

# TYRONE AREA HIGH SCHOOL



“Others have seen what is and asked why. I have seen what could be and asked why not.”

Robert F. Kennedy

## 2023-2024 Course Description Guide

02/14/2023

*"It is the policy of the Tyrone Area School District not to discriminate on the basis of sex, handicap, race, and national origin in its educational and vocational programs, activities, or employment, as required by Title IX, Section 504, and Title VI. Please direct any questions about this policy to Superintendent of Schools at 814.684.0710 Ext. 4123."*

TABLE OF CONTENTS		
I.	Graduation Requirements	1-3
II.	Grade Level Requirements	4
III.	Enrollment Requirements	4
IV.	Schedule Changes	4
V.	Honor Roll Criteria	5
VI.	Testing Information	6
VII.	Grading System	7
VIII.	Athletic/Extra Curricular Eligibility Requirements	8
IX.	Post-Secondary Education	9
X.	National Honor Society	9
XI.	NCAA Eligibility	10
XII.	Grade Average Calculations	10
XIII.	Dual Enrollment Program	11
XIV.	<b>Course Descriptions – Required Courses</b>	
	English	13
	Mathematics	17
	Science	21
	Social Studies	25
	Health and Physical Education	27
	Personal Finance	28
	Workplace Readiness	28
	<b>Course Descriptions – Elective Choices</b>	
	Foreign Language	28
	Music	32
	Visual Arts	34
	Advanced Specialized Careers & Technology Training	35
	Agriculture	36
	Business	40
	Carpentry and Design	43
	Health Technology	44
	Metals and Manufacturing	45
	Greater Altoona Career & Technology Center	46
	Applied Nutrition	47
	Café	47
	Channel T Newscaster	47
	Community Outreach	48
	Driver Education	48
	Eagle Yearbook	48
	General Psychology	49
	Health and Resiliency	49
	Life Skills	49
	Peer Tutoring	49
	Math Peer Tutoring	49
	SAT Review: Math & Reading Language	50
	STEP - Teen Parenting	50
	Tyrone Eagle Eye News	50
	Video Production	51
XV.	Customized Learning Program	51

## SCHEDULING GUIDELINES AND ACADEMIC EXPECTATIONS

### **I. Graduation Requirements – Beginning with the Class of 2023**

- A. Successful completion of 25 credits, with a minimum distribution in the following specified content areas:

<b>CLASS OF 2023</b>	<b>CREDIT REQUIREMENTS</b>	<b>GACTC STUDENT REQUIREMENTS</b>
<b>English</b>	<b>4.0</b>	<b>4.0</b>
<b>Mathematics</b>	<b>4.0</b>	<b>3.0</b>
<b>Science</b>	<b>4.0</b>	<b>3.0</b>
<b>Social Studies</b>	<b>4.0</b>	<b>3.0</b>
<b>Personal Finance</b>	<b>0.50</b>	<b>0.50</b>
<b>Workplace Readiness</b>	<b>0.50</b>	<b>0.50</b>
<b>Health</b>	<b>0.50</b>	<b>0.50</b>
<b>Physical Education</b>	<b>2.0</b>	<b>2.0</b>
<b>Electives</b>	<b>5.5</b>	<b>8.5</b>
<b>TOTAL MINIMUM CREDITS REQUIRED</b>	<b>25</b>	<b>25</b>
<b>SENIORS MUST COMPLETE the required 25 CREDITS. to participate in the Commencement program.</b>		
<b>Eligible students are only permitted to schedule a maximum of two study hall periods per year.</b>		

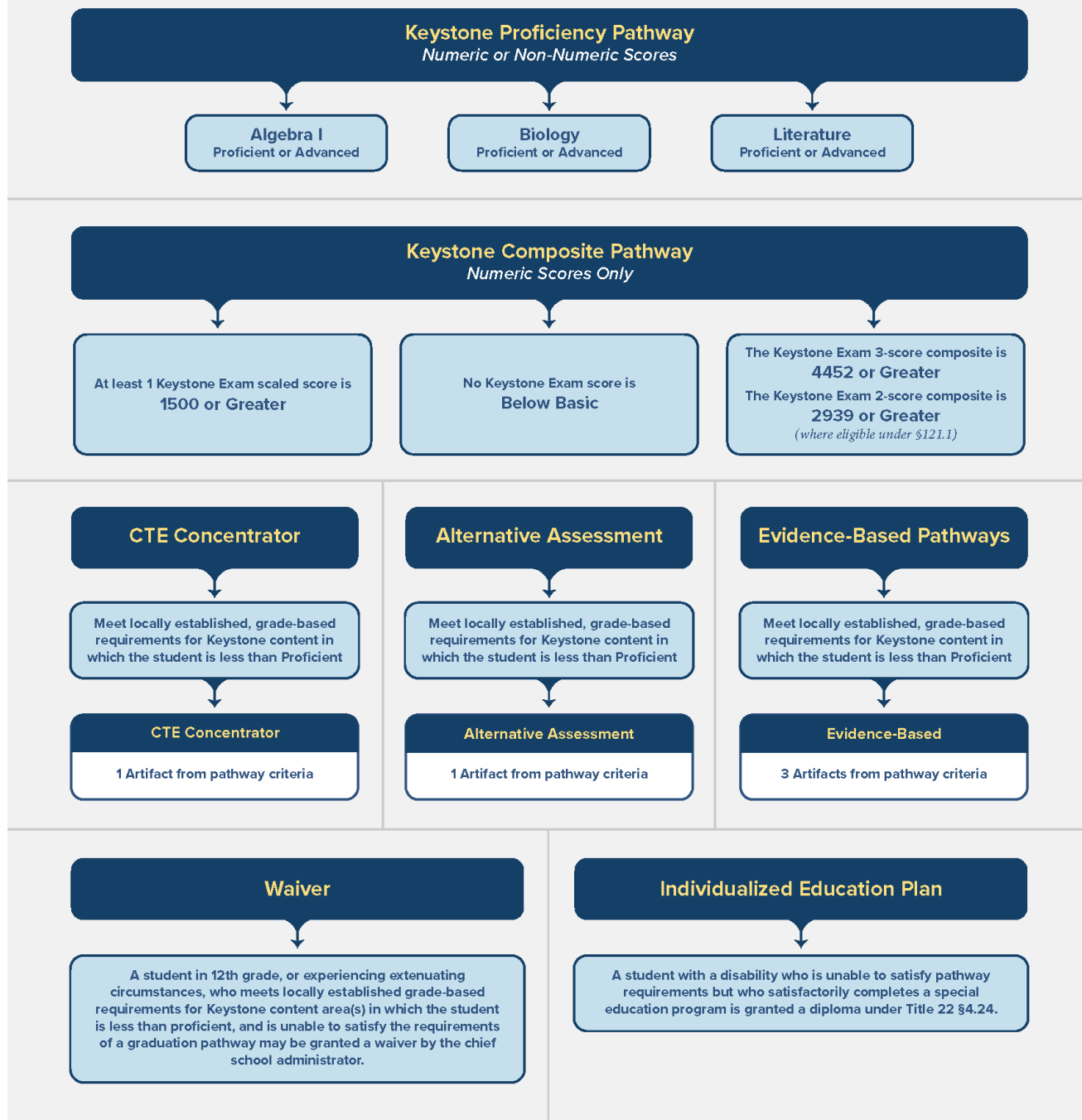
- B. Satisfactory completion of Senior Career Exploration Project
- C. Adherence to the school district attendance policy as described in the Student Handbook.
- D. Community Service Requirement of 15 hours.
- Students can start to accumulate community service hours upon completion of eighth grade. Activities in which students can participate include volunteering time to help others, youth coaching, volunteering with the elderly, helping a neighbor in need, giving blood, as well as numerous other activities not listed here.
  - Any community service class or projects in which the student receives compensation, either monetary or a grading and credit, cannot be used toward the 15 hours requirement.

For each activity, students need to complete a Community Service Form and return it to the high school counseling office. Forms can be obtained in the office or from the high school counseling webpage. The Community Service requirement must be fulfilled by May 1<sup>st</sup> of the senior year for the student to be eligible to participate in graduation ceremonies.

- E. ACT 158 - Graduation Requirements - An Overview of the 5 Pathways to Graduation

**ACT 158 of 2018 provides an outline of five distinct pathways to meet graduation requirements starting with the graduating class of 2023.** All students will begin with Pathway 1 and move down the list until they have reached proficiency. It is important for students to try their hardest for success on the Keystone exams to reach proficiency in the most efficient way.

# Pennsylvania Pathways to Graduation



**NOTE:** Although this infographic displays a sequential progression, students may fulfill criteria under the CTE Concentrator, Alternative Assessment, or Evidence-Based Pathways prior to demonstrating proficiency in Keystone academic content through Keystone Exam scores or locally established grade-based requirements.

# Pathway Criteria

CTE Concentrator	Alternative Assessment	Evidence-Based
1 Artifact	1 Artifact	3 Artifacts consistent w/student goals ONE or more from Section One No more than TWO from Section Two
<p>Industry-based competency certification</p> <hr/> <p>Likelihood of industry-based competency assessment success</p> <hr/> <p>Readiness for continued engagement in CTE Concentrator program of study</p>	<p>Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010)</p> <hr/> <p>Attainment of Gold Level or better on ACT WorkKeys</p> <hr/> <p>Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Successful completion of a pre-apprenticeship program</p> <hr/> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4yr program for college-level coursework</p>	<p><b>Section 1</b></p> <hr/> <p>Attainment of 630 or better on any SAT Subject Test</p> <hr/> <p>Attainment of Silver Level or better on ACT WorkKeys</p> <hr/> <p>Attainment of 3 or better on any AP Exam</p> <hr/> <p>Attainment of 3 or better on any IB Exam</p> <hr/> <p>Successful completion of any concurrent enrollment or postsecondary course</p> <hr/> <p>Industry-recognized credentialization</p> <hr/> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program</p> <hr/> <p><b>Section 2</b></p> <hr/> <p>Attainment of Proficient or Advanced on any Keystone Exam</p> <hr/> <p>Successful completion of a service-learning project</p> <hr/> <p>Letter guaranteeing full-time employment or military enlistment Completion of an internship, externship, or cooperative education program</p> <hr/> <p>Compliance with NCAA Division II academic requirements</p>

**II. Grade Level Requirements** - To be ranked as a:

- 10<sup>th</sup> Grader:** 6 credits must be earned by the end of 9<sup>th</sup> grade.  
**11<sup>th</sup> Grader:** 12 credits must be earned by the end of 10<sup>th</sup> grade.  
**12<sup>th</sup> Grader:** 18 credits must be earned by the end of 11<sup>th</sup> grade.

**III. Enrollment Requirements:**

- A. Due to low enrollment numbers some courses may not be offered. This includes Honors courses, DE courses, DE elective courses, and general elective courses. If a course you chose is not offered, your counselor will select for you from your list of alternatives.
- B. Any student who is enrolled in a summer school course must have the course completed and the official grade/credit information must be received in the HS Counseling office within 5 days of the first day of school.

**IV. SCHEDULE CHANGES:**

**CAREFUL ATTENTION TO COURSE SELECTION IS ABSOLUTELY ESSENTIAL.**

**As part of the course selection process, students will be responsible to return completed course request forms containing a parent approval signature. This completed form will show teacher core course recommendations and student elective choices including alternate elective choices.**

**Mid-year course assignments** made by teachers during the scheduling process **are subject to change** based on the student's final course grade, class performance, and Keystone assessment results. **Parent/Guardian requests to change final course assignments will not be honored.**

**NO CHANGES to course request selections will be accepted after April 30<sup>th</sup>.**

Each student's schedule will be considered complete as of the first day of school, and **there will be NO schedule changes without just cause.** The following are circumstances under which schedule changes may be made after this date:

- A. A student's schedule is incorrect due to:
- An incomplete or incorrect schedule: For example, a missing period, two math assignments, a missing core course, or a computer data entry error.
- B. To meet the requirements of a special program:
- Learning Support
  - English as a Second Language (ESL)
  - Keystone Remediation
  - Workplace Experience, Off-Campus Dual Enrollment or Dual Enrollment in building
  - GACTC
  - College admission requirement

## V. HONOR ROLL CRITERIA

Students will be recognized at the end of each nine-week grading period for outstanding work. The following criteria will be used to determine these honors:

High Honor Roll:       90% - 100% average NGA by marking period  
Honor Roll:             80% - 89% average NGA by marking period

***Regardless of NGA, a student cannot qualify for either honor roll if he/she achieves a grade below 70% in any course.***

- To qualify to wear an Honor Cord at graduation, a student must earn a cumulative 90% average, beginning with 9th grade and continuing through the fourth marking period of the 12th grade year.
- Class rank including the valedictorian and salutatorian will be determined using all grades earned beginning in 9<sup>th</sup> grade and continuing through the fourth marking period of the 12<sup>th</sup> grade year.



## VI. TESTING INFORMATION

The testing program at the high school encompasses a variety of tests which serve several purposes. While some of these tests are mandated, others are administered as a service to students and their families. The following chart provides basic information on these tests.

GRADE LEVEL	TEST	RECOMMENDED TEST WINDOW	DEFINITION OF TEST	PURPOSE
9-11	Keystone Exam	December and/or January	Re-test for students who did not score proficient on the end-of-course exam.	State Proficiency Test
	Keystone Exam	May	End of course exam for any students taking Algebra 1 (if applicable), Biology, or Literature (English 10)	State Proficiency Test
10-12	PSAT	October	Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test	Acquaint students with SAT Material and Testing
	ASVAB	October	Armed Services Vocational Aptitude Battery	Assess student aptitudes
11-12	SAT	Various dates October-June	Scholastic Aptitude Test	College admission evaluation
12	AP Testing	May	Advanced Placement Testing	College placement evaluation
	NOCTI	April	National Occupational Competency Testing Institute	Career & Technical Program Completion Exam

## **VII. GRADING SYSTEM**

**THE FOLLOWING GRADING SYSTEM IS USED IN THE TYRONE AREA HIGH SCHOOL:**

<b>100</b>	<b>99</b>	<b>98</b>	<b>97</b>	<b>A+</b>
<b>96</b>	<b>95</b>	<b>94</b>	<b>93</b>	<b>A</b>
<b>92</b>	<b>91</b>	<b>90</b>		<b>A-</b>
<b>89</b>	<b>88</b>	<b>87</b>		<b>B+</b>
<b>86</b>	<b>85</b>	<b>84</b>	<b>83</b>	<b>B</b>
<b>82</b>	<b>81</b>	<b>80</b>		<b>B-</b>
<b>79</b>	<b>78</b>	<b>77</b>		<b>C+</b>
<b>76</b>	<b>75</b>	<b>74</b>	<b>73</b>	<b>C</b>
<b>72</b>	<b>71</b>	<b>70</b>		<b>C-</b>
<b>69</b>	<b>68</b>	<b>67</b>		<b>D+</b>
<b>66</b>	<b>65</b>	<b>64</b>	<b>63</b>	<b>D</b>
<b>62</b>	<b>61</b>	<b>60</b>		<b>D-</b>
<b>59</b>	<b>And Below</b>			<b>F</b>

MARKING PERIOD GRADES ARE REPORTED BY PERCENTAGES.

