, and harmony, are an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural (listening) skills is a primary objective. Performance is also part of the curriculum through the practice of sight-singing. Students learn basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized.

Prerequisites: There are no prerequisite courses for AP Music Theory. Prospective students should be able to read and write musical notation and have basic performance skills with voice or an instrument.

**Science Course Sequence Summary**
**Career Pathways: Engineering, Science and Technology**

| | |
|---|---|
| Grade 9 | Advanced Biology<br>Earth and Space Science |
| Grade 10 | Advanced Chemistry (must have completed or concurrently taking Algebra II)<br>Biology |
| Grade 11 | Physics<br>Chemistry |
| Grade 12 | Advanced Placement Biology (Grade 11 or 12)<br>Advanced Placement Chemistry (Grade 11 or 12)<br>Advanced Placement Physics (Grade 12)<br>Physics |

Note: Three (3) credits of science are required for graduation

Requirements for Advanced Biology Course:

1. Teacher recommendation.
2. 3.25 cumulative average in subject area and math.
3. Students who chose not to continue in Advanced Science courses must take Earth & Space Science.

## Science

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0607 | Advanced Biology | 1.00 | 9 |

This course is a system/applications approach to the learning of fundamental biological concepts. This is an accelerated course stressing biochemistry, cell biology, genetics, and ecology. A short unit on the biological kingdom is included. Students will have the opportunity to learn and practice skills used in the learning and study of biology and the development of specific technical research skills used in biology. Prerequisite: CDT Science score, Grade 8 Science Course grade, and teacher recommendation.

| | | | |
|---|---|---|---|
| 0610 | Earth & Space Science | 1.00 | 9 |

This course is an academically oriented study of geology, astronomy, meteorology and oceanography. The course provides students with the basic knowledge of earth and space science as it relates to them and to their range of experiences. Students will also use their abilities to develop an appreciation of the basic concepts in earth and space science.

| | | | |
|---|---|---|---|
| 0615 | Advanced Chemistry | 1.00 | 10 |

This accelerated course is a study of matter, atom theory, periodicity, chemical bonding, chemical formulas, reactions and kinetic theory. It infuses concept mastery, high-level critical thinking, problem solving and laboratory experimentation. The intent of this course is to prepare the student for advanced placement or college chemistry. Prerequisite: Algebra II/Trigonometry or concurrent enrollment.

| | | | |
|---|---|---|---|
| 0618 | Biology | 1.00 | 10 |

This is an academically oriented course stressing biochemistry, cell biology, genetics, and ecology. A short unit of the biological kingdoms is included. Emphasis in the course is placed on biology as a science and science as a process of gathering information and using information rather than on the accumulation of memorized data.

| | | | |
|---|---|---|---|
| 60875 | Chemistry | 1.00 | 11 |

This descriptive course is a study of matter, atomic theory, periodicity and chemical bonding. It infuses concept mastery, critical thinking, problem solving and laboratory experimentation. This course will also explore other specialized topics of chemistry, complimenting quantitative chemistry. The course includes a study of chemical formulas, reactions, and Kinetic Theory.

| | | | |
|---|---|---|---|
| 0641 & 0642 | Advanced Placement Chemistry | 1.00 | 11-12 |

This course is taught on the same level as a college freshman general chemistry course. Emphasis is placed on chemical calculations and mathematical formulation of principles. This course is designed to prepare the student for the AP test. Students will be expected to take the test. Those enrolling in this class must have a cumulative GPA of 3.25 or better in science/math courses and department recommendation.

0612 & 0613 Advanced Placement Biology 1.00 11-12

This course is taught on the same level as a college freshman course in biology. Emphasis is placed on content material needed to score well on the AP test. Those enrolling must have a cumulative GPA of 3.25 or better in science and math courses and have department recommendation. Prerequisite: Honors Chemistry.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 60877 | Physics | 1.00 | 11-12 |

The course includes a study of measurements, linear motion, projectile motion, and forces. A solid mathematical base is needed to be successful in this course. Students are challenged to think and to apply scientific and mathematical skills. Prerequisite or concurrent Trigonometry.

