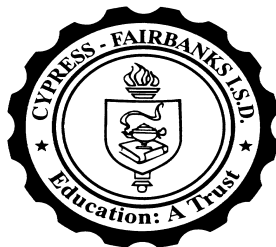


Cypress-Fairbanks  
Independent School District



**High School**

Course Offerings and Descriptions

**2014-2015**



# High Schools

## **Cy-Fair High School**

22602 Hempstead Hwy.  
Houston, TX 77429

**281.897.4600**

## **Cypress Springs High School**

7909 Fry Rd.  
Cypress, TX 77433

**281.345.3000**

## **Cypress Creek High School**

9815 Grant Rd.  
Houston, TX 77070

**281.897.4200**

## **Cypress Woods High School**

13550 Woods Spillane Blvd.  
Cypress, TX 77429

**281.213.1800**

## **Cypress Falls High School**

9811 Huffmeister Rd.  
Houston, TX 77095

**281.856.1000**

## **Jersey Village High School**

7600 Solomon St.  
Houston, TX 77040

**713.896.3400**

## **Cypress Lakes High School**

5750 Greenhouse Rd.  
Katy, TX 77449

**281.856.3800**

## **Langham Creek High School**

17610 F.M. Rd. 529  
Houston, TX 77095

**281.463.5400**

## **Cypress Ranch High School**

10700 Fry Rd.  
Cypress, TX 77433

**281.373.2300**

## **Windfern High School**

12630 Windfern Rd.  
Houston, TX 77064

**281.807.8684**

## **Cypress Ridge High School**

7900 N. Eldridge Parkway  
Houston, TX 77041

**281.807.8000**



## General Registration Information

High schools in Cypress-Fairbanks operate on a semester system (seven classes per day). One year's work will provide one Carnegie credit in each course or a maximum total of seven credits per regular school year. Additional credits may be earned in summer school, correspondence, credit-by-exam, or college courses taken for dual credit.

### New Students

A senior high school student new to the school district should report to the registrars' office with the following documents.

1. A birth certificate
2. Immunization records as follows:

A validated document of immunization, which has been issued by a public health clinic or one signed by a licensed physician\*, must include the following.

<b>Polio</b>	3 doses if last dose is on or after 4 <sup>th</sup> birthday <b>OR</b> 4 doses if 3 <sup>rd</sup> dose is prior to 4 <sup>th</sup> birthday
<b>DTP/DtaP</b>	Children 7 years of age and older – 3 doses; last dose must be after the 4 <sup>th</sup> birthday; booster every 5 years
<b>TDAP booster</b>	1 dose for 7 <sup>th</sup> - 12 <sup>th</sup> graders; booster needed every 5 years
<b>MMR</b> (Measles, Mumps, Rubella)	2 doses; 1 <sup>st</sup> dose – on or after the 1 <sup>st</sup> birthday
<b>Hepatitis B</b>	3 doses
<b>Varicella</b> (Chicken Pox)	1 dose or parent/physician statement of chicken pox illness <b>OR</b> 2 doses if 1 <sup>st</sup> was given at /after age 13 <b>OR</b> 2 doses for 7 <sup>th</sup> – 12 <sup>th</sup> graders
<b>Meningococcal</b>	1 dose for 7 <sup>th</sup> – 12 <sup>th</sup> grade entry

Proof of DT booster and/or second measles vaccine must be presented to the school nurse at the beginning of the semester in which they are due. Parents and students will be notified when vaccines are due.

\*Immunization records from a previous school are also acceptable.

**Please note:** Immunization requirements differ for younger children. Parents of elementary school-age children should consult with the elementary school nurse.

3. A copy of his/her academic record from the previous school
4. A copy of his/her STAAR Confidential Student Report for the most recent test administration (students enrolling from another Texas school)
5. Social Security number
6. Proof of residency in the district (lease agreement, proof of home ownership, etc.)

### Returning Students

Students who have already registered but must have a schedule change due to the situations listed below must call the school office no later than August 1 to make an appointment to discuss a change due to

- attendance in summer school;
- completion of a correspondence course; or
- failure to complete the prerequisites for a new course.

## Course Offerings

Pages 15-27 list all the high school course offerings with grade placement, credit(s), prerequisites, and some brief information on each course. This bulletin serves as an overview of students' requirements for graduation including course descriptions. This bulletin also outlines procedures for changing courses and possible consequences of changes.

A wide variety of electives are found among the courses offered. Career and Technical skills preparation courses are offered to junior and senior students who are at least 16 years old. These courses are two to three hours daily with all or part of the instruction given on campus. Students participating in courses which involve off-campus instruction (practicums) must provide their own transportation.

## Special Education

Students experiencing difficulties in school may be referred for services in special education. Before a student can receive special education and/or related services for the first time, an initial evaluation must be conducted. Decisions regarding the provision of special education services are made by an Individual Education Plan (IEP) committee. If a student is determined to be eligible for services in accordance with the Texas Education Agency guidelines, an individualized education plan is developed. Instruction that is designed