## **VIII. ATHLETIC/EXTRA CURRICULAR ELIGIBILITY REQUIREMENTS:**

The Tyrone Area School Board has approved eligibility requirements for participation in extracurricular activities that are not a part of the daily assignments. Students involved in athletics and extra-curricular activities must attend at least a half day of school to participate in the event that evening. Based on the requirements, eligibility is determined as follows:

### **Weekly Eligibility Requirements:**

Teachers report names of students who are failing to the Athletic Office each Thursday.

Students who are failing more than one class are ineligible to participate for the following week. (Sunday through Saturday)

### **Marking Period Requirements:**

- Students must earn a 70% (C-) average during marking periods 1, 2, and 3.
- Students must earn a 70% (C-) cumulative yearly average to participate in fall activities during the subsequent school year.
- Students may have no more than one failing grade.
- Students must pass a minimum of 4.5 credits.
- Students may miss no more than a total of 20 school days during a semester.
- Ineligibility will last for 15 school days which starts the day the report cards are distributed.

PLEASE NOTE that **Weekly Eligibility Requirements** and **Marking Period Eligibility Requirements** are different.

High School students who are enrolled in the following credit-bearing courses may participate in performance-based evening activities:

- Concert Band
- Jazz Band
- Pops Extension
- Concert Choir
- Eagle Yearbook
- Tyrone Eagle Eye Newspaper
- Video Production

Students will only be eligible to participate in those performances which comprise a percentage of their marking period grades. No other after school activities are considered part of a credit-bearing course. Therefore, students must meet policy requirements in order to participate in them.

## IX. POST SECONDARY PREPARATION

Students who plan to continue their formal education following graduation from high school (i.e., attend college, technical school, nursing school, business college, etc.) should realize that entrance requirements vary from institution to institution. Early selection of colleges will be advantageous so that high school courses may be selected to meet entrance requirements. In addition to selection of the subjects required by the different colleges, high scholastic achievement is essential. The student's class rank at the end of the junior year will be included on high school transcripts.

Completion of two years of a laboratory science satisfies most admission requirements for college. Likewise, two years of a foreign language is usually sufficient, although more is preferred. Students preparing for a college program related to science and mathematics should elect additional courses in science and mathematics, and those planning to major in other areas should consider taking the full sequence of a foreign language. Also, without exception, academic chemistry is listed as a basic requirement for entrance into a nursing curriculum. Business administration and engineering programs similarly require strong preparation in mathematics through trigonometry.

### ADMISSION CRITERIA FOR POST SECONDARY EDUCATION MAY INCLUDE:

- Courses Taken/GPA
- Rank in Class
- Application Questions and Essays
- Activities outside the classroom
- SAT Scores
- Counselor/Teacher Recommendations
- Personal Interview (if available)
- Special Talents, Skills, and Interests

## X. NATIONAL HONOR SOCIETY

**Scholarship:** Students who have a cumulative grade point average of 90% standard of excellence meet the scholarship requirement for membership. These students are then eligible for consideration based on service, leadership, and character.

**Service:** This quality is defined through the voluntary contributions made by a student to the school or community, done without compensation and with a positive, courteous, and enthusiastic spirit.

**Leadership:** Student leaders are those who are resourceful, good problem solvers, promoters of school activities, idea-contributors, dependable, and persons who exemplify positive attitudes about life. Leadership experiences can be drawn from school or community activities while working with or for others.

**Character:** Students of good character uphold principles of morality and ethics, are cooperative, demonstrate high standards of honesty and reliability, show courtesy, concern, and respect for others, and generally maintain a good and clean lifestyle.

- Sophomores and juniors are inducted after the third nine weeks of the school year who have earned a 90% (or higher) grade point average during each of the first three marking periods.
- Failure to meet the eligibility criteria for a marking period results in a letter of probation.
- Failure to meet the eligibility criteria for two consecutive marking periods results in permanent loss of membership.

## XI. NCAA ELIGIBILITY

Student-athletes entering grades 9 through 12 should be aware that there are core course credit and grade point average requirements for those who wish to eventually participate in Division I or II collegiate sports. Please contact your School Counselor if you have questions regarding these requirements. More information is also available from the NCAA at <https://web3.ncaa.org/ecwr3/>

## XII. GRADE AVERAGE CALCULATIONS

A Weighted Numeric Grade Average (100-point scale) and a Weighted Grade Point Average (4-point scale) are calculated at the end of every marking period. Averages are generated for both the current marking period and for your entire high school academic history (9th-12th grade). Certain classes, such as classes graded Pass/No Pass (ex: Advisory) and high school courses taken in middle school, are not included in NGA calculations. Class rank, honor roll, and several other awards are based on these averages.

These averages are weighted by the credit value of the course you are taking. A 2-credit course will count twice as much as a 1-credit course. Example: Your reported final grade in a 2-credit course is 90%. When calculating your NGA, that final grade is calculated to be 180%. When dividing to determine your averages, remember to use the total number of credits attempted, not the number of courses you have taken, as the denominator.

The NGA is based on the final grade for the class. For classes that are in-progress, the credit weight is adjusted relative to the percentage of the course you have completed. Example: At the end of marking period 3 you have completed 75% of a year-long, 1 credit course and your report card grade is 89%. As you are  $\frac{3}{4}$  of the way through that course, when calculating your NGA that grade is weighted at .75 credits resulting in a calculated grade of 66.75%

To reflect the increased rigor of advanced courses, when calculating your grade averages a point boost will be added to your grade for all Honors, Dual Enrollment and Advanced Placement courses as follows:

Honors Classes: + (H) 5 points

Dual Enrollment Classes: + (DE) 7 points

Advanced Placement Classes: + (AP) 10 points

The dual enrollment boost is applied irrespective of your payment for college credit for dual enrollment classes. The advanced placement boost is applied irrespective of your participation in the AP test.

The boost is **not** reflected in your final grade as reported on your report card or transcript; rather, it is added in only when calculating your NGA/GPA. Example: You receive a 97% as a final grade in a one credit Honors course. Your reported grade on your report card/transcript is 97%, however, when calculating your NGA/GPA 5 points are added to the final grade resulting in a calculated grade 102% for NGA/GPA calculation.

As some institutions prefer us to report a GPA vs an NGA, we also calculate a weighted GPA by converting your final grades plus any boosts to the 4.0 scale before multiplying by the class credit weight for the overall calculation. Example: You receive an 85% as a final grade in a dual enrollment course. Due to the dual enrollment, your final grade is boosted by 7 points to a 92 and then converted to the 4-point scale resulting in a 3.66 ( $92\% = A^- = 3.66$ ). This value is then weighted by the course credit value for the GPA calculation.

### **XIII. DUAL ENROLLMENT PROGRAM**

1 Credit + (DE)

Tyrone Area High School students are afforded a unique opportunity to take college classes at the high school and/or participating post-secondary institutions. Requirements may vary based on the post-secondary institution.

Eligible students can take college classes to earn credit at both the high school AND the college. In this case, the high school transcript will show the percentage/letter grade and the high school credit earned. Students generally will earn 3.0 college credits (which shows on your college transcript) and 1.0 weighted high school credit per class (which shows on your high school transcript and calculates into your high school GPA – see Section XII).

NOTE: There is no guarantee that your college course credits will transfer to the college you plan to attend after high school. Contact your chosen college's admissions office if you have questions about credits that will transfer.

Tyrone Area High School offers twelve classes, taught by TAHS faculty, for college AND high school credit. The classes are DE Chemistry 2, DE Calculus, DE Statistics, DE United States History 1 & 2, DE Health Technology 3, DE English Composition 1, DE English Composition 2, DE Intro to Geography, DE Intro to Business, DE College Algebra, DE Public Speaking, and DE Introduction to Art History. Class names will appear on the student's high school transcript, along with the weighted grade and credit earned. Students are responsible to pay for the college credits if they wish to earn a college credit for the course.

#### **Student Eligibility for Off-Campus Dual Enrollment:**

##### **Juniata College Requirements:**

- 1) The student is a high school junior or senior.
- 2) The student is making satisfactory progress toward fulfilling high school graduation requirements determined by the Tyrone Area High School based on the following criteria:
  - Seniors must have a minimum of 19.5 high school credits earned; juniors must have 13.0 credits.
  - GPA of 3.0 or higher.
  - Class Rank in top 25% of class.
  - SAT scores of 1140 (Combined)
  - PSAT scores of 1044 or higher.
- 3) The student has scored at least “proficient” on the Keystone exams.
- 4) The student demonstrates readiness for college-level coursework in the intended subject area of study.

##### **University Park Requirements:**

- The student must be a senior to be eligible for Penn State Dual Enrollment. Exceptions will be made for high school juniors on a case-by-case basis.
- Students must submit a copy of their high school transcripts.
- Students must submit a letter of recommendation from a teacher, counselor, or principal.
- It is preferred, but not required, that students submit their standardized test scores such as SAT, ACT,

PSAT, and Keystone Exams.

**Limitations to Enrollment:**

- Enrolling in a college course as a high school student is an honor and a privilege, not a right.
- Colleges may limit the number of college credits high school students can earn during their high school years.
- There is no guarantee that a high school student will be admitted into a college course because of seat count limits and/or the class not fitting into the student's high school schedule.
- There may be pre-requisite limitations for some college classes.

**Registration Procedures:**

- 1) When students complete their high school course selection for the next school year, allow adequate time in your schedule for the college classes that you would take at a college campus. College classes at the high school should not require additional time in your schedule. A typical college class will require additional time for travel, etc.
- 2) Be sure to alert your counselor that you are interested in taking a college class and that your schedule may have to be reviewed and adjusted accordingly.
- 3) Attend the "college course" meeting held by the Guidance Office for students interested in taking college classes. The meeting is held in April or May and will be announced. After the meeting, determine what college classes you wish to take for the next year.
- 4) Go to the college's website to research other courses you may wish to take. Set up an appointment with your high school counselor to discuss your plans and to get help with the process. This is mandatory. ***You cannot register for a college class without meeting with your counselor.***
- 5) Remember... It is the student's responsibility to meet with the counselor in order to register for college classes. Some classes fill up quickly. Students are not guaranteed entry.
- 6) Once you are registered, the college will contact you directly regarding your enrollment status, bill, and notice about orientation.

**Reimbursement for College Courses:**

Parents and students are fully responsible for all tuition and fees associated with college courses.

#### XIV. COURSE DESCRIPTIONS

Administration reserves the right to adjust or waive any or all course prerequisites.

##### KEYSTONE COURSES

All Keystone courses are indicated by the Keystone symbol.



#### ENGLISH DEPARTMENT

Mid-year course assignments made during scheduling are subject to change. To reflect a student's course placement more accurately, course assignments may be reevaluated during the summer based on the student's final course grade, class performance, and their Keystone assessments results. Parent/Guardian requests to change final course assignments will not be honored.

##### ENGLISH 9

1 Credit

English 9 students will be asked to read, write, speak, and listen daily. English 9 students will read and respond to informational texts such as: *The Seven Habits of Highly Effective Teens*, websites, newspaper articles, magazine feature articles, and primary documents. Students will write resumes, cover letters, thank you letters, memoirs, newspaper articles, book/movie reviews, and I-search papers. English 9 students will read and respond to literary texts in a variety of genres including: autobiographical fiction (*A Day No Pigs Would Die*), memoir (*Night*), allegory (*Animal Farm*), Young Adult (*That Was Then, This Is Now*), mystery (*The Accident*), poetry (various), short stories (various), and plays (*Romeo and Juliet*). Students will write literary analysis essays, narratives, and poems. Students will build their knowledge about the world through texts and engage in rich and rigorous evidence-based conversations. Writing will emphasize the use of evidence from the course to inform or make an argument. Students will constantly build a transferable vocabulary needed to access complex texts.

##### HONORS ENGLISH 9

1 Credit + (H)

Honors English 9 is a rigorous and relevant course meant to challenge and engage students as readers, writers, speakers, and listeners. Much like English 9, Honors English 9 students will read, write, speak and listen on a daily basis. Students will read and respond to informational and literary texts (both classic and Young Adult). Students will build their knowledge about the world through texts and engage in rich and rigorous evidence-based conversations. Writing will emphasize the use of evidence from the course to inform or make an argument. Students will consistently build a transferable vocabulary needed to access complex texts. Unlike English 9, Honors 9 students will delve deeper into annotating, analyzing, and evaluating informational and literary texts, as well as exploring the art and craft of writing narratives, informational texts and arguments. Students will be expected to learn 15-20 vocabulary words each week. **Prerequisite:** Honors courses will require students to display strong aptitude in a subject before being allowed to take an honors class in that subject. Placement into this class will be determined by the criteria available: standardized exam scores, placement exam scores if applicable, previous grades in the same subject area, and teacher recommendation. **Because this is an honors course, students will receive an NGA/GPA boost.**



## ENGLISH 10

## Keystone English Literature



1 Credit

In keeping with the standards of the nationally adopted Career & College Readiness Core Curriculum, students' reading strategies and note-taking skills will improve through a selection of the following college-level literary offerings: at least one Shakespearean play; Harper Lee's Pulitzer Prize-winning novel *To Kill a Mockingbird*; *The Old Man and the Sea*, by Nobel Prize winning Ernest Hemingway; popular fiction's *The Five People You Meet in Heaven*; as well as a compilation of short stories from the young adult literature genre. Students will enhance their pre-writing, drafting, editing, and publishing abilities by authoring a diverse collection of college-length informative, persuasive, narrative, poetic, and research compositions, which will hone their writing focus, content, organization, style, and grammatical conventions. In addition to offering opportunities for creative expression, English 10 compositions will prepare students for 10<sup>th</sup> grade Keystone Literature assessments (a TASD graduation exam), college composition courses, and everyday writing opportunities. Students will also study the conventions of film and media by examining effective strategies for media literacy. Vocabulary, spelling, root words, and literary term quizzes will assist students in retaining and applying these skills. Higher level thinking skills will be addressed through individual and group activities. Rigor and relevance will be ensured by differentiating instruction where possible. For example, students may choose from summative artistic representations, historical explorations requiring multiple-source documentation, and in-depth literary analysis. **Prerequisite: Pass English 9.**

## HONORS ENGLISH 10

## Keystone English Literature



1 Credit + (H)

In keeping with the standards of the nationally adopted Career & College Readiness Core Curriculum, this course is designed as a rigorous experience for motivated and advanced students. Honors English 10 encourages participants to examine the broader connections and bigger questions in life and literature. The course is written in multi-genre thematic units exploring complex questions, such as, "What is Identity?" "How does what others think about you influence how you think about yourself?" and "What responsibility do we have to other people?" Along with poems, songs, media, and essays, the novels, *The Five People You Meet in Heaven*, *To Kill a Mockingbird*, and *The Old Man and the Sea* will be part of the content used to reinforce these thematic concepts. Students are expected to write beyond the five-paragraph essay while considering style, syntax, voice, and development of a thesis statement. **Prerequisite: Students with a 90% minimum Honors English 9 grade at the end of semester-1 may be enrolled in Honors English 10. Additionally, any Regular English students in grade 9 with 60 or above combined PSAT CR and WR scores by the end of semester-1 may be enrolled in Honors English the subsequent year as long as their semester-1 Regular English grades meet a 95% minimum. If the total enrollment moving into Honors English 10 is less than 24 by these criteria, Regular English 9 students who meet the 95% grade minimum, ranked by their highest semester-1 English grade, may be enrolled until 24 students are reached. Because this is an honors course, students will receive an NGA/GPA boost.**