0646 Environmental Studies 0.50 11-12

This is a semester course which focuses on an awareness of environmental issues and their impact on humans and ecosystems. Students will gain knowledge of basic ecological structure, function, principles, and interrelationships of ecosystems. Topics include discussion on issues such as hunting, tropical rainforest, energy production, and the ozone. Prerequisite: Biology.

0647 Microbiology – Spring Semester 0.50 11-12

This course is a semester, lab-oriented course which focuses on an awareness of microbes and their impact on the environment and humans. Students will gain a knowledge of viruses, bacteria, protozoa, and fungi. Topics include infectious diseases, antibiotic use and parasitic relationships. This course is geared towards college bound science and non-science majors. Prerequisite: "C" or higher in Biology. This course is offered in both the traditional and blended format.

0648 Organic Chemistry – Fall Semester 0.50 11-12

This lab oriented courses focuses on the structure and reactions of carbon compounds. This course is strongly recommended for students desiring a career in the biological, chemical, medical, pharmaceutical and veterinary sciences. Prerequisite: Academic Chemistry I and II or Advanced Chemistry.

0649 Nuclear Chemistry – Spring Semester 0.50 11-12

This course focuses on the short term and long term implications of the nuclear industry. Topics include: nuclear scientists, public perception and knowledge of the nuclear industry, radiation, half-life, fission, fusion, nuclear weapons and low/high level waste disposal. Prerequisite: Chemistry in the Community I or Academic Chemistry I or Advanced Chemistry.

0650 Waters of the World 0.50 11-12

This is a semester elective which focuses on an awareness of how water influences the world we live in and its impact on humans and the environment. The course will emphasize components of meteorology and oceanography. The course is designed for college bound students.

0651 Astronomy 0.50 11-12

This course is a semester elective which focuses on an awareness of astronomical objects, concepts, theories and issues of space exploration and travel. Mathematical equations will be utilized to perform numerous calculations related to celestial and planetary motion.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0653 | Dissecting the Animal Kingdom – Fall | 0.50 | 11-12 |

This is a semester, lab-oriented course stressing an anatomical approach through a survey of the animal kingdom. This course will provide several in depth, detailed dissection opportunities of selected invertebrate and vertebrate species. Students must be comfortable with the physical investigation techniques of dissection. Prerequisite: "C" or higher in Biology.

| | | | |
|---|---|---|---|
| 0601 | Forensic Science | 0.50 | 11-12 |

Forensic Science is the study and application of science to the legal system. In recent years, it has become the theme of various television programs and documentaries. This class appeals to the detective in people. Forensic Science is multi-disciplinary and integrates concepts from science, social studies, math and language. The primary focus of the course will be the practice of forensic science and the analysis of physical evidence. It is a research and lab-based course in which students must work safely and efficiently. Those enrolling in this class should have earned at least a "C" in academic chemistry.

| | | | |
|---|---|---|---|
| 0619 & 0620 | Advanced Placement Physics | 1.00 | 12 |

This course is taught at the same level as a college freshman course in physics. Those enrolling in this class must have a cumulative GPA of 3.25 or better in science/math courses and department recommendation. This course will emphasize basic and fundamental physic principles in greater depth compared to the general physics course. Topics will include mechanics, electricity and magnetism. This course is designed to prepare students for the AP test covering College Board Physics C. AP Calculus must be taken concurrently with AP Physics. Prerequisite: Algebra II/Trigonometry.

**Social Studies Course Sequence Summary**
**Career pathways: Business and Social Services**

| | |
|---|---|
| Grade 9 | World Cultures |
| Grade 10 | Western Civilization |
| Grade 11 | Advanced Placement United States History<br>Advanced Placement European History<br>American Studies |
| Grade 12 | Advanced Placement United States History<br>Advanced Placement European History |

Note: 1. Three (3) credits of social studies are required for graduation. One credit must be American Studies or AP American History.

Requirements for Advanced Courses:

1. Teacher recommendation
2. 3.25 cumulative average in subject area.

## Social Studies

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0701 | World Cultures | 1.00 | 9 |

This course explores the non-western area of the world. The geography, history, technology and cultural achievements of the various areas are studied in relation to the United States and its people. World Cultures will also examine how various cultures view religion, trade, and customs. It will address cultural diversity and multicultural issues across a broad spectrum of topics.

| | | | |
|---|---|---|---|
| 0702 | Western Civilization | 1.00 | 10 |

This course explores the geography, history, politics, and culture of Europe. Students will study the history of Europe starting with 1450 through the Renaissance, the rise of monarchies resulting in revolutions, World War I and World War II. A focus on Post World War II Russia and Eastern Europe will conclude this course.

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|---|---|---|---|
| 0717 & 0718 | Advanced Placement European History | 1.00 | 10-12 |

Advanced Placement European History will introduce students in cultural, economical, political and social developments that had a major role in shaping the world from 1450 to the present. The course will also provide a basic narrative of events and movements throughout Europe with a focus on the themes of modern Europe. Students will analyze historical evidence as well as express historical understanding through writing as they examine Europe and it's relationship to other parts of the world. Scheduling for 10th graders will be by teacher and counselor recommendation.

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|---|---|---|---|
| 60878 | American Studies | 1.00 | 11 |

This course explores the major events, trends, and famous personalities involved in the history of American from the start of the Twentieth Century to the beginning of World War II. It includes a study of topics on the: Progressive Era, WWI, the Roaring Twenties, and the Great Depression and an analysis of the role of government and the importance of economic factors in events during this time period. The class will also explore the major events, trends, and famous personalities involved in the history of America from WWII until the present.

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|---|---|---|---|
| 0715 & 0716 | Advanced Placement United States History | 1.00 | 11-12 |

This course is a survey of American history from the colonial period until the present. Students will acquire an understanding for the methods of history and discover that history includes controversies and complex ideas. Writing skills are also emphasized. A cumulative average of 3.25 in social studies or better, department recommendation. This course is offered in both the traditional and blended format.

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|---|---|---|---|
| 0707 | Psychology – Part I | 0.50 | 11-12 |

This course will explore the behavior and relationship between living beings and their environment. Differing theories in psychology and human development will be studied. Students will conduct an experiment in order to gain an understanding of the experimentation process.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0708 | Psychology – Part II | 0.50 | 11-12 |

This course will focus on the biological influences on behavior as well as thinking and perception. Psychological disorders will be defined, described and categorized. Students will conduct research and develop presentations on topics relating to psychology. Prerequisite: Psychology – Part I.

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|---|---|---|---|
| 0709 | Economics | 0.50 | 11-12 |

This course will focus on introducing students to economics, microeconomics, macroeconomics, and international economics while looking into economic theory, the role of the government in the economy, as well as the world economy.

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|---|---|---|---|
| 0710 | Political Science | 0.50 | 11-12 |

Debate current political issues facing our nation today. Topics include: American foreign policy and the role of the United Nations.

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|---|---|---|---|
| 0711 | Sociology | 0.50 | 11-12 |

This course will examine how people relate to each other and how individual behavior is influenced by others. Topics include: culture, socialization, personality, crime and social control.

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|---|---|---|---|
| 0069 | Law and Society | 0.50 | 11-12 |

The course introduces students to the American legal system by looking into constitutional law, civil law, criminal law, and fair legal procedures. The course is open to all students with an interest in the legal system and particularly to those considering careers in law or law enforcement.

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|---|---|---|---|
| 0712 | Cultural Diversity in American Society | 0.50 | 11-12 |

America's cultural diversity will be the focus of this course. Students will examine and analyze the differences and similarities of socially transmitted behavior, patterns, arts, beliefs and customs of various groups of people. The immigration process of America and the theories of class and society will be studied. This course will take an in depth analysis of the African American, Asian American, Latino American, and Native American Societies. The interaction of these societies with American cultures in the past as well as the present will be explored.