## ENGLISH 11

1 Credit

In keeping with the standards of the nationally adopted Career & College Readiness Core Curriculum, students write a host of college-length informative, persuasive, narrative, and poetic compositions that will hone their style, content, organization, focus, and grasp of grammatical conventions. These compositions thoroughly prepare students for college freshman composition courses, for research, and for Pennsylvania Keystone Composition Exams while offering opportunities for creative expression and publication in *Stardust*, the high school literary magazine. Literary offerings include a mixture of classic and popular works. A student favorite, the darkly comic novel *Speak* by Laurie Halse Anderson will lead off our reading. Classics to follow include

*Death of a Salesman*, *The Short Works of Edgar Allan Poe*, *Fahrenheit 451*, plus pieces by Hawthorne, Thoreau, Emerson, Dickinson, Twain, and Hemingway. Students can choose two major works of their own preference, one fiction, and one non-fiction from the acclaimed *Opposing Viewpoints* research series. Tough SAT caliber words appear on quizzes [10 every 2 weeks] that also test common roots, affixes, and SAT/Keystone skills. Grammar and usage instruction in this course is frequent and focused, with emphasis on such conventional skills as subject-verb agreement, pronoun-antecedent agreement and case, sentence fragments, run-on sentences, punctuation, capitalization, and spelling. Instruction on these skills entails regular drill, practice, and repeated application and feedback in compositions. **Prerequisite: Pass English 10.**

## **HONORS ENGLISH 11**

1 Credit +(H)

In keeping with the standards of the nationally adopted CCR Core Curriculum, students write a host of college-length informative, persuasive, narrative, and poetic compositions that will hone their style, content, organization, focus, and grasp of grammatical conventions. These compositions thoroughly prepare students for college freshman composition courses, for research, and for Pennsylvania Keystone Composition Exams while offering opportunities for creative expression and publication in *Stardust*, the high school literary magazine. Literary offerings include a mixture of classic and popular works. A student favorite, the darkly comic novel *Speak* by Laurie Halse Anderson will lead off our reading. Classics to follow include *Death of a Salesman*, *The Short Works of Edgar Allan Poe*, *Fahrenheit 451*, plus pieces by Hawthorne, Thoreau, Emerson, Dickinson, Twain, and Hemingway. Students can choose two major works of their own preference, one fiction, and one non-fiction from the acclaimed *Opposing Viewpoints* research series. Tough SAT caliber words appear on quizzes [50 words every two weeks] that also test SAT skills and Keystone terminology. Grammar and usage instruction in this course is frequent and focused, with emphasis on such conventional skills as subject-verb agreement, pronoun-antecedent agreement and case, sentence fragments, run-on sentences, punctuation, capitalization, and spelling. Instruction on these skills entails regular drill, practice, and repeated application and feedback in compositions. Instruction will be differentiated for more talented and motivated students in a number of ways: Research will demand multiple-source documentation composition scoring and topic selection are more college-like in rigor; literary (versus non-literary) topics are encouraged; classic (versus popular) literature is encouraged; alternative readings by the same author are incorporated; students will be invited to participate in state and national Speech and Writing Competitions. **Prerequisites: Students with a 90% minimum Honors English 10 grade at the end of semester-1 may be enrolled in Honors English 11. Additionally, any Regular English students in grade 10 with 62 or above combined PSAT CR and WR scores by the end of semester-1 may be enrolled in Honors English the subsequent year as long as their semester-1 Regular English grades meet a 95% minimum. Because this is an honors course, students will receive an NGA/GPA boost.**

## **ENGLISH 12**

1 Credit

Students write a host of college-length informative, persuasive, narrative, and poetic compositions that will hone their style, content, organization, focus, and grasp of grammatical conventions. These compositions thoroughly prepare students for college freshman composition courses, technical composition in trade schools, the military, or the world of work. Description, process analysis, cause-effect, narrative, and persuasion are a sampling of the standard college modes and structures practiced, as well as the research paper. Readings will come from college-style thematic anthologies, magazines, newspapers, and British literature anthologies. The modern novel *Monster*, *A Streetcar Named Desire*, and classics like *Hamlet* are explored. Students will study the history, syntax, and etymology of their language as they examine the evolution of prose, poetic, and dramatic literature with a moderate British emphasis. They will ultimately evaluate literature as an art form in terms of universality, originality, accuracy, and imagery. More motivated students are encouraged to write on literary topics whenever possible, to select classics versus popular fiction, and to take SAT Verbal Review as

an elective to develop their reading and writing prowess more fully. For college-bound students, instruction is differentiated to reflect increased rigor in composition, outside-of-class workload, research, and evaluation. **Prerequisite: Pass English 11.**

## **HONORS ENGLISH 12**

1 Credit +(H)

Students write a host of college-length informative, persuasive, narrative, and poetic compositions that will hone their style, content, organization, focus, and grasp of grammatical conventions. These compositions thoroughly prepare students for college freshman composition courses, technical composition in trade schools, the military, or the world of work. Description, process analysis, cause-effect, narrative, and persuasion are a sampling of the standard college modes and structures practiced, as well as the research paper. Readings will come from college-style thematic anthologies, magazines, newspapers, and British literature anthologies. The modern novel *Monster*, *A Streetcar Named Desire*, and classics like *Hamlet* are explored. Students will study the history, syntax, and etymology of their language as they examine the evolution of prose, poetic, and dramatic literature with a moderate British emphasis. They will ultimately evaluate literature as an art form in terms of universality, originality, accuracy, and imagery. More motivated students are encouraged to write on literary topics whenever possible, to select classics versus popular fiction, and to take SAT Verbal Review as an elective to develop their reading and writing prowess more fully. Designed more rigorously for motivated and advanced students, Honors English 12 encourages students to examine the broad connections and big questions in life and literature. Students are expected to write beyond the five-paragraph essay while considering style, syntax, voice, and development of a thesis statement. Students should also expect more work outside of class, involving research and reading. This course is designed to simulate college freshman English in terms of forms of composition, research, and course load. More independent reading and writing will be required. **Prerequisite: Complete English 11. The following criteria will be used to place students in this course. 1. The regular English student with the highest total raw score on the state-administered Keystone Literature Exam administered at the end of the 10<sup>th</sup> grade year may be enrolled in Honors English 12. 2. Current Honors English students must maintain a 90% course grade average to guarantee their placement in Honors. If fewer than 30 students meet the admission standards, the Regular English student with the next highest GPA and Keystone Literature Exam test scores will be admitted alternately until a total of 30 students is reached. Because this is an honors course, students will receive an NGA/GPA boost.**

## **DE ENGLISH COMPOSITION 1**

Grades 11 and 12 1Credit +(DE)

This semester elective course emphasizes the techniques of writing expository essays with stress upon careful thinking, word choice, sentence structure, and methods of organization. Students practice the writing of clear, coherent, and unified paragraphs and essays. Editing skills and the use of correct grammar and mechanics are also emphasized. Students are taught research and documentation skills and are required to write an argumentative research paper. **Prerequisite: Students must pass a qualifying examination. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

## **DE ENGLISH COMPOSITION 2/STUDIES IN LITERATURE**

Grades 11 & 12 1 Credit +(DE)

This semester elective course emphasizes the study of literary terms and techniques frequently used in literature. This course introduces students to major themes found in fiction, poetry, and drama. Students are required to read various types of literature and must be able to respond to their readings in well-developed essays and in an analytical research paper, as well as to participate in class discussions. **Prerequisite: 90% or above GPA or Principal / Teacher recommendation. This course is offered as a Dual Enrollment course with a boost**

to your NGA/GPA calculation (see Section XII). **Prerequisite:** Successful completion of DE English Composition 1. Successful completion of this course may replace English 12 only.

### **LANGUAGE AND LITERACY – GRADE 9**

Grade 9

1 Credit

Enrollment in this course will be based on teacher recommendation, results from the 8<sup>th</sup> grade PSSA test, and individual screening of students' reading skills. Course content will include literacy skill development incorporated through direct instruction as well as reading short stories and novels. **Prerequisite: Teacher Recommendation**

### **LANGUAGE AND LITERACY**

Grades 9, 10, 11 & 12

1 Credit

Students will expand their vocabulary through the use of figurative context clues and figurative language. Students will improve their reading fluency and comprehension through various reading exercises. **Prerequisite: Teacher Recommendation**

### **LIFE SKILLS WRITING**

Grades 9, 10, 11 & 12

1 Credit

Students will express their thoughts through various types of writing and activities, including typing skills. Students will also work on grammar, punctuation, spelling, and writing formats. **Prerequisite: Teacher Recommendation**

## **MATHEMATICS DEPARTMENT**

Mid-year course assignments made during scheduling are subject to change. To reflect a student's course placement more accurately, course assignments may be reevaluated during the summer based on the student's final course grade, class performance, and their Keystone Assessments results. Student pathways may also differ based on teacher recommendation and Keystone Assessment results. Parent/Guardian requests to change final course assignments will not be honored.

### **ALGEBRA 1**

**Keystone**



Grades 10, 11, and 12

1 Credit

Basics of algebra: properties and operations of real numbers; extension of numbers to rational numbers; evaluation of algebraic expressions, algebraic symbols, terms and expressions; variables in solving word problems; solving open numbers sentences in one variable; factoring, properties of plane and solid figures. This is a double period course. **Prerequisite: Pre-Algebra. Teachers select students for this course and teacher recommendation is required.**

### **ACADEMIC ALGEBRA 1**

**Keystone**



Grades 9, 10 and 11

1 Credit

Basics of algebra; algebraic symbols, terms and expressions; use of variables in solving word problems; solving open number sentences in one variable; extension of numbers to rational numbers. This is a double period course. **Prerequisite: Pre-Algebra. Teacher selects students for this course and teacher**

recommendation is required.

### ADVANCED ALGEBRA 1

Keystone



Grade 9

1 Credit

Basics of algebra; algebraic symbols, terms and expressions; use of variables in solving word problems; solving open number sentences in one variable; extension of numbers to rational numbers. This is a single period course. **Prerequisite:** Students who passed Algebra 1 in 8<sup>th</sup> grade but did not score proficient on the Keystone Algebra 1. Teacher selects students for this course and teacher recommendation is required.

### ALGEBRA APPLICATIONS

Grades 9, 10 and 11

1 Credit

A study of math concepts tested on the Keystone Algebra 1 exam; aligned with the Math Anchors and Eligible Content. Material includes practice exercises to prepare for Keystone Algebra 1 exam. **Prerequisite:** Student has taken Pre-Algebra in Grade 9 or 10. Teacher selects students for this course and teacher recommendation is required.

### ALGEBRA 2

Grades 10, 11, and 12

1 Credit

Course includes solving linear equations and inequalities; graphing functions; real number system; factoring; systems of equations; logarithms; trigonometric functions; and geometric theorems. **Prerequisite:** Geometry or Algebra 1. Teachers select students for this course and teacher recommendation is required.

### ACADEMIC ALGEBRA 2

Grades 9, 10, 11, and 12

1 Credit

Course includes solving linear equations and inequalities; graphing functions; real number system; factoring; systems of equations; logarithms; trigonometric functions; and geometric theorems. **Prerequisite:** Geometry. Teacher selects students for course and teacher recommendation is required.

### HONORS ALGEBRA 2

Grades 9, 10 and 11

1 Credit + (H)

Honors Algebra 2 continues the study of advanced algebraic concepts including functions, polynomials, rational expressions, and systems of functions and inequalities. Students will be expected to describe and translate among graphic, algebraic, and numeric representations of relations and use those representations to solve problems. Honors Algebra 2 is intended to be more challenging than academic courses and provide multiple opportunities for students to take greater responsibility for their learning. Honors Algebra 2 is distinguished by a difference in the quality of the work expected rather than merely by the quantity of the work required. Assignments and assessments will be more challenging, more in depth, and require a greater use of higher-level thinking skills, with less scaffolding. **Prerequisite:** Academic or Honors Geometry. In addition, students must have a proficient or advanced score on the Keystone Algebra 1 exam. Teacher selects students for this course and teacher recommendation is required. This course requires a serious time commitment. Because this is an honors course, students will receive an NGA/GPA boost.

## DE COLLEGE ALGEBRA

Grade 11 or 12

1 credit+ (DE)

Students enrolled in this course should have a strong background in basic and intermediate Algebra. Topics include a more in-depth study of expressions, solving equations, solving inequalities, circles, and a detailed study of functions including polynomial, logarithmic, and exponential functions. **Prerequisite: Algebra II and pass the Penn Highlands entrance exam. 90% or above GPA or Principal/Teacher recommendation. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

## DE CALCULUS

Grades 11 and 12

1 Credit + (DE)

Algebra, geometry, logic, analytic geometry, and trigonometry are intensively used to provide necessary structure for the study of the theory and application of calculus. Calculus involves the study of limits, derivatives, and integration. This course is a college level calculus course and requires a serious time commitment. This course is for strong math students who are willing to learn new and abstract topics and will require extra time and effort. Assignments and assessments will be more challenging, more in depth, and require a greater use of higher-level thinking skills, with less scaffolding. This course may be taken concurrently with Statistics or DE Statistics. This course is offered as a dual enrollment course. **Prerequisite: Pre-Calculus or Honors Pre-Calculus. Teacher selects students for this course and teacher recommendation is required. Students will be required to complete a review packet over the summer in preparation for the beginning of the school year. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

## CONSUMER MATH

Grade 12

1 Credit

This is a study of mathematic applications for consumers. Emphasis is on math in the home and workplace. Topics include income earnings, taxes, insurance, buying and selling techniques, saving, and checking accounts, and other career-oriented topics. This course is **NOT** open to students who have completed Academic Geometry, Algebra 2, Academic Algebra 2, Pre-Calculus, Honors Pre-Calculus, or DE Calculus. **Teacher selects students for this course and teacher recommendation is required.**

## GEOMETRY

Grades 10, 11, and 12

1 Credit

Course will explore thinking techniques through inductive and deductive reasoning. Topics covered include similarity, congruence, plane and solid theorems, and relationships between them; lines, planes, polygons, circles, spheres, and other three-dimensional figures will be used for representing and solving a variety of problems. Prerequisite: Algebra 1. Teacher selects students for this course and teacher recommendation is required.

## ACADEMIC GEOMETRY

Grades 9, 10, 11, and 12

1 Credit

Course will explore abstract and logical thinking through inductive and deductive reasoning. Lines, planes, polygons, circles, spheres, and other three-dimensional figures will be used for representing and solving a variety of problems. Topics also covered include two-column, paragraph, and flowchart proofs to organize their steps and prove similarity, congruence, theorems, and other relationships. This course will help you understand how all fields of mathematics are intertwined and how they depend on each other. **Prerequisite: Algebra 1. Teacher selects students for this course and teacher recommendation is required.**



## **HONORS ANALYTIC GEOMETRY**

Grades 9 and 10

1 Credit + (H)

Honors Analytic Geometry explores the relationships, measurements, and properties of one, two, and three-dimensional objects, including triangles, quadrilaterals, and circles. Honors Analytic Geometry is intended to be more challenging than academic courses and provide multiple opportunities for students to take greater responsibility for their learning. This emphasizes the further development of skills, techniques, and connections to geometry concepts. This course teaches how to think logically, problem solve, and use critical thinking skills in real life situations. Honors Analytic Geometry is distinguished by a difference in the quality of the work expected rather than merely by the quantity of the work required. Assignments and assessments will be more challenging, more in depth, and require a greater use of higher-level thinking skills, with less scaffolding.