**Technology Education Course Sequence Summary**
**Career Pathways: Video Production, Engineering, Architectural, Graphic Design, Manufacturing/Construction, Science and Technology and STEM**

**Video/Film Production Careers**

Level I- Video Production I (9-12th)
Level II- Video Production II (10th-12th)
Level III- Video Production III (10-12th)
Level IV- Video Production Independent Study (11-12th)

**Engineering/Architectural Career**

Design Engineering (9-12th)
Level I- (Computer Aided Drafting and Design)
CADD (9th - 12th)
Level II- Mechanical Design (10th-12th)
Level II- Architectural Design (10th-12th)
Robotics (11th -12th)

**Mechanical Trade Career**
**Manufacturing/Construction**

Manufacturing Systems (9th-10th)
Wood Systems (10th-12th)
Metal Systems (10th-12th)

**Graphic Design Career**

Graphic Communication (9-10th)
Graphic Comm. Technology (10th-12th)
Advanced Graphic Communications (10-12th)
Digital Color Photography (10-12th)

**Product Design**

Design Engineering (9-12th)
CADD (9th-12th)
Mechanical Design (10th-12th)
Robotics (11th-12th)

## Technology Education

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0801 | Design Engineering | 1.00 | 9-12 |

The design engineering course is designed for students to apply their knowledge in a multiple of subjects to solve problems and challenges. The course will cover a wide variety of content and topics from the technology education discipline such as, but not limited to, electronic engineering, energy and power engineering, product design engineering, applied technology, bioengineering along with other field of engineering. Students will learn new content along with methods of how to use the new content, connected to their prior knowledge and research method to formulate new, creative and innovation solutions to real life problems and issues. Emphasis will be placed on the design and research aspect of problem solving.

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|---|---|---|---|
| 0802 | CADD<br>(Computer Aided Drafting and Design) | 1.00 | 9-12 |

This course will provide students with the use of multiple CADD software applications used in engineering and architecture. Students will use CADD software to design and produce accurate, orthographic drawings, three dimensional models, and assemblies. Students will learn the operations needed to design products using computer software. Students will also be exposed to 3-D printing, where they will 3-D print products that they design. Students will also use an architectural software to design a residential structure. They will produce floor plans and three-dimensional views of their design. Prerequisite: None.

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|---|---|---|---|
| 0804 | Graphic Communications | 1.00 | 9-12 |

Graphic design is everywhere. From internet advertisements, posters, billboards along the road, store signs, custom air brushed cars or motorcycles, t-shirt printing and every package a product is placed in for purchase at a store. Graphic designers, designed, prepared layouts, created prototypes and produced these products. This course will provide students with an opportunity to apply a variety of printing processes used within the Graphic Design and Graphic Arts Industry. Activities include project design, screen-printing, image and design preparation on various software programs using computers, photography, and current printing techniques. Students will design, layout and produce personal and commercial products

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|---|---|---|---|
| 0805 | Manufacturing Systems | 1.00 | 9-10 |

This course will provide students with the opportunity to utilize various manufacturing processes and techniques to produce products with both wood and metal materials. Activities in the woodworking area include measurement, project planning, machine materials processing, wood joinery, drawer construction, assembly, and finishing. Their first woodworking project will engage them in many of these processes. They will have a choice between two projects for their second woodworking project, which will include drawer construction. Activities in the metal working area will include measurement, sheet metal layout, cutting, forming, soldering and spot welding processes. Students will also learn about electric arc welding. They will use the Technological Design Process to design and manufacture their scroll shelf bracket. They will utilize the electric arc welding process to join components together.

Students will also experience the gas forging process. Emphasis will be placed on shop safety, safe use of tools and machines, and applying woodworking and metal working skills to solve production problems. This course is for 9th and 10th grade students.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0835 | Video Production I | 1.00 | 9-12 |

This course will provide an overview of video production and digital film technology. Students will demonstrate storyboard creation, broadcast camera techniques, digital computer editing, audio editing and various other video production applications. Activities include the production and development of various video projects, such as commercials, public service announcements, music videos, news broadcasts, movie previews and more.

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| 0833 | Digital Color Photography | 0.50 | 9-12 |

Digital Photography will provide the students with the opportunity to capture images electronically, digitally enhance the images by using photo editing software and produce both printed and electronic image presentations. This course is designed to enhance the student's photography skills in the shot set-up, composition principles, developing a photographer's eye, photo editing techniques and picture producing.