**Prerequisite: Academic Algebra 1. Teacher selects students for this course and teacher recommendation is required. This course requires a serious time commitment. This course is offered as an Honors course with a boost to your NGA/GPA calculation (see Section XII).**

## **LIFE SKILLS MATH**

Grades 9, 10, 11 & 12

1 Credit

Students will expand on functional math and real-world, problem-solving skills. This class will learn new math skills with repeated practices and with constant review on skills needed every day. This class focuses on everyday math such as addition, subtraction, multiplication, division, telling time, and using money in various ways. **Prerequisite: Teacher Recommendation.**

## **PRE-ALGEBRA**

Grades 9, 10 and 11

1 Credit

Course includes operations on whole numbers, fractions, and decimals, variables, number theory, graphing, probability, exponents, linear and solid measurement, and real numbers. **Prerequisite: Teacher selects students for this course and teacher recommendation is required.**

## **PRECALCULUS with Trigonometry**

Grades 10, 11, and 12

1 Credit

Analysis of functions: polynomial, rational, exponential, logarithmic, trigonometric, and logistic with emphasis on transformations that assist graphing without a grapher. Topics from applied trigonometry include right triangle trigonometry, law of sines/cosines, circular functions, sinusoids. **Prerequisite: Algebra 2, Academic Algebra 2, Honors Algebra 2. Teacher selects students for this course and teacher recommendation is required. This course may be taken concurrently with Statistics.**

## **HONORS PRECALCULUS with Trigonometry**

Grades 10, 11, 12

1 Credit + (H)

Honors Pre-Calculus is a study of trigonometric applications, linear algebra, logic, analysis of functions: polynomials, trigonometric, and logarithmic and their graphs, and the use of graphing calculators. Honors Pre-Calculus is intended to be more challenging than academic courses and provide multiple opportunities for students to take greater responsibility for their learning. Honors Pre-Calculus is distinguished by a difference in the quality of the work expected rather than merely by the quantity of the work required. Assignments and assessments will be more challenging, more in depth, and require a greater use of higher-level thinking skills, with less scaffolding. The course is a preparation for Calculus with Analytic Geometry. **Prerequisite: Academic or Honors Algebra 2. Teacher selects students for this course and teacher recommendation**

is required. This course requires a serious time commitment. Because this is an honors course, students will receive an NGA/GPA boost.

### **STATISTICS**

Grade 12

1 Credit

Course concentrates on graphical and numerical methods for analyzing data: Probability and probability distributions, normal distribution, sampling, hypothesis testing, linear correlation and regression, and chi-square distribution. This course is NOT offered as a dual enrollment course. **Prerequisite: Algebra 2, Academic Algebra 2, Honors Algebra 2. This course may be taken concurrently with Calculus, Pre-Calculus or Trigonometry. Teacher selects students for this course and teacher recommendation is required.**

### **DE STATISTICS**

Grades 11 and 12

1 Credit + (DE)

DE Statistics is a college level statistics course and requires a serious time commitment. Students will develop analytical and critical thinking skills as they learn to describe 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. This course is for students who are strong in mathematical computations and reasoning and reading comprehension. This course will require extra time and effort. Assignments and assessments will be more challenging, more in depth, and require a greater use of higher-level thinking skills, with less scaffolding. This course is offered as a dual enrollment course. **Prerequisite: Pre-Calculus or Honors Pre-Calculus. This course may be taken concurrently with Trigonometry or DE Calculus. Teacher selects students for this course and teacher recommendation is required. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

### **TRIGONOMETRY**

Grade 11 and 12

1 Credit

This course covers right triangle trigonometry, applications of the law of sines/cosines, circular functions, solving trigonometric equations, identities, analysis of trigonometric functions, graphing, and topics from applied trigonometry. **Prerequisite: This course may be taken concurrently with Pre-Calculus, Honors Pre-Calculus, Honors Calculus, or Statistics. Teacher selects students for this course and teacher recommendation is required.**

## **SCIENCE DEPARTMENT**

Mid-year course assignments made during scheduling are subject to change. To reflect a student's course placement more accurately, course assignments may be reevaluated during the summer based on the student's final course grade, class performance, and their Keystone assessments results. Parent/Guardian requests to change final course assignments will not be honored.



## AGMO (ASTRONOMY, GEOLOGY, METEOROLOGY AND OCEANOGRAPHY)

Grades 11 and 12

1 Credit

In addition to the basics of the four disciplines of earth science, students are encouraged to investigate the practical fields of energy, conservation, and job possibilities. A Biology prerequisite will be required. This course is recommended for college-bound students.

**Astronomy** - The student will be introduced to the basics of Astronomy with concentration on the place of man in the universe.

**Geology** - Historical and structural geology will help the student investigate the earth upon which he lives. Rocks, minerals, stratigraphy, and other geologic concepts will be covered in this quarter.

**Oceanography** - The earth's oceans, 4/5's of the earth's surface, will be investigated with emphasis on understanding how they affect man and his environment.

**Meteorology** – The ocean of air surrounding man will be the subject of intense investigation. Establishing a foundation for weather prediction will be emphasized.

## ANATOMY/PHYSIOLOGY

Grade 12

1 Credit

This course is for students who have successfully completed Biology. Anatomy focuses on the human anatomy covering the structures of major systems of the body. It also covers some fundamental biochemistry within the function of each system. This course is recommended for college-bound students heading for a medical profession. **Students signing up for this course are REQUIRED to dissect preserved organisms; you must agree to participate in this dissection.** Physiology is a detailed study of the major systems of the human body, in reference to their function, operation, and relation to each other. Emphasis is placed on diseases which occur when these systems malfunction. **Prerequisite: Successful completion of a biology course and successful completion or enrollment in a chemistry course. Students who are planning a career in medicine and do not meet the prerequisites must obtain teacher approval to take the course. Teacher recommendation required.**

## ADVANCED LIFE SCIENCE

Grade 9

1 Credit

Advanced Life Science will cover the basic biology concepts. This will be a stepping stone to 10th grade biology. Areas that will be covered in this class are: The scientific method, the study of the cell and the organelles, DNA and protein synthesis, meiosis and mitosis, basic genetics, natural selection, and nutrition along with various other biological related materials. **Prerequisite: Teacher recommendation required. Students are recommended to this course by 8<sup>th</sup> grade science teacher.**

## BIOLOGY

Keystone



Grades 10, 11, and 12 1 Credit

This course will provide students with a basic overview of the major themes of biology and science process skills. Special emphasis will be placed on biochemistry, cells, energy transfer, genetics, natural selection, and ecology. The pacing and rigor of this course is ideal for a student looking to attend a technical school after high school. **Prerequisite: Completion of Earth and Space Science and Teacher recommendation.**



## ACADEMIC BIOLOGY

Keystone

Grades 10, 11, and 12 1 Credit

This course will provide students with an in-depth study of the major themes of biology and science process skills. Special emphasis will be placed on biochemistry, cells, energy transfer, genetics, natural selection, and ecology. The pacing and rigor of this course is ideal for a student looking to attend a college or university after high school. **Prerequisite: Teacher recommendation required.**

## HONORS BIOLOGY

Keystone



Grade 10

1 Credit + (H)

This course will provide students with an in-depth study of the major themes of biology and science process skills. Special emphasis will be placed on biochemistry, cells, energy transfer, genetics, natural selection, and ecology. The pacing and rigor of this course is ideal for a student who has the ability and work ethic to master advanced work. This class is ideal for a student looking to attend a college or university in a science-related field. **Prerequisite: Teacher recommendation. Because this is an honors course, students will receive an NGA/GPA boost.**

## CHEMISTRY

Grades 11 and 12 1 Credit

This course provides students with the opportunity to study chemistry as it affects them and the environment in which they live. Topics covered include the uses of water, water quality, identifying gases, use of gases, the gases of the atmosphere, atomic structure, and periodic table, balancing equations, organic chemistry introduction and radioactive decay. **Prerequisite: Successful completion of a biology course and teacher recommendation.**

## ACADEMIC CHEMISTRY

Grades 10, 11, and 12 1 Credit

This course is an introductory theory course that includes the following concepts and principles: atomic structure, bonding, physical states of matter, thermodynamics, chemical kinetics, chemical equilibrium, gases, acids and bases, the balancing of equations, and basic stoichiometry. **Prerequisite: Enrollment in, or successful completion of, Algebra 1 or Academic Algebra 1 and Teacher Recommendation.**

## HONORS CHEMISTRY

Grades 11 and 12 1 Credit + (H)

This course is a fast-paced theory course that includes learning the following concepts and principles of chemistry: atomic structure, bonding, physical states of matter, thermodynamics, chemical kinetics, chemical equilibrium, gases, acids and bases, the balancing of equations, and basic stoichiometry. The pacing and rigor of the curriculum is ideal for a student who has the ability and work ethic to master advanced concepts. This class is ideal for students who plan to take DE Chemistry 2 in the future or who plan to attend college in a science-related field. **Prerequisite: Successful completion of Algebra 1 and recommendation from Biology teacher. Because this is an honors course, students will receive an NGA/GPA boost.**

## DE CHEMISTRY 2

Grades 11 and 12 1 Credit + (DE)

This course is for students who have completed Biology and Academic Chemistry. It is a continuation of the concepts offered in inorganic Academic Chemistry, as well as an introduction to Organic Chemistry. Advanced

technology will be utilized in most of the laboratory activities. This course is recommended for college-bound students interested in a medical, pharmaceutical, or chemical career, or students interested in Chemistry in general. **This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

### **EARTH AND SPACE SCIENCE**

Grade 9

1 Credit

Using the four disciplines of astronomy, geology, meteorology, and oceanography, this class introduces students to the universe in which they live and the processes of nature which affect their lives. In-depth study of many of those processes will help the students understand their place in the scheme of things.

### **HONORS EARTH AND SPACE SCIENCE**

Grade 9

1 Credit + (H)

A focus on the four disciplines of Earth and Space Science which includes Geology, Meteorology, Astronomy, and Oceanography. Special Emphasis is placed on the concepts/processes involved in each of the four disciplines. Project-based learning and hands-on activities along with lectures. Creation of a science scrapbook in addition to scientific readings above and beyond the general Earth Science course is required. **Prerequisite: Honors courses require students to display strong aptitude in a subject before being allowed to take an honor class in the subject. Placement into this class will be determined by the criteria available: standardized exam scores, placement exam scores if applicable, previous grades in the same subject area, and teacher recommendation. Because this is an honors course, students will receive an NGA/GPA boost.**

### **PHYSICS**

Grades 11 and 12

1 Credit

This course is an academic introductory theory course. Students will use a problem-solving method to study the properties of the physical world. Problem solving skills will be enhanced by hands-on labs related to the theory covered. Topics covered include kinematics, projectile motion, Newton's Laws, momentum, friction, equilibrium, rotational motion, energy, electricity, light, and optics. **Prerequisite: Completion of Geometry or enrollment in Algebra 2 or Academic Algebra 2 and teacher recommendation.**

### **HONORS PHYSICS II**

Grade 12

1 Credit + (H)

Honors Physics C, Electricity and Magnetism, is a calculus-based physics course principally taught to students who plan to major in physics, astronomy, mathematics, or any type of engineering. The topics covered include electrostatics, conductors, capacitors, electrostatics, magnetism, and electromagnetism. **Prerequisite: Completion of physics and teacher recommendation. Because this is an honors course, students will receive an NGA/GPA boost.**

### **MICROBIOLOGY**

Grades 11 and 12 1 Credit + (H)

Microbiology is for students who have successfully completed Honors or Academic Biology. This course is a study of the fundamentals of microbiology and cellular biology, with emphasis on the principles of disease, immunology, food pathogens, and laboratory techniques as needed in the medical field. **Prerequisite: Successful completion of Honors or Academic Biology course. Teacher recommendation is required. Because this is an honors-weighted course, students will receive an NGA/GPA boost.**

## **PRINCIPLES OF TECHNOLOGY**

Grades 11 and 12

1 Credit

This course is a physical science course for 11th or 12th grade students. This course is designed for students going into career and technical programs or participating in career and technical programs. It incorporates hands-on hardware labs, and math skills labs. Mechanical, fluid, electrical, and thermal systems are explored. Students will discuss the effects of rapid technological change within the physical sciences.

## **SOCIAL STUDIES DEPARTMENT**

Mid-year course assignments made during scheduling are subject to change. To reflect a student's course placement more accurately, course assignments may be reevaluated during the summer based on the student's final course grade, class performance, and their Keystone assessments results. Parent/Guardian requests to change final course assignments will not be honored.

## **DE US HISTORY 1 & 2**

Grades 11 and 12

1 Credit + (DE)

This course is offered through Mt. Aloysius College. Students who earn a C or higher will earn 3 college credits. It can be taken in place of World Cultures or Economics/World Geography. The course will focus on the history of the United States through Reconstruction, the Gilded Age, Western Expansion, the World Wars, the Great Depression, the Cold War, the culture, and major events of the 1950s-1990s, and America's leadership role as the sole superpower today. Major events will be introduced and analyzed along with political, economic, social, and cultural challenges that faced America. In addition, the roles of Native Americans, African Americans, immigrant cultures and women will be explored in sections of the course. Great emphasis is put on analysis of primary documents. Students are required to complete a 4-5 page research paper on an assigned theme. **Prerequisite: 90% or above GPA or Principal / Teacher recommendation. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

## **ECONOMICS/HUMAN GEOGRAPHY**

Grade 12

1 Credit

This course blends both Economics and Human Geography. Our world today is interconnected through our economic needs, cross cultural influences, technology, environmental problems, political concerns, and religious interests. Economics is the scientific study of the choices made by individuals and societies in regard to the alternative uses of scarce resources which are employed to satisfy wants. Geographers study our relationships with the earth and how we use the earth to live, work, move, and play. This course will examine our relationships to one another and to our planet. One half of the year we will study Economics. We will use both a Junior Achievement textbook and we will create and run the JA Company Program, a student-run business. Students will operate their business to make a profit and all students will share in the profits, based upon job performance, with an actual paycheck at the conclusion of the business. The second half of the year will focus on Human Geography. Students will learn how to make their own reading notes. We will use the textbook to learn the overall concepts and listen to international radio stories as told by reporters from all corners of the globe, as we gather international perspectives and as we learn about our world today. **Prerequisite: Pass 11th grade history course and teacher recommendation.**

## DE INTRO TO GEOGRAPHY

Grades 12

1 Credit + (DE)

Do you want to better understand why there is so much conflict in the world today? Are you interested in knowing why we do what we do? This course is an introduction to the basic concepts found in physical and cultural geography. Characteristics such as our environment, land, language, religion, economics, population, urbanization, and natural identity of our world's different regions will be examined through various geopolitical perspectives of our global community. We will explore the challenges facing mankind and search for a better understanding of the world around us today. **Prerequisite: 90% or above GPA or Principal / Teacher recommendation. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

## HONORS US CIVICS

Grade 10

1 Credit + (H)

This Civics class is designed for motivated college-bound students. Like the regular Civics class, it covers the foundations of U.S. government, the U.S. Constitution, political parties, voting and voting behavior, the electoral process, the media and public opinion, interest groups, the three branches of U.S. government, civil rights and responsibilities, and current events. Students will be required to take the US Naturalization and Citizenship test as their midterm examination. Students who score perfect on the exam will be awarded a certificate developed by the state Department of Education. **Prerequisite: Teacher Recommendation. Must have an A average in 9<sup>th</sup> grade U.S. History, must successfully complete all major assignments, and must demonstrate advanced skills in classwork. Because this is an honors course, students will receive an NGA/GPA boost.**

## HONORS US HISTORY 2

Grade 9

1 Credit+ (H)

This course is designed for motivated college-bound students. This course will inform students of the people, events, places, and theories that have shaped our nation in the last 90 years. After a quick review of the late 1800s and early 1900s, this course begins with the 1920s and ends with the present. Honors students must complete several larger primary document-based assignments, read 2 historical novels outside class, and complete journal assignments and an essay for each novel. **Prerequisite:** Placement into this class will be determined by the criteria available: standardized exam scores, placement exam scores if applicable, previous grades in the same subject area, and teacher recommendation. **Because this is an honors course, students will receive an NGA/GPA boost.**

## HONORS WORLD CULTURES

Grade 11

1 Credit+ (H)

This course is designed for motivated college-bound students. It takes as its field of study selected non-U.S. areas of the world. The course is designed to expose students to many different cultures with emphasis on examining perspectives other than their own. Within each cultural region, students will study population patterns, history and government, cultures and lifestyles, life there today, and people and their environment. The tolerance of the ideas of others as well as an understanding of the problems of contemporary social issues being studied will be a major goal of the course. This course will cover the same global areas as regular World Cultures but will require students to study the material in more depth. We will be looking at a variety of human rights issues and holding class discussions to discover what can be learned from these situations as we develop our own critical thinking skills. **Prerequisite: Teacher Recommendation. Must have an A average in 10<sup>th</sup> grade Civics, must successfully complete all major assignments, and must demonstrate advanced skills in classwork. Because this is an honors course, students will receive an**

**NGA/GPA boost.**

### **US CIVICS**

Grade 10

1 Credit

This course is designed to help students become better informed and responsible citizens. It will cover the foundations of U.S. government, the U.S. Constitution, political parties, voting and voting behavior, the electoral process, the media and public opinion, interest groups, the three branches of U.S. government, civil rights and responsibilities, and current events. Students will be required to take the US Naturalization and Citizenship test as their midterm examination. Students who score perfect on the exam will be awarded a certificate developed by the state Department of Education. **Prerequisite: Pass 9<sup>th</sup> grade history course and teacher recommendation.**

### **US HISTORY 2**

Grade 9

1 Credit

This course will inform students of the people, events, places, and theories that have shaped our nation in the last 90 years. After a quick review of the late 1800s and early 1900s, this course begins with the 1920s and ends with the present. Analysis of primary documents is emphasized in each chapter. **Prerequisite: Pass 8<sup>th</sup> grade U.S. History I and teacher recommendation.**

### **WORLD CULTURES**

Grade 11

1 Credit

World Cultures takes as its field of study selected non-US areas of the world. The course is designed to expose students to many different cultures with emphasis on examining perspectives other than their own. Within each cultural region students will study population patterns, history and government, cultures and lifestyles, life there today, and people and their environment. The tolerance of the ideas of others as well as an understanding of the problems of contemporary social issues being studied will be a major goal of the course. **Prerequisite: Pass 10<sup>th</sup> grade history course and teacher recommendation.**

## **HEALTH AND PHYSICAL EDUCATION DEPARTMENT**

### **HEALTH**

Grade 9 (10, 11, 12 for graduation requirement)

.50 Credit

The health program is a comprehensive course stressing the physiological and social development of the whole individual which includes physical, social, and emotional health. Topics include defining health from a holistic perspective, influences on health (including health risks), goal setting and action planning, stress management, peer and family relationships, conflict resolution, body systems, sexuality and reproduction, nutrition and eating disorders, and the interrelationships that exist within the body between each of the components of health and wellness. The emphasis on health education is about giving necessary guidance and direction to allow each individual to develop a set of values about health unique to him or her.

### **PHYSICAL EDUCATION**

Grades 9, 10, 11, and 12

.50 Credit

This course is designed to emphasize lifelong leisure-time activities, individual and team sports. All students are encouraged to make healthy decisions to create and maintain a high level of physical fitness to meet the demands of everyday living. Participation and proper dress are mandatory for all physical education students.

**All students must successfully complete this course each year. A medical excuse signed by doctor or surgeon is necessary to exempt a student from class activity.**

**Expectations for appropriate dress:** Appropriate athletic clothing for physical education is as follows:

T-shirt must hang below the waistline when arms are raised above head. T-shirt may not have any offensive graphics or language.

Athletic pull-on shorts worn near the waist (so underwear and backside are covered). The hem of the shorts must be mid-thigh length. No buttons, zippers, snaps, or Velcro are permitted on athletic clothing. Sweatpants or athletic pants can be worn for class.

Athletic shoes (sneakers) that are appropriate, non-marring of gym floor, laced and tied on the foot to provide firm support of the feet are required. Unacceptable footwear includes boots, slippers, flip-flops, Crocs, dress shoes, or slip-on shoes.

In cold weather students should wear warm clothing for classes held outdoors such as sweatpants and sweatshirts.

## **BUSINESS DEPARTMENT**

### **PERSONAL FINANCE**

Grades 9, 10, 11, and 12 .50 Credit

\*\*Graduation requirement

You probably never thought you would need help figuring out how to spend your money – but there is much more to handling your money than just spending it. In this course, you will learn how to plan and save for things to make the most of the money you have. You will also learn how to invest, use credit, and keep your money safe. This course is designed to teach you lessons that will benefit you for the rest of your life.

### **WORKPLACE READINESS**

Grades 10, 11, and 12 .50 Credit

\*\*Graduation requirement

The purpose of this class is to give all students, who plan to work at some point in their lives, a firm foundation regarding how to apply for a job, conduct a successful job interview, and grow in a chosen job/career. This course will also give students a solid foundation to prepare for work and life through career planning, personal money management, and independent living techniques. Workplace Readiness is an investment in your personal and professional future.

## **XIV. COURSE DESCRIPTIONS – ELECTIVES**

### **FOREIGN LANGUAGE**

**All students interested in scheduling an on-line foreign language must meet with the Guidance Counselor to review the rigors of on-line foreign language courses. A parent signed permission form to take on-line languages will also be required.** Foreign language on-line choices are limited to French, German, Latin, or American Sign Language.



**ON-LINE AMERICAN SIGN LANGUAGE 1**

Grades 9, 10, 11, and 12

1 Credit

American Sign Language 1 is designed to introduce learners to the unique characteristics of a visual language. This is not a class about ASL; it is a class in ASL. Learners will be guided through engaging activities and interactions using signs, facial expressions, gestures, and body language to communicate about authentic and relevant everyday topics. Learners will also explore elements of Deaf culture and the ways in which language and culture interact to shape each other. This exploration will allow learners to reexamine spoken languages, including their own, and the ways in which their cultural experiences have been shaped by language. Throughout, learners will be challenged to reconsider their understanding of ability/disability as they experience a whole new means of communication. Because of the visual nature of ASL and the interactive nature of this course, camera use is required. **Prerequisite: English Teacher's approval and an 80% or above in English class.**

**ON-LINE AMERICAN SIGN LANGUAGE 2**

Grades 9, 10, 11, and 12

1 Credit

In American Sign Language 2, learners will build on the basic skills developed in ASL 1 to communicate more complex and abstract concepts. Learners will continue to develop their understanding of the ways in which a visual language differs from a spoken one by beginning to convey more visual messages themselves. Elements of Deaf culture will be interwoven in all aspects of the course and learners will have specific opportunities to communicate with Deaf individuals using their developing skills. By the end of the course, learners will be able to engage in an authentic conversation with someone they do not know using ASL exclusively. Because of the visual nature of ASL and the interactive nature of this course, camera use is required, and class sizes may be capped. **Prerequisite: Previous year on-line language course must be passed with a grade of 73% or above.**

**ON-LINE FRENCH 1**

Grades 9, 10, 11, and 12

1 Credit

French 1 is designed to develop an authentic and practical understanding of the French language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities. **Prerequisite: English Teacher's approval and an 80% or above in their English classes.**

**ON-LINE FRENCH 2**

Grades 9, 10, 11, and 12

1 Credit

French 2 is designed to build upon skills learned in French I and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework. **Prerequisite: Previous year on-line language course must be passed with a grade of 73% or above.**

**ON-LINE FRENCH 3**

Grades 10, 11, and 12

1 Credit

French 3 is designed to build upon skills learned in French II and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Furthermore, students will



expand their knowledge of French culture. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework. **Prerequisite: Previous year on-line language course must be passed with a grade of 80% or above.**

#### **ON-LINE FRENCH 4**

Grades 11 and 12

1 Credit

French 4 is designed to develop an authentic and practical understanding of the French language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities. **Prerequisite: Previous year on-line language course must be passed with a grade of 80% or above.**

#### **ON-LINE GERMAN 1**

Grades 9, 10, 11, and 12

1 Credit

German 1 is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities. **Prerequisite: English Teacher's approval and an 80% or above in their English classes.**

#### **ON-LINE GERMAN 2**

Grades 9, 10, 11, and 12

1 Credit

German 2 is designed to build upon skills learned in German 1 and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework. **Prerequisite: Previous year on-line language course must be passed with a grade of 73% or above.**

#### **ON-LINE GERMAN 3**

Grades 10, 11, and 12

1 Credit

German 3 is designed to build upon skills learned in German 2 and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework. **Prerequisite: Previous year on-line language course must be passed with a grade of 80% or above.**

#### **ON-LINE GERMAN 4**

Grades 11 and 12

1 Credit

German 4 is designed to develop an authentic and practical understanding of the German language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities. **Prerequisite: Previous year on-line language course must be passed with a grade of 80% or above.**

### ON-LINE LATIN 1

Grades 9, 10, 11, and 12 1 Credit

Latin 1 is an introduction to the language and culture of the Latin speaking ancient Romans and is meant for beginners without prior exposure. Latin 1 will develop, at the basic level, an understanding and competence in the interpretation of the written (and spoken) Latin language on a variety of topics. Students will read, understand, appreciate, and make a personal response to some of the literature written in Latin. **Prerequisite: English Teacher's approval and an 80% or above in English class.**

### ON-LINE LATIN 2

Grades 9, 10, 11, and 12 1 Credit

Latin 2 is building upon skills and concepts developed in Latin 1. Learners will acquire some understanding of the Roman civilization within which the Latin language was used and demonstrate an understanding of the relationship between the practices and perspectives of the culture studied. This class is intended to develop a sensitive and analytical approach to language by seeing English in relation to a very different language structure and thoroughly observing the influence that Latin has on the English language. **Prerequisite: Previous year on-line language course must be passed with a grade of 73% or above.**

### SPANISH 1

Grades 9, 10, 11, and 12 1 Credit

This is an introductory course in communicating in Spanish. Oral work is stressed with basic dialogues, variations, practices, and conversation. Short assignments from the text stress grammatical, structural, and oral comprehension of the language. Customs of Spanish-speaking people are related to the units. **Prerequisite: English Teacher's approval and an 80% or above in their English classes.**

### SPANISH 2

Grades 10, 11, and 12 1 Credit

This is a continuation and enhancement of Spanish I. More emphasis is given to reading comprehension and spoken Spanish. Daily assignments from the text emphasize more writing skills and more complicated grammatical concepts, as well as vocabulary. Culture is introduced with each unit. **Prerequisite: Spanish 1 passed with a 73% or above.**

### \* SPANISH 3

Grades 11 and 12 1 Credit

This is an intermediate course where continued stress is given to spoken Spanish as well as grammatical concepts. More in-depth writing and reading take place with resource materials as well as the major text. Students are involved in individual and class projects. **Prerequisite: Spanish 2 with an 80% or above.**

### \* SPANISH 4

Grades 11 and 12 1 Credit

Advanced courses are on a more individualized basis. Spanish and Latin American literary works are studied. Oral creativity is developed, and total use of the Spanish language is encouraged. Advanced students may help tutor lower-level students as part of their course work. Students will move rather quickly and individually through various grammar reviews from previous Spanish courses as well as through new ones. Students will be expected to produce writing at a more advanced level. **Prerequisite: Spanish 3 with an 80% or above.**

**\* Depending on Spanish 1, 2, 3 and 4 course enrollments, Spanish 3 and/or Spanish 4 may be an on-line offering instead of an in-building live class.**

## MUSIC DEPARTMENT



TAHS and the entire community of the Tyrone Area School District are extremely proud of our Music Department. Our award-winning musical ensembles are only one aspect of our entire music curriculum. Many non-performance classes are offered in addition to our choral and instrumental ensembles. We also provide many opportunities for students to perform in various chamber groups that study a wide variety of musical literature and styles.

We are dedicated to all students with a desire to explore the world of music. Our courses are designed for the performer as well as the non-performer.

If you should have any questions concerning our course offerings, please feel free to contact Mrs. Laura Harris, High School Choral Director and Fine Arts Department Chairperson. Eagle Pride and Commitment can be seen **AND** heard throughout the TAHS Music Department!

### TAHS VOCAL DEPARTMENT:

**\* TAHS CONCERT CHOIR** Grades 9, 10, 11, and 12 1 Credit

Participation in this prestigious high school choral ensemble requires no audition. Choral repertoire studied will include a variety of music styles as well as a few pieces in foreign languages to be performed at their annual Holiday and Spring concerts. Students will study the cultural and historical backgrounds of their repertoire. Members of this group and POPS Extension, who are enrolled in grades 10 -12, are also eligible to audition for the Pennsylvania Music Educators' District, Region, All-State and All-Eastern Choruses.

**\* Students taking both chorus and band will receive a total of one credit.**

**POPS EXTENSION** Grades 9, 10, 11, and 12 1 Credit  
**By Audition Only**

POPS Extension is the show choir at Tyrone Area High School. This award-winning ensemble performs a variety of distinctive choral literature. Students will develop individual vocal skills, choreography skills, musicianship, and performance techniques. **Entrance into this ensemble is determined by audition only. Auditions occur in the spring semester. See the choral director for information.**

### TAHS INSTRUMENTAL DEPARTMENT:

**\*TAHS SENIOR HIGH CONCERT BAND** Grades 9, 10, 11, and 12 1 Credit

The TAHS concert band concentrates on the intensified study and performance of standard band repertoire that represents various composers, genres, and historical periods. The focus of the student's learning experience is

on the continued development and application of instrumental musicianship. Participation in all public performances is required. Participation in the high school marching band is highly recommended but not required as part of concert band. Members of this group who are enrolled in grades 10, 11, and 12 are eligible to audition for the Pennsylvania Music Educator's District, Region, All-State, and All-Eastern bands.

**\* Students taking both chorus and band will receive a total of one credit.**

## **TAHS JAZZ BAND**

Grades 9, 10, 11, and 12 1 Credit

The jazz band is composed of musicians who play saxophone, trumpet, trombone, keyboard, guitar, and percussion instruments. Music is selected from various styles of jazz including swing, Latin, pop, rock, funk, and ballads. A brief overview of jazz history and appreciation, ear-training, and interpretation/ improvisational skills will be presented throughout the year. Many performances are held throughout the school year and are mandatory (approximately 15). Members of this group who are enrolled in grades 10, 11, and 12 are eligible to audition for the Pennsylvania Music Educator's District, Region, All-State, and All-Eastern jazz bands. **This is an auditioned group and auditions are held in the spring. See the band director for more information.**

## **INTRODUCTION TO MUSIC THEORY**

Grades 9, 10, 11, and 12 1 Credit

This year-long course is a beginner level course designed for any high school student. Students do not need to have any prior knowledge of music to take this course. Students will learn the fundamentals of music with the goals of understanding how modern and classical music works and will be able to write and play their own songs. This course also allows current, experienced music students to expand their knowledge of music and be able to compose or perform at a higher level. Concepts include music notation using technology, intervals, key signatures, rhythm, meter, chords and inversions, harmonic analysis, part writing, ear training, and performance where appropriate.