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|---|---|---|---|
| 0821 | Graphic Communication Technology | 0.50 | 10-12 |

Graphic design is everywhere. From internet advertisements, posters, billboards along the road, store signs, custom air brushed cars or motorcycles, t-shirt printing and every package a product is placed in for purchase at a store. Graphic designers, designed, prepared layouts, created prototypes and produced these products. This course will provide students with an opportunity to apply a variety of printing processes used within the Graphic Design and Graphic Arts Industry. Activities include project design, screen-printing, image and design preparation on various software programs using computers, photography, and current printing techniques. Students will design, layout and produce personal and commercial products

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| 0840 | Advanced Graphic Communications Technology | 1.00 | 10-12 |

This course will expand the principles of the Graphic Communications course by providing the students with an opportunity to enhance skills and apply those skills to advanced graphic arts and graphic design activities. In this course students will be working with actual companies and organizations and working to meet their graphic design needs. Students will also be learning the Adobe Creative Suite Software package in greater detail.
Prerequisite: Graphic Communications or Graphic Communications Technology.

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|---|---|---|---|
| 0836 | Video Production II | 0.50 | 10-12 |

This course will expand on the first level course. Students will explore advanced studies of digital filming and editing, digital photography, green screens, chrome keying, audio editing and studio production equipment. Activities include the production and development of various video projects such as autobiography, stop motion, community events and more. Prerequisite: Video Production I

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|---|---|---|---|
| 0837 | Video Production III | 0.50 | 10-12 |

This course will expand on the second level course. Student will explore advanced technology used in today's broadcast, video editing and film industry. Students will create projects using special effects, audio editing, lighting and more. Prerequisite: Video Production I and II. Upon completion of Level III student are eligible to apply for the Video Production Independent Study program.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 0806 | Architectural Design | 1.00 | 10-12 |

This course will provide students with a broad understanding of residential architecture. Students will design various residential and commercial architectural designs. The focus of this course will be on residential housing styles, trends, construction, requirements, and materials. Commercial architecture will focus more on code requirements. Using the software, students will design floor plans, electrical plans, site plans, elevations, and 3D views of their designs.
Prerequisite: CADD

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|---|---|---|---|
| 0809 | Mechanical Design | 1.00 | 10-12 |

This course will provide students with an in depth use of SolidWorks software to create, replicate, and test designs. Students will create 3D models, orthographic, section view, auxiliary view, working, and production drawings. The drawing will contain all the necessary dimensions and notes for a given object. Using the CADD software, students will create assemblies to produce a virtual working model. Students will use the problem-solving method to design various solutions to problems. This course is designed to explore various aspects of engineering and design. Students will also be exposed to 3-D printing, where they will 3-D print a product that they design.
Prerequisite: CADD

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| 0838 | Metal Systems | 1.00 | 10-12 |

This course will provide students the opportunity to work with the basic metal working processes and techniques. During the first half of the year the students will learn many of the basic skills in the metal working area. Activities will include production planning, sheet metal layout and fabrication, stick electrode arc welding, MIG welding, drill press and metal lathe machining processes. They will make a number of assigned projects to learn and develop skills in these areas.
The second half of the year will allow the students to further develop these skills. They will be planning and developing the metal working project of their choice. They will be responsible for developing their own plans and material list. This course will allow them to further develop their skills in the sheet metal, electric arc welding, or machining areas of metal working. Emphasis will be placed on shop safety, safe use of tools and machines, and applying metal working skills to solve production problems. This course is for $10^{th}$, $11^{th}$, and $12^{th}$ grade students.

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|---|---|---|---|
| 0839 | Wood Systems | 1.00 | 10-12 |

This course will provide students with the opportunity to work with the basic woodworking processes and techniques. During the first half of the year the students will learn many of the basic skills in the woodworking area. Activities will include measurement, production planning, the steps of squaring a board, woodworking joinery, material processing with the jointer, planer, table saw, miter chop saw, and band saw, project construction, drawer construction, and woodworking finishing.
The second half of the year will allow the students the opportunity to further develop these skills. They will be planning and developing the woodworking project of their choice. They will be responsible for developing their own plans and material list. This will allow them the opportunity to further develop their skills in the planning and design, material processing, woodworking joinery, woodworking construction techniques, and finishing areas of woodworking. Emphasis will be placed on shop safety, safe use of tools and machines, and applying woodworking skills to solve production problems. This course is for 10th, 11th, and 12th grade students.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|
| 91265 | Robotics | 1.00 | 11-12 |

Robotics and automation is the technological backbone that is driving innovation in our industrial economy. This challenging robotics course is designed to introduce students to advanced robotics and coding techniques and concepts. Students will learn to design, create and code various robots pertaining to movement, gathering, sorting and sensory in full or partial autonomous modes. Students will be using the coding language C++. Students will develop and apply computational thinking skills to solve real-world challenge scenarios. Students will be using VEX robots and other current robotic training material.