## **POPULAR AMERICAN MUSIC EXPLORATORY**

Grades 9 .25 Credit

This quarter elective rotation course serves as a survey of the history of popular music in America from the invention of the phonograph (1877) to the present. Students will explore the use of music as a social, cultural, and political mirror and influence on the society we live in. Music will be connected to major historical events of the 20th century. Supplemental recordings, concerts, and other media are used as tools in the study of American music.

## **POPULAR AMERICAN MUSIC IN THE 20<sup>TH</sup> CENTURY**

Grades 9, 10, 11, and 12 .50 Credit

This semester elective course reviews the basic elements of music, surveys the history of popular music in America from the invention of the phonograph (1877) to the present, and explores the use of music as a social, cultural, and political mirror and influence on the society we live in. Supplemental recordings, concerts, and other media are used as tools in the study of American music.

## VISUAL ARTS DEPARTMENT

### **ART APPLICATION 1**

Grades 9, 10, 11, and 12      1 Credit

Art Application 1 is intended to get students enthused about art by providing them with the fundamental skills, knowledge, and vocabulary needed to produce and appreciate visual art. Basic media and methods used in drawing, painting, and three-dimensional design will be explored in addition to the historical figures that have made contributions in these areas. An additional emphasis will be placed on methods used in the critical evaluation of artwork.

### **ART APPLICATION 2**

Grades 10, 11, and 12      1 Credit

Art Application 2 is a production-oriented class where students can learn an array of new art media and a wide variety of application techniques. Exposure to contemporary artists and a survey of career opportunities available in the visual arts are important features of this class. Students are expected to maintain a sketchbook and work independently on extended projects to develop the creative thinking skills and work ethic necessary to be successful in the visual arts. **Prerequisite: Art Application I**

### **ART LABS**

Grades 11 and 12      1 Credit

This course is designed for the student who wishes to undertake an intense study of a specific medium or subject. The Art Labs include Portraiture and Figure Study, Advanced Drawing, Advanced Painting, Advanced 3D Design (Ceramics & Sculpture), and Airbrush.

**Portraiture and Figure Study** – This lab specializes in rendering the human form in a variety of media. Study of the skeletal and muscular structure will provide students with the knowledge necessary to render the human head and figure with proportional accuracy.

**Advanced Drawing** – This lab will introduce students to a variety of new drawing media and techniques while extending the skills they have developed in Art Applications 2. Students will render a variety of different subjects and learn to combine several different mediums in their drawings.

**Advanced Painting** – Students will have the opportunity to explore watercolor, oil, and acrylic paint with much greater depth than Art Applications 2. An intensive study of light and color, paint chemistry, and application tricks and techniques are covered in this lab.

**Airbrush** - This lab explores the possibilities of this very versatile painting tool. A variety of different applications will be covered from T-shirt design to illustration.

**Prerequisite: Art Application 2 and permission of the instructor.**

### **ART STUDIO**

Grades 11 and 12      1 to 2 Credits

This course is for those students who may be interested in pursuing art at the collegiate level or who wish to further their skills in a challenging class. The purpose of this class is to produce a portfolio of high-quality artwork suitable for entry into a college art program. This involves perfecting application skills with various drawings, painting, and sculpting mediums, and developing creative thought processes. **Prerequisite:**

**Signature of instructor is required.**

### **DE INTRODUCTION TO ART HISTORY**

Grades 9, 10, 11, and 12 1 Credit + (DE)

This course introduces the major periods of Western art history, including Ancient Egyptian, Greek, Early Medieval, Romanesque, Gothic, Renaissance, Baroque, and 19<sup>th</sup> and 20<sup>th</sup> Century. The course will examine the religious, philosophical, and social forces that shaped the masterpieces. **Prerequisite: 90% or above GPA or Principal / Teacher recommendation. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

### **INTRODUCTION TO SCULPTURE/CERAMICS**

Grades 9, 10, 11, and 12 .50 Credit

This semester course will explore 3-Dimensional art and cover a wide variety of topics, ranging from basic hand-building and wheel-throwing techniques to contemporary sculpture and installation. This course will rely heavily on student research of both art history and contemporary sculpture and ceramics.

## **ADVANCED SPECIALIZED CAREERS AND TECHNOLOGY TRAINING**

### **CAREER & TECHNICAL EDUCATION (CTE) AT TYRONE AREA HIGH SCHOOL**

For over 70 years, the Tyrone Area School District has offered state of the art Career and Technical Education (CTE) programs for high school students, and occasionally adults. Upon graduation, students enrolled in the CTE programs have the opportunity to continue their education in that career cluster or seek employment immediately in a high priority occupation that is in demand and offers competitive wages.

Stakeholders representing post-secondary institutions, businesses, and local industries continue to partner with our CTE instructors to provide advice, recommendations, and resources to promote continual improvement in all program areas. This collaboration and continued effort, results in the ability to provide high quality teachers, facilities, and partnerships. We believe that these CTE programs are an excellent option for all TAHS students and encourage everyone to take advantage of these opportunities.

Students apply for CTE courses when submitting their course requests for the following school year. Admission to career and technical programs is open to such regularly enrolled students as are qualified by their interest and aptitude for achieving occupational success or other goals of the program as outlined in the TASD Board Policy 115 Career and Technical Education. Students are encouraged to work closely with a counselor to carefully consider all available options and effectively meet their educational needs and career goals.

Many CTE courses have articulation agreements and/or dual enrollment opportunities with area technical schools and colleges, so students can earn college credit by successfully completing a CTE Program at TAHS. In addition, students can earn industry recognized certifications and credentials and participate in Career and Technical Student Organizations (CTSOs).

Each Career & Technical Program requires that students participate in the NOCTI examination program. Students take a written (online) test and a hands-on test related to areas in their program. If successful, students can earn a PA Skills Certificate which can enhance a student's resume and help with college placement.

Participating in a CTE Program at Tyrone Area High School allows students to stay at their home school. Students can also take other electives as well as participate in additional school activities.

We are proud to offer the following four (4) CTE programs at Tyrone Area High School.

- **Accounting Technology/Technician and Bookkeeping 52.0302** \*\* (Listed on pages 41 - 42 Business Department)
- **Agricultural Production Operations 01.0301** (Listed on page 36 - 40 Agriculture Department)
- **Carpenter/Carpentry 46.0201** \*\* (Listed on page 43 - 44 Carpentry & Design)
- **Health Professions and Related Clinical Sciences 51.9999** \*\* (Listed on page 45 Health Technology Programs)
- \*\* denotes Program of Study – SOAR (Student Occupationally and Academically Ready).
- SOAR programs operate under a Statewide Articulation Agreement which articulate skills and tasks gained at the high school level to course credit earned in a postsecondary institution degree, diploma, or certificate program. More information about SOAR can be found on the [PDE website](#).

## AGRICULTURAL SCIENCE

Agriculture is Pennsylvania's #1 employer with about 1 in every 5 jobs being agriculturally related. There are 300 different agricultural career opportunities, which include veterinarian, forester, landscaper, agriculture mechanic, floral designer, agriculture teacher, salesperson, and agriculture engineer, just to name a few.

Agriculture is the study of the food, fiber, and natural resources industries, and the Ag Science Department has a variety of classes to meet everyone's interests from plants and animals to mechanics and the environment. Students will learn skills for entry-level positions and to further their education after high school.

Agricultural education at the high school level focuses on three main categories: classroom instruction, supervised agricultural experience (SAE), and active involvement in the National FFA Organization. All students enrolled in an agricultural education course will complete ten hours of SAE hours per semester, be engaged in hands-on, inquiry-based projects, and be recognized as a National FFA member.

**Successful completion of the Agriculture Program at TAHS and/or successful completion of specific courses may result in the earning of articulated credits from the following universities, if the student is accepted and meets all the additional criteria:**

### **Rutgers University**

- CASE- Principles of Agriculture Science- Animal (3 credits)- Animal Science
- CASE- Animal and Plant Biotechnology- (1.5 credits)- Issues and Concepts in Biotechnology
- CASE- Principles of Agricultural Science - Plant - (3 credits)- Plants and People
- CASE-Agriculture Natural Resource and Ecology (3 credits)- Principles of Natural Resource Management
- CASE- Environmental Science Issues: (2 credits)- Issues in Environmental Pollution
- CASE-Food Science and Safety -(3 Credits)- Science of Food



**\*Students may receive up to 15.5 transfer credits at Rutgers for specific CASE courses taken during high school. Eligible students must have an 83% or greater in the CASE courses and must be admitted to Rutgers within 4 years after graduation from high school.**

#### **Delaware Valley University**

- CASE- Intro to Agriculture/Food and Natural Resources: (3 credits)- This course satisfies 3 credits as a restricted elective in Ag. Business.
- CASE- Principles of Agriculture Science- Animal (3 credits)- This course satisfies 3 credits of restricted electives in the Animal Science major.
- CASE-Agricultural Business, Research and Development -(3 Credits)- This course satisfies 3 credits restricted electives in the Plant Science majors; Horticulture, Crop Science, Sustainable Agriculture, Landscape Architecture and Environmental Sciences
- CASE-Agriculture Business Foundations (2 credits)- This course satisfies 2 credits as an Ag Business restricted elective
- CASE- Animal and Plant Biotechnology- (2 credits)- This course satisfies 2 credits as a restricted elective in Ag Business.
- CASE-Agriculture Natural Resource and Ecology (3 credits)- This course satisfies 3 credits -LAES Principles of Ecology.
- CASE- Agriculture Power and Technology (2 credits)- This course satisfies 2 credits as an Ag Business restricted elective.

**\*Students must successfully complete the CASE Agricultural classes identified above with an 83% or greater in each course to receive college credit for the course.**

#### **SUNY Cobleskill University**

Completion of Agriculture Program at TAHS will result in 9 articulated credits for the following courses at SUNY Cobleskill:

ANSC 199 Foundations of Animal Science (3 credits)

AGBU 101 - Introduction to Agricultural Business (3 credits)

ANSC 140 Small Animal Management (3 credits), after the student passes the challenge exam given during the first week of classes at SUNY Cobleskill.

**See the guidance office and the Agricultural teacher for more specific information regarding the CASE programs offered at Tyrone.**

#### **AGRICULTURAL ANIMAL SCIENCE (ASA)**

Grades 10, 11, and 12

1 Credit

Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, or industry personnel face in their respective careers. The knowledge and skills students develop will be used in future courses within the CASE™ program.

In addition, students will understand specific connections between the Animal Science lessons and Supervised Agricultural Experience, FFA, and LifeKnowledge® components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. This course may be used by seniors as a science credit for graduation only if students have a Proficient or Advanced Keystone Biology Score.



## **AGRICULTURAL BUSINESS FOUNDATIONS**

Grades 9, 10, 11, and 12 .50 Credit

This elective course introduces students to business management in agriculture. Mathematics, reading, and writing components are woven in the context of agriculture, and students will use the introductory skills and knowledge developed in this course throughout subsequent CASE courses. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. The course includes starting a business, financial documents, risk management, and writing a business plan.

## **AGRICULTURAL POWER & TECHNOLOGY (APT)**

Grades 10, 11, and 12 1 Credit

The focus of Agricultural Power and Technology (APT) is to expose students to mechanics, power, technology, and career options in the world of agriculture. Students will experience various mechanical and engineering concepts with hands-on activities, projects, and problems. Students will acquire the basic skills to operate, repair, engineer, and design agricultural tools and equipment. Students will also investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

## **AGRICULTURE RESEARCH AND DEVELOPMENT**

Grades 11 and 12 1 Credit

The Agricultural Research and Development (ARD) course is the capstone designed to culminate student's experiences in agriculture, based on the pathway of study pursued. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students. Students will further enhance research, critical thinking, and teamwork skills as they expand on content knowledge from previous CASE Courses. Students will work to solve complex, real-world problems through a focused research project. This process will include conducting research, data analysis and communication, and the development of new products. Students will understand specific connections between the course's lesson and supervised Agricultural Experience and FFA components of agricultural education programs. Students will improve investigative, experimental, and communication skills. Student will develop skills in scientific communications about problems, research, and solutions. The knowledge/skills students develop will be valuable for college and career aspirations.

## **ANIMAL & PLANT BIOTECHNOLOGY**

Grades 11 and 12 1 Credit

Students will complete hands-on activities, projects, and problems designed to build content knowledge and technical skills in the field of biotechnology. Students are expected to become proficient at bio-technological skills involving micro-pipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Students will maintain a research level laboratory notebook throughout the course documenting their experiences in the laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. Students will develop and conduct a research project following the National FFA Agriscience Fair guidelines. From background research through data collection and analysis, students will investigate a problem of their choice and conclude the project by reporting their results in the forms of a research paper and a poster. This course may be used by seniors as a science credit for graduation only if students have a Proficient or Advanced Keystone Biology Score.

## **BOTANY - HORTICULTURE PLANT SCIENCE**

Grades 10, 11, and 12 .50 Credit

Horticulture is the branch of agriculture dealing with the production and use of ornamental, fruit and vegetable crops. The list of plants studied by students in this diverse area is an important and exciting one, including the

trees, shrubs and flowers we use to enhance our landscapes, as well as most of the foods in the fresh produce section of supermarkets. Agricultural remains the largest industry in Pennsylvania and provides 1 in 6 jobs nationally. According to students surveyed in current agricultural courses and the 8th grade tech course, students have an interest in the Horticulture/Plant Science Industry. Students will also be able to have an appreciation for applied science through this course.

### **FOOD SCIENCE**

Grades 10, 11, and 12 .50 Credit

The Food Science course provides learning experiences in food science and safety, which allows students to apply scientific knowledge and processes to the development and preservation of food products. Issues of food science and safety are examined from a scientific and technological perspective. Students critically analyze information to evaluate and draw conclusions on the appropriate use of technology in food science and safety practices. Units of instruction include principals of food preservation, food processing, biochemistry, food selection, and consumer health. Students develop personal viewpoints on societal issues concerning the development and preservation of food products and make career plans in the food industry. Agriculture remains the largest industry in Pennsylvania and provides 1 in 6 jobs nationally. According to students surveyed in current agricultural courses and the 8th grade tech course, students have an interest in the food science industry. Food science impacts human life every day, and students will gain valuable knowledge of the entire food industry from farm to table, including marketing and safety processes.

### **INTRODUCTION TO AGRICULTURE, FOOD AND NATURAL RESOURCES (AFNR)**

Grade 9 1 Credit

This course will briefly cover a wide range of general agricultural science topics, giving students a basic knowledge of the size and scope of the agricultural industry and an understanding of how agriculture affects their daily lives. Students will also have the opportunity to explore potential areas of career interest. Students in this course are encouraged to join and participate in the Tyrone FFA Chapter. The course is designed to introduce students to the four pathways that are offered through CASE. In addition to a brief overview of animal science, plant science, natural resources, and agricultural technology and systems, students will explore FFA, leadership, and science in agriculture. This course is offered to 9th grade students who have not taken agricultural education courses before. It will give them a broad base so that they may select an Agricultural Career Pathway to study for their 10th, 11<sup>th</sup>, and 12th grade levels.

### **NATURAL RESOURCES AND ECOLOGY (NRE)**

Grades 10, 11, and 12 1 Credit

The Natural Resources and Ecology course provides students a variety of experiences in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of the natural world including biomes, land, air, water, energy, use and care as well as a focus on issues surrounding man's interaction with the Earth will be addressed in this course. Students will select an ecosystem to study throughout the course and apply principles of natural resources and ecology from each unit of study to that ecosystem. This course may be used by seniors as a science credit for graduation only if students have a Proficient or Advanced Keystone Biology Score.

### **SAE PRACTICUM**

Grades 9, 10, 11, and 12 .50 to 1 Credit

This course is designed to establish knowledge and skills in various agricultural careers. Students will gain

credit by establishing a program at their home, at a local business, or at their school usually after normal school hours. Example programs may include but are not limited: to working at a garden center, raising vegetables/grain/livestock, conducting agriscience experiments in a greenhouse, and training horses at a stable. Students will be required to verify their experiences by keeping computerized records including business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted at the student's home or place of employment. SAE records should be evaluated at least once per month. In addition, SAE lessons are integrated in each agricultural course. SAE participation can lead to full-time employment, scholarships, and awards through the FFA. Agricultural remains the largest industry in Pennsylvania and provides 1 in 6 jobs nationally. To create a complete Agricultural Education experience, students who are enrolled in an Agricultural Education course are required to maintain an SAE program. These programs are conducted outside of course time and students spend many hours on these programs. Students also learn the valuable aspect of record keeping, journaling, and budgeting and how it impacts their lives. Other certification programs will be added to each individual project as the teacher sees fit. **Prerequisite: Teacher signature required.**

## BUSINESS DEPARTMENT

### **ACCOUNTING 1**

Grades 10, 11, and 12

1 Credit

Do you enjoy working with money? Are you thinking about pursuing a career in business? Have you thought about owning your own business? Are you just looking for a practical class that offers valuable skills for your future? Then Accounting is for you! This course takes students on a journey through the world of basic accounting. You will build a strong foundation of accounting skills in addition to real-world concepts related to money management. Careers in business will be explored and you will have the opportunity to use actual accounting software. This course may be used by seniors as a math credit for graduation if students have a Basic or higher score on the Keystone Algebra 1 exam.

### **ACCOUNTING 2**

Grades 11 and 12

1 Credit

This course builds on the concepts gained in Accounting I. It introduces accounting for partnerships and corporations through advanced transactions and activities. Students will continue to use actual accounting software and spreadsheets and continue to build strong money management skills. They will learn relevant concepts that will help them in the future. **Prerequisite: Successful completion of Accounting 1.**

### **ACCOUNTING 3**

Grade 12

1 Credit

Have you successfully completed Accounting I and II? This course will advance your accounting skills even further by focusing on Management Accounting. Students will continue to use accounting software that simulates real-world accounting. Students have the opportunity to complete the Nocti certification test if all requirements are met. **Prerequisite: Successful completion of Accounting 1&2 and teacher recommendation.**

### **BUSINESS AND PERSONAL LAW**

Grades 10, 11, and 12

.50 Credit

Know your rights. Debate. Think about deep questions as to what is right, what is wrong and what is legal. All

legal issues arise out of life experiences. These issues affect consumers, employees, business owners, and ordinary citizens. This course introduces students to legal terminology, rights, responsibilities, and remedies. Specific areas covered include sources of law, criminal law, trial procedures, contracts, marriage and divorce, home-buying, warranties, and ethics. This course provides a solid foundation for those who are interested in careers in law, law enforcement, business, or political science. A mock trial simulation may be utilized.

### **DE INTRODUCTION TO BUSINESS**

Grades 10, 11, and 12

1 Credit + (DE)

This course examines the social, legal, ethical, economic, and political interactions of business and society. This is a foundation for students who specialize in some aspect of business and provide the opportunity for non-business majors to learn about the impact of business in a society in which they are citizens, consumers, and producers. The class includes topics such as: economic systems; government and business; ethics and law; social responsibility; globalization; and international business concepts, principles, and practices. **Prerequisite: 90% or above GPA or Principal / Teacher recommendation. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

### **INTRODUCTION TO CAREER AND TECHNOLOGY EDUCATION**

Grade 9

0.25 credit

This nine-week course is designed to introduce 9<sup>th</sup> grade students to all the Career and Technology Education programs offered at Tyrone. Students will be immersed in the information and material for each CTE program, so that they can make informed decisions if they choose to join one of the programs during their sophomore year. By the end of the course, students should be able to understand and explain each CTE program and how that program would benefit them after high school graduation.

### **INTRODUCTION TO ENTREPRENEURSHIP**

Grades 10, 11, and 12

.50 Credit

Entrepreneurship is more than just starting a business. Entrepreneurship is for creative people who aren't afraid to take a few risks as long as the chance of a payoff is big. This class examines the definition of entrepreneurship and small business, while providing an overview of the past and present small business environment. Students will delve into the steps and considerations involved with turning an idea into a business: identifying a passion or hobby that can provide a product or service, researching the market, and weighing the risk of starting a small business. Students will explore the nuts and bolts of starting a business: writing a business plan, obtaining funding, and learning about the agencies that businesses interact with to become a legitimate entity. **Students that have taken, or are currently enrolled in, DE Introduction to Business may not enroll in this class.**

### **INTRO TO PROGRAMMING & COMPUTER SCIENCE APPLICATIONS 1**

Grades 9, 10, 11, and 12 .50 Credit

This course is an introduction to basic programming using Python, one of the most popular coding languages. Python is a text-based coding language used by companies such as Google, Amazon, and Facebook. This course was developed by Carnegie Mellon University, world renowned for computer science and artificial intelligence, for high school students to bridge the gap between coding in elementary/middle school and college level courses. The goal of this course is to provide you with an introduction to programming while also building your problem-solving skills and providing you with an understanding of the thinking methods used by programmers. In each unit of this course, there will be classroom instruction and discussion followed by exercises and projects to give you the opportunity to experiment with your newly learned skills.

The first semester will cover the following topics: 1) Creating drawings, shapes, colors, opacity. 2) Functions, onMousePress and onMouseRelease, and shape properties. 3) onMouseMove and onMouseDrag, conditionals, helper functions. 4) elif statements, onKeyPress and onKeyRelease, shape methods. 5) Compound and nested conditionals, onKeyHold. 6) Groups, onStep, motion. 7) Local variables, for loops, random values.

## **INTRO TO PROGRAMMING & COMPUTER SCIENCE APPLICATIONS 2**

Grades 9, 10, 11, and 12 .50 Credit

This course is an introduction to basic programming using Python, one of the most popular coding languages. Python is a text-based coding language used by companies such as Google, Amazon, and Facebook. This course was developed by Carnegie Mellon University, world renowned for computer science and artificial intelligence, for high school students to bridge the gap between coding in elementary/middle school and college level courses. The goal of this course is to provide you with an introduction to programming while also building your problem-solving skills and providing you with an understanding of the thinking methods used by programmers. In each unit of this course, there will be classroom instruction and discussion followed by exercises and projects to give you the opportunity to experiment with your newly learned skills.

The second semester will cover the following topics: 8) Arcs, types, division and modulo, CMU graphics math functions, nested for loops. 9) Strings, while loops. 10) Lists, group.hitTest(), writing functions that return values. 11) 2D Lists, Games. 12) Final Project (images, sounds). **Prerequisite: Successful completion of Intro to Programming & Computer Science Applications 1.**

## **INTRODUCTION TO COMPUTERS AND MICROSOFT OFFICE**

Grades 9, 10, 11, and 12 .50 credits

This class is designed to give students a basic understanding of computers by giving students a working knowledge of Microsoft Office products such as Word, Excel, Publisher, PowerPoint, and Access that will aide them in both higher education and in the workplace. Students will build spreadsheets to perform calculations, display data, conduct analysis, and explore what-if scenarios. In addition, students will develop technical and scientific presentations which will utilize charts and visual aids to share data. This course will also give students the opportunity to identify, access, and evaluate information to solve real world problems.

## **WORKPLACE EXPERIENCE**

Grades 11 and 12 1 to 2 Credits

This program is designed to provide on-the-job training by a participating employer in an established place of employment. Students must complete an in-school theory course as well as on-the-job training. Workplace experience can only be scheduled with the approval of the course teacher and the guidance counselor. Students who are interested in being considered should complete an application prior to May of their 11<sup>th</sup> grade year. Students completing applications in May will be considered first. Any students taking workplace experience are **required** to take **Workplace Readiness prior to or in conjunction with this course.**

## **YOUNG ENTREPRENEURS ACADEMY (YEA!)**

Grades 9, 10, 11, 12

Calling All Young Entrepreneurs! Are you interested in starting and running your own business? Then consider exploring the Young Entrepreneurs Academy! The Young Entrepreneurs Academy (YEA!) is a class that teaches students how to start and run their own REAL business or social movement! Students come up with a Big Idea, then instructors help them discover what they are great at doing, what they love to do, and where that

intersects with a business opportunity. Students then create a real business plan, pitch their plan to a panel of investors, get REAL funding, and launch their own, REAL, company!

YEA! is sponsored by the Blair County Chamber of Commerce. The class consists of middle and high school students from all over Blair County who meet weekly for 25 weeks (October through April), alternating morning and afternoon sessions. Transportation is provided for students to attend the classes, which are offered at Penn State Altoona's Sheetz Entrepreneurial Center in downtown Altoona. Students must apply and be accepted as part of the class (<http://www.blairchamber.com/young-entrepreneurs-academy.html>) and there is a \$395 tuition fee, with limited partial scholarships available. Participating students may also elect to earn dual enrollment credit through Saint Francis University and Mount Aloysius College.

This class will not be available on the course selection form. Any student who applies and is accepted should contact the Guidance Office upon notification.

### CARPENTRY & DESIGN 1, 2, AND 3

This course is intended for students who are interested in securing employment as a carpenter in the construction field, or for students who are interested in continuing their education in the many construction and design programs at the post-secondary, associate degree level. This course gives students the opportunity to develop the necessary skills to construct, maintain, service, and repair all types of building construction. A continued pursuit of higher math courses and computer skills classes throughout the course of study is greatly encouraged.

Instruction will be given in the following areas of building construction:

1. Shop mathematics, layout, and safety
2. Footer, forms, and foundation
3. Sill, girder, and floor framing
4. Wall, ceiling, and roof framing
5. Exterior and interior finish
6. Sound and heating insulation materials
7. Cabinet making
8. Estimation of materials and cost
9. Computer assisted home design and blueprint reading.
10. Machine operation and tool conditioning
11. Bench work
12. Safety

#### **CARPENTRY AND DESIGN 1**

Grade 10

2 Credits

At this level the student will learn the safe and proper machine operation and tool conditioning of the tools and equipment used in the construction trade. They will explore fundamentals of residential construction in preparation for their on-the-job site house construction. Students will perform hands-on operations and activities to gain experience in these areas. Coursework includes classroom instruction (theory) 30% and hands-on operations 70%. This course includes blueprint reading and career & technical communication skills. Class will meet for two periods a day, all week, all year for two credits in the shop only. **Prerequisite: The desire to be in the construction trade or related areas. Maximum class size is 15.**



## CARPENTRY AND DESIGN 2

Grade 11

2 Credits

At this level the student will learn the fundamentals and skills of residential construction. Students will perform hands-on operations and activities to gain experience in these areas. Course work includes classroom instruction (theory) 30% and hands-on operations 70%. Program exit goals will be established for the student. Class will meet for two periods a day, all week, all year for two credits in the shop and at the current house project. **Prerequisite: Successful completion of Carpentry and Design 1 or equivalent. Maximum class size is 15.**

## CARPENTRY AND DESIGN 3

Grade 12

3 Credits

At this level the student will learn advance carpentry skills, blueprint reading, and home computer design. Students will perform hands-on operations and activities to gain experience in these areas. Course work includes classroom instruction (theory) 30% and hands-on operations 70%. Opportunities for community service, a shadowing program, and entry-level job positions will be provided. The student's program exit goals will be completed. Class will meet for two periods a day all year for three credits in the shop and at the current house project. Students are responsible for on-line OSHA training which accounts for the additional credit. **Prerequisite: Successful completion of Carpentry and Design 2 or equivalent. Maximum class size is 15. Students, regardless of grade, will begin course of study in Carpentry and Design 1 unless otherwise approved by the instructor.**

## PRE-CARPENTRY

Grade 9

.25 Credit

This quarter rotation course is offered to all 9<sup>th</sup> grade students. At this beginner level, the student will learn the safe and proper machine operation of tools and equipment used in the construction trade. They will explore fundamentals of woodworking and basic joinery by way of constructing two small, required projects. In addition, they will complete career exploration and a brief introduction into residential construction. Students will perform hands-on operations and activities to gain experience in these areas. Course work includes classroom instruction (theory) 30% and hands-on operations 70%. **Prerequisite: Completion of construction technology or a desire for woodworking and construction.**

## HEALTH TECHNOLOGY

### HEALTH TECHNOLOGY 1

Grade 10

2 Credits

This course meets two consecutive periods a day in the Health Occupations Suite. Students learn skills such as taking vital signs and proper handwashing. There is also intensive focus on Hospital Safety, Infection Control, Anatomy/Physiology, Medical Terminology, and Medical Abbreviations.

### HEALTH TECHNOLOGY 2

Grade 11

2 Credits

This course meets two consecutive periods a day in the Health Occupations Suite. Students will study growth/development, death and dying, nutrition, and first aid, with special emphasis on job seeking skills and various health related careers. Students will have the opportunity to receive clinical experience at Tyrone

Hospital and Epworth Manor one day a week during class time. Health Tech II students also have clinical time at Tyrone Area Elementary School several days a week during the appointed class time to teach about health topics. Students will also be certified in CPR. **Prerequisite: Must have an 80% grade or better in Health Tech 1.**

### **DE HEALTH TECHNOLOGY 3/CLINICAL EXPERIENCE**

Grade 12

3 Credit + (DE)

This course meets three consecutive periods every morning. Five days a week will be spent at a clinical site of the students' choice with specified days off, as chosen by the students to complete classroom assignments. Areas of exploration include, but are not limited to, physical therapy, medical assistant, nursing, dental assistant, child-care/child development, and physician assistant. Grades come from evaluation from the clinical supervisor and various class assignments. Students will also be part of the TASD Wellness Program. **Prerequisite: Must have an 80% grade or better in Health Tech 2. This course is offered as a Dual Enrollment course with a boost to your NGA/GPA calculation (see Section XII).**

### **PRE-HEALTH TECHNOLOGY**

Grade 9

.25 Credit

This nine-week course is designed to introduce 9<sup>th</sup> grade students to the health field by instruction on hospital safety, infection control, measuring vital signs, and anatomy and physiology. This elective course is offered as a marking period course.