## Wellness and Fitness

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0538 | Wellness | 0.50 | 9 |

The wellness curriculum focuses on general health information, personal wellness and decision making skills that will contribute to a healthy lifestyle. This semester course contains curriculum content from the following topics: health risk factors, personality, stress and stress management, mental health, nutrition, social health including families and violence, tobacco, alcohol and drug education, reproduction and sexual responsibility and consequences. Successful completion of this course is required to fulfill graduation requirements. This course will be presented in an online format.

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|---|---|---|---|
| 0537 | Fitness 9 | 0.50 | 9 |

The 9th grade class is designed to offer the students an "array of both lifetime and team oriented activities". This course is also designed to teach the fitness concepts that students can carry with them throughout adulthood to help assess their fitness levels. The course is supplemented with outside reading assignments on health and fitness related topics to help students understand the correlation of both exercising and nutrition in relationship to one's overall health and wellbeing. The goal is to provide students with the skills, knowledge and confidence needed to live a healthy and physical lifestyle.

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| 0514 | Fitness Activities I | 0.50 | 10-12 |

This course is designed to enable students to participate in highly competitive team activities as a of improving, or maintaining physical fitness. Some examples of activities that may be done in class include: lacrosse, swat ball, team handball, ultimate football, volleyball, floor hockey, prison ball, and basketball. Students should expect a challenging cardiovascular workout every day.

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| 0515 | Fitness Activities II | 0.50 | 10-12 |

This course is designed to enable students to participate in a variety of team activities and low organizational games. The focus will be on fitness and team dynamics rather than competition. This course could include: volleyball, basketball, soccer, softball, low organizational aerobic games (scooter hockey, mat ball) and cooperative games.

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|---|---|---|---|
| 0517 | Exercise and Fitness for Life | 0.50 | 10-12 |

This course is designed to enable students to identify activities which could be continued or pursued after their high school years as a means of maintaining physical fitness and managing stress. This course includes classroom instruction and participation in activities such as aerobics, power walking, jogging, Pilates, Zumba, golf, weight training, volleyball, and badminton, and tennis. The focus in this course is lifetime fitness.

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0526 | Introduction to Weight Training | 0.50 | 10-12 |

This course is designed for students to learn different vigorous training techniques that would lead to a higher level of physical fitness. This course includes training that will challenge you mentally and physically using free weights, machines, and other equipment available to the weight room. During the second half of the course you will research, create, and implement a workout plan to achieve a personally derived goal that you have a desire to complete. Topics that will be covered during the course include isometric, plyometric, concentric, eccentric, weight loss, weight gain, flexibility, and goal setting.

| | | | |
|---|---|---|---|
| 0527 | Personal Fitness Class | 0.50 | 10-12 |

This course is designed to teach students how to develop and implement a personal fitness plan. Student will learn how to assess their fitness, write goals, and create a plan to reach those goals. Classes will split time between the weight room and the gym. On gym days the focus will be on cardiovascular training through competitive team sports (ultimate football, speedball, floor hockey, etc). On the weight room days students will learn training principles, develop and implement a weight training program.

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|---|---|---|---|
| 0516 | Sports Science | 0.50 | 10-12 |

This course was designed for the student who has a strong work ethic and desires to continue their education in a sports science or medical field. This course is designed mostly as a classroom based course, especially in the first quarter of the semester, with the second half of the course covering the weight training aspect. This course will consist of, but not limited to, lecture, group presentations, writing assessments, project work, nutrition and performance lab assessments, (including short and long distance runs), use of technology and demonstration of weight training applications. Lecture topics will include the principles of fitness, maximum and target heart rate zones, body composition, energy/fuel systems, skeletal and muscular systems, nutrition and exercise performance. The training aspect of the course will include knowledge of lifts per muscle groups, traditional resistive training programs and a series of "intensity training protocols". "**Prerequisite: The student must have successfully completed Fitness in grades 9 and 10".**

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|---|---|---|---|
| 0559 | Performance Training for Athletes I - Female | 1.00 | 10 |
| 0561 | Performance Training for Athletes I - Male | | |

This course is designed to familiarize the student with an effective approach to athletic conditioning and strength training, and will equip students with the knowledge to develop, track, and maintain a training plan as it relates to athletic movement and performance. In doing so, students will learn the basic principles of strength training and conditioning for athletic performance and personal fitness to implement a weight-training program that works towards achieving personal athletic and fitness goals. The course instruction will include lessons on various training philosophies, movements and techniques. Topics that may be explored include systematic strength training, plyometric (explosive movement) training, speed and agility training, physiology of exercise, and other training methods. Students will also be provided with the

opportunity to apply the knowledge and skills acquired through the course activities via a training program. Students will be assessed through written activities and
tests as well as measurements of fitness, strength, & conditioning, as a means of evaluating progress.
**Requirements: in the year you are taking the course, you must be participating in a Solanco sport.**

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0560 | Performance Training for Athletes II - Female | 1.00 | 11 |
| 0562 | Performance Training for Athletes II - Male | | |

This course is the second level of the performance training course. The purpose of the course is to advance the students level of skill and understanding of athletic conditioning and strength training, and will equip students with a deeper understanding of how to develop, track, and maintain a training plan as it relates to athletic movement and performance. In doing so, students will learn the basic principles of strength training and conditioning for athletic performance and personal fitness to implement a weight-training program that works towards achieving personal athletic and fitness goals. The course instruction will include lessons on various training philosophies, movements and techniques. Topics that may be explored include systematic strength training, plyometric (explosive movement) training, speed and agility training, physiology of exercise, and other training methods. Students will also be provided with the opportunity to apply the knowledge and skills acquired through the course activities via a training program. Students will be assessed through written activities and tests as well as measurements of fitness, strength, & conditioning, as a means of evaluating progress. **Requirements: successful completion of Performance Training 1 - 11th grade in the year you take the course you must be participating in a Solanco sport.**

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|---|---|---|---|
| 0541 | First Aid and CPR | 0.50 | 10 - 12 |

This course will provide the necessary training to become certified in: adult/child/infant CPR, adult AED, and basic first aid. Classes will cover basic anatomy and physiology of the cardiovascular and respiratory systems as they relate to breathing and cardiac emergencies. At the end of the course students who successfully complete the skill and quizzes required will be certified for two years in CPR and AED, and three years for First Aid. Students will also explore health related careers and learn the training required for those careers. An excellent class for any students planning to go to CTC for any health related courses, or plan a career in the health field.

**World Language**
**Career Pathways: Arts and Communication**

| Code | Course | Credit | Grade(s) |
|---|---|---|---|
| 0201 | French I | 1.00 | 9-11 |

French I is a study of francophone communication, cultures, connections, comparisons, and communities that will target all four language skills: listening, speaking, reading, and writing. Emphasis is placed on using the present tense, asking and answering questions, and creating a linguistic base for further language studies. The course is conducted primarily in French and the students are expected to communicate in French while in the classroom. No prerequisites.

| | | | |
|---|---|---|---|
| 0203 | Spanish I | 1.00 | 9-11 |

This first-level course places emphasis on the student's acquisition of vocabulary, sentence structure with every day situations, and an overall appreciation of the culture of the target language. Therefore the course is conducted primarily in Spanish and the students are expected to communicate in Spanish in the classroom. The course will also offer and demonstrate comparisons of both the English and Spanish languages and cultures. Spanish I is designed to foster both confidence and capability in speaking Spanish on a rudimentary level and serve as a basis for more detailed instruction and expansion at the second-year level.