## **METALS & MANUFACTURING**

### **INTRODUCTION TO TECHNOLOGY**

Grades 9

.25 credit

This quarter course is designed to introduce the concepts of technology and engineering. Student assignments will use a variety of hand tools, power tools and machinery, and computerized equipment in order to complete a wide range of individual and group projects and S.T.E.M. activities. Through project-based instruction, students will explore the eight technology and engineering practices defined by the International Technology and Engineering Educator Association (ITEEA), which are system thinking, creativity, making and doing, critical thinking, optimism, collaboration, communication, and attention to ethics. It is recommended that students come to class with jeans without holes and to wear closed-toed shoes or boots that are made of leather. (A locker and a lock will be provided in the production lab to keep personal items and projects.) **This course will act as a prerequisite for future Technology Education courses (Materials Processing I, Metalworking I, and Advanced Robotics & Manufacturing). Class size is limited to 16 students.**

### **INTRODUCTION TO DRAFTING & BLUEPRINT READING**

Grades 10, 11, and 12

.50 Credit

An introduction to the basic concepts and practices of drafting and print reading. The course will address the interpretation of blueprints and schematic diagrams as well as free-hand sketching and the use of basic drafting tools and techniques. Students will also be introduced to geometric dimensioning practices, projection techniques, drafting conventions, and tolerances.



## **METAL WORKING I**

Grades 10, 11, and 12 .50 Credit

The Metal Working I course has been designed to expose students to the various areas of the metal fabrication industry. Safety is highly emphasized and extensively covered in this course. All areas covered will include theory lessons, teacher recommendations, and student hands-on exercises. These are provided to give the students a solid foundation in the metal fabrication area, and to allow students to expand their knowledge in all units of instruction. It is recommended that students come to class with jeans without holes and to wear closed-toed shoes or boots that are made of leather. (A locker and a lock will be provided in the production lab to keep personal items and projects.) **Class size is limited to 16 students.**

## **ART & FINE METALWORKING**

Grades 10, 11, and 12 .50 credit

The Art and Fine Metalworking course gives students the creative freedom to fabricate custom metal projects, both small and large. Concepts of design and project planning will be emphasized throughout the semester. A variety of tools and techniques will be taught for simple jewelry making. Skills include, but are not limited to, shaping, assembling, and cutting precious metals. In addition, a combination of equipment such as a foundry and forge and CNC technologies will be used for custom projects. It is recommended that students come to class with jeans without holes and to wear closed-toed shoes or boots that are made of leather. (A locker and a lock will be provided in the production lab to keep personal items and projects.) **Class size is limited to 16 students.**

### **GREATER ALTOONA CAREER & TECHNOLOGY CENTER**

Tyrone Area High School is a member district of the Greater Altoona Career & Technology Center. The following courses at the GACTC are available to students in 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade.

- Automotive Technology
- Auto-Diesel Technology
- Baker and Pastry Arts/Baker/Pastry Chef
- Cabinetmaking/Finished Carpentry
- Carpentry Construction
- Collision Repair & Refinishing Technology
- Computer Programming
- Computer & Networking Technology
- Cosmetology
- Culinary Arts
- Dental Assistant
- Digital Communications (Previously Multimedia & Web Design)
- Electrical Trades
- Electro-Mechanical Engineering Technology
- Emergency Services
- Engineering Design Technology (Previously Drafting/Design Technology)
- Health Occupations
- HVAC/Plumbing
- Logistics & Supply Chain Management (Previously Logistics & Materials Management)

- Masonry
- Outdoor Power Equipment Technology
- Precision Machining
- Graphic Design (Previously Visual Arts Technologies)
- Welding Technologies

Any students who are interested in attending the Greater Altoona Career & Technology Center should visit the GACTC website – [www.gactc.edu](http://www.gactc.edu) - for specific information on each program.

Students apply on-line at [www.gactc.edu](http://www.gactc.edu) in December and January. Application deadline is February 2nd.

After two consecutive failing (69% or below) marking periods, the student will be removed from the program they are enrolled in and will return to Tyrone School district with a revised schedule.

## ADDITIONAL ELECTIVES

### **APPLIED NUTRITION**

Grades 10, 11, and 12

.50 Credit

This course will provide students with a look at major concepts and scientific processes involved with the principles of nutrition. Major themes include the structure and function of the digestive system, the major and minor nutrients, nutritional consumerism, careers in nutrition, food preparation and preservation, health issues related to poor nutritional status giving insight to cause, treatment, and prevention of disease, trends in fad dieting, nutritional needs and recommended dietary allowances throughout the lifespan, media influence, understanding basal metabolic rates, body mass index, and target heart rate calculations. Prerequisite: Successful completion of 9<sup>th</sup> grade health.

### **CAFE**

Grades 9, 10, 11, and 12

.50 Credit

The Eagle Café is an elective course which meets daily for a semester. Students are assigned to the Cafe by teacher recommendation only. The purpose of this course is to provide students with an opportunity to develop employability skills in a supported setting within the school day. Students working in the café will have opportunities to experience training on point-of-sale operations and food safety. Students working in the café will regularly perform the following activities: preparing food and beverages for sale, running the dish machine, restocking supplies and items, performing deliveries, and filling customer orders.

### **CHANNEL T NEWSCASTER**

Grades 10, 11, and 12

.50 Credit

Uncover and report on news stories that students and staff at Tyrone High School are craving to hear! Interview the people who are making news in our school and community. Deliver these important stories every morning on Channel T and on the new Eagle Eye News and Multimedia Website! Students will be expected to attend certain extracurricular school events outside of regular school hours. Students must have a strong work ethic, punctuality, and good speaking skills. **Prerequisite: Signature of instructor is required.**

## **COMMUNITY OUTREACH - SERVICE LEARNING**

Grade 11 & 12

.50 to 1 Credit

Community Outreach gives students the opportunity to volunteer their services. Community Outreach Assignments will be made by the Community Outreach Coordinators. These assignments will cover the academic year and will be available with various teachers, offices, and departments within the Tyrone Area School District. Students enrolled will be held to the High School Attendance/Discipline Policy. They will be matched with appropriate Community Outreach Service-Learning sites and assigned mentors who will oversee their work. Students will earn up to 1 credit for their learning experience. Community outreach will be a maximum of one period per school day and preference will be given to seniors first.

## **DRIVER EDUCATION**

Grades 10, 11, and 12

.25 Credit

This course is a combination of classroom and behind-the-wheel (BTW) instruction; both elements are elective courses. Classes will be offered after school and over the summer. Students are eligible after they have completed and passed their 9<sup>th</sup> grade year.

**Classroom Instruction:** Classroom instruction is based on the Indiana University Highway Safety curriculum. Classroom instruction will run for a total of 34 hours. One class will be offered each marking period and the classes will run every Monday, Tuesday, and Wednesday from 3:20-5:20. The summer course dates and times will be announced in the spring of the year. Students may not miss more than 2 classes or 4 hours of instruction. Supplemental instruction will also be given to assist in meeting this requirement. Course work includes basic operations, space management, maneuvering, expressways/residential/rural driving, malfunctions/collisions, and personal factors and distractions. There is NO charge for classroom instruction. Students must pass the classroom instruction curriculum to be eligible for the Behind the Wheel (BTW) Component.

**Behind the Wheel (BTW) Component:** BTW instruction is optional. Students must be 16 years of age, have a valid permit or operator's license, and have passed the classroom instruction component to enroll in the BTW phase of the program. BTW is taught after school at a cost of \$45. Students must pay this fee at the Main Office. Please bring your permit with you at time of payment. Students must log six (6) hours in the driver education car with an instructor. It is recommended that a student have 40 hours or so of BTW time with their parents before they request BTW instruction from the district. Completion of both phases of the program will make the student eligible for an insurance reduction if an 80% average is maintained in the classroom. If you desire, your last session may include your driver's license exam. There is no charge for the test.

## **EAGLE YEARBOOK**

Grades 9, 10, 11, and 12

1 Credit

The yearbook class is responsible for all aspects of the production, sales, and distribution of the Tyrone Eagle Yearbook, published annually since 1914. Yearbook is a perfect elective for anyone looking for a creative outlet for their school spirit, love of photography, design, and/or the written word.

Students will learn basic principles of yearbook production and develop skills that include elements of layout and design, writing, photography, sales, and marketing. Students will learn to use desktop publishing software (including Adobe InDesign), and photo editing software (including Adobe Photoshop). Students interested in photography will learn to use state of the art camera and studio equipment.

Students interested in yearbook should have a strong creative spirit, work well with others, be able to complete work on deadline, be willing to attend after-school events, and be detail-oriented. No previous experience is necessary, however basic computer skills and/or previous knowledge of photography and/or photo editing software is helpful. This course will be limited to fourteen students. **Prerequisites: Fill out an online staff application and approval/signature of teacher are required.**

## **GENERAL PSYCHOLOGY**

Grades 10, 11, and 12

1 Credit

This elective course is a general introduction to the scientific study of the brain, behavior, and mental processes of humans and animals, with emphasis on the goals of psychology: to describe, explain, predict, and control behavior. Students examine the substance of psychology such as biopsychology, sensation and perception, learning, memory, cognitive processes, affective behaviors, and mental illness through an examination of the theories, principles, and methods of research used in the field. Examples and applications enable the student to acquire the elements of critical thinking as adapted to the research environment. Students produce an APA formatted research paper. This course applies the fundamental principles of psychology as a natural science. Students explore current research through reading original empirical research and write an APA formatted analytic research paper.

## **HEALTH AND RESILIENCY**

Grades 11 & 12

.5 Credit

This course will take an intense look at various health and resiliency topics that are currently impacting the lives of high school students. It will focus on areas that will help students develop a sense of understanding for their transition between high school and their early twenties. By exploring and discussing these topics, students will gain knowledge and understanding of the following topics.

- Drugs and Alcohol
- Healthy Relationships
- Work Ethic and Career exploration
- Social Media
- Conflict resolution
- Anxiety/Depression/General Stressors
- Belonging and Connecting
- Strategies for Coping

## **LIFE SKILLS**

Grades 9, 10, 11 & 12

1 Credit

Students will work on becoming as independent as possible in various aspects of the school day. Students will develop social understanding and communication skills. Students will work on Community Based Instruction and Life Skills to prepare them for real world experiences and independent living.

**Prerequisite: Teacher Recommendation**

## **PEER TUTORING/HELPING**

Grades 11 and 12

.50 to 1.0 Credit

Students with significant ability in particular academic areas *or interpersonal skills* can apply to become peer tutors. 90% cumulative GPA or higher is required. Students will be placed in a “peer tutoring” study hall or assigned to a teacher to assist students who need extra help.

## **MATH PEER TUTORING/HELPING**

Grades 10, 11, and 12 .50 to 1.0 Credit

\*Grade 10 by teacher recommendation only

Students will be assigned as a peer tutor specifically to a math class. 90% GPA or higher is required. Peer tutors will help students in a math classroom with their math assignments. As a math peer tutor, they will gain a deeper understanding of the material while helping other students.

**SAT REVIEW: MATH AND READING/LANGUAGE**

Grades 11 and 12

0.50 Credit

This one-semester course, taught as two consecutive quarter-long prep classes, is a must for all college-bound students and will consist of skill-building, test-taking strategy, timed test-taking, and discussions of answers reflecting the changes adopted for the March 2016 SAT. Students who sign up for this course must complete both the Math and Verbal quarters even if they earn acceptance letters for college prior or during the course, even if they decide not to attend college after signing up, and even if they have previously taken the SAT and are satisfied with their previous score.

**STEP (STRENGTHENING TEENS THROUGH EDUCATION & PARENTING)**

Grades 9 - 12

1.0 Credit

STEP is a course offered to any student who is pregnant or already a parent. The purpose of this course is to gain an understanding of the stages of child development (including prenatal development and birth), responsibilities of parenting, and learning the basic skills of providing a safe, nurturing, and stimulating environment for children. This course will provide in-depth information on pregnancy, infancy, toddlers, and preschool ages. We will be discussing current issues that affect children and parents.

**TYRONE EAGLE EYE NEWS ONLINE STUDENT NEWSPAPER**

Grades 9, 10, 11, and 12

1 Credit

Students in this course produce Tyrone High School's award-winning student news website, the Tyrone Eagle Eye News. If you are creative, have school spirit, and talent in one or more of the following areas: writing, photography, podcasting, or social media, you should join the Eagle Eye staff.

Students in Eagle Eye will learn basic principles of journalism including news values, news, sports, and/or feature writing, interview techniques, ethics, and law. They will also learn how to publish content online using WordPress, one of the most popular web publishing platforms in use today, as well as other software applications such as Adobe Photoshop and Premier.

Students may apply for any of the following positions on the news staff: staff writers, photographers, or editors (see below for more information about editor positions).

**Note:** This class is open to students in grades 9-12 who meet the prerequisites listed below. If a required class in your schedule conflicts with the Eagle Eye and you are a self-motivated student with excellent writing or photography skills, you may still be a reporter or a photographer for credit during another class period. If you choose to schedule this way, this class will be an "independent study" with limited direct instruction. To do this you must have the approval of the newspaper advisor. **Prerequisite: 85% average or better in previous year's English class and current English teacher's recommendation. A maximum of 40 staff reporter positions are available.**

**TYRONE EAGLE EYE EDITORS**

Grades 10, 11, and 12

1 Credit + (H)

The editors are the student leaders of the *Eagle Eye News*. In addition to regular writing, and/or photo assignments, the editors supervise the *Eagle Eye* staff, make editorial decisions, assist in assigning stories, and setting deadlines. The editors work closely with the adviser to assist the staff with stories and publish content. Editors must possess superior writing, organizational, and interpersonal skills. Editors must be willing to devote the extra time and effort necessary to produce a high-quality product.

Students may apply for one or more of the following editor positions: **Editor-in-Chief, News Editor, Sports Editor, Features Editor, Photo Editor, Social Media Editor.** **Prerequisites: 90% average or better in previous year's English class and current English teacher's recommendation. Prior experience writing for the newspaper is preferred but not required. Interested students must also fill out an online application. Editor positions are offered as an Honors course with a boost to your NGA/GPA calculation (see Section XII).**

## **VIDEO PRODUCTION**

Grades 10, 11, and 12

1 Credit

Students in this course will produce video programs for the televised morning announcements on Channel T, video features for the Tyrone Eagle Eye News, and video features for our new live broadcasts of TAHS sports events. If you are excited about using your creative talents to communicate to the entire school and community then Video Production is the class for you.

Students in this class will learn the basic principles of video production including staging, lighting, recording, editing, and publishing original video projects. Students will use contemporary production, editing and broadcasting equipment, and software to create programs viewed by a wide audience.

A new and exciting feature of this class will be live broadcasts of high school sports. Students will be expected to devote time outside of the regular school day to maintain a passing grade by assisting the production crew during at least 10 athletic or extracurricular events throughout the school year.

## **XV. CUSTOMIZED LEARNING PROGRAM**

The Customized Learning Program (*CLP*) is an in-house program, located at the Tyrone Area High School. The *CLP* follows the Tyrone Area School District calendar and daily academic bell schedule. This program was developed to foster and enhance the emotional, social, academic, and transitional needs of each student. Students returning or entering the district from an outside placement will have the opportunity to transition into the traditional classroom setting through the *CLP*. The *CLP* will provide additional academic, counseling, and credit recovery support to promote classroom success in a small group setting. Each student has the opportunity to return to the traditional classroom setting by demonstrating improvement in areas where support was requested.

Students assigned to the *CLP* are enrolled in Mathematics, Social Studies, Science, and English. During the school day, highly qualified teachers in each of these core subjects (including special education) visit the classroom and provide assisted cyber instruction in their area of expertise. The students also participate in a Physical Education course. Employability and Life Skills classes are also offered to further meet the needs of each student.

The goal of the *CLP* program is to present each student with the opportunity to develop, grow, and receive the additional support needed to return to a traditional classroom environment with confidence.