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|---|---|---|---|
| 0204 | French II | 1.00 | 10-12 |

French II is a study of francophone communication, cultures, connections, comparisons, and communities that will target all four language skills: listening, speaking, reading, and writing. Emphasis will be placed on learning to narrate with the past tenses and using irregular verbs. The course is conducted primarily in French and the students are expected to communicate in French while in the classroom. It is recommended that students have earned a C or higher in French level 1.

| | | | |
|---|---|---|---|
| 0206 | Spanish II | 1.00 | 10-12 |

Recognizing the theory that the second year in a four-year sequence of language is the most developmental and difficult, the foreign language department endeavors:

-to capsulize the body of knowledge acquired in the first year;
-to introduce and require a working knowledge of all tenses: present, past, future, conditional and commands
-to elicit from the student more active participation in class, not only in the realm of question/answer/prepared statements, but also in the area of critical listening/presentation and defense of opinions.
-the course is conducted in Spanish and the students are expected to communicate in Spanish in the classroom

Prerequisite: Spanish I. **It is recommended that a minimum grade of "C" be attained in Spanish I in order to be successful in Spanish II.**

0207 French III – Part A 0.50 11-12

French III - Part A is a combined course with French IV that runs with a year A/B model. It is a study of francophone communication, cultures, connections, comparisons, and communities that will target all four language skills: listening, speaking, reading, and writing. Emphasis will be placed on expanding the use of the present and past tenses in communication and learning to communicate with the subjunctive, future and conditional. Students will work to expand their communication interpretively, presentationally, and interpersonally on a wide range of topics. The course is conducted primarily in French and the students are expected to communicate in French while in the classroom. It is recommended that students have earned a C or higher in French level 2.

| **Code** | **Course** | **Credit** | **Grade(s)** |
|---|---|---|---|

0208 French III – Part B 0.50 11-12

French III - Part B is a continuation of knowledge and skills emphasized in Part A. Prerequisite "C" or better in French III – Part A.

0211 Spanish III – Part A 0.50 11-12

This course involves advanced application of acquired knowledge and skills in the Spanish language. Students will be actively engaged in all four (4) areas of foreign language proficiency: listening, speaking, reading and writing. Students will be expected to demonstrate a working knowledge of all tenses learned to this point as well as tenses learned in Spanish III. Culture is a primary focus at this level. This course is conducted entirely in Spanish. Prerequisite: "C" or better in Spanish II.

0212 Spanish III – Part B 0.50 11-12

Part B is a continuation of knowledge and skills emphasized in Part A. Prerequisite "C" or better in Spanish III – Part A.

0213 French IV – Part A 0.50 12

French IV – Part A is a combined course with French III that runs with a year A/B model. It is a study of francophone communication, cultures, connections, comparisons, and communities that will target all four language skills: listening, speaking, reading, and writing. Emphasis will be placed on expanding the use of the present and past tenses in communication and learning to communicate with the subjunctive, future and conditional. Students will work to expand their communication interpretively, presentationally, and interpersonally on a wide range of topics. The course is conducted primarily in French and the students are expected to communicate in French while in the classroom. It is recommended that students have earned a C or higher in French level III.

0214 French IV – Part B 0.50 12

French IV - Part B is a continuation of knowledge and skills emphasized in Part A. Prerequisite "C" or better in French IV – Part A.

0223 AP Spanish Language and Culture/AP Spanish Literature and Culture 1.0 12

AP Spanish is comparable to an advanced level college Spanish language and literature course. Emphasizing the use of Spanish for active communication, it encompasses aural/oral skills, reading comprehension, grammar, and composition. The course is designed to:

- Help you understand formal and informal Spanish spoken and written by native speakers from a variety of regions,
- Further develop an active vocabulary sufficient for reading authentic materials in Spanish without depending on a dictionary, and
- Express yourself with reasonable fluency by describing, narrating, inquiring, and developing arguments in Spanish, both orally and in writing, using different strategies for different audiences and communicative contexts.

In this course, special emphasis is placed on the use of authentic source materials and the integration of language skills. Therefore, you will listen, read, write, and speak in order to demonstrate understanding of authentic Spanish-language source materials. Students enrolled in this course will be completing both the AP Spanish Language and Culture exam, as well as the AP Spanish Literature and Culture exam, in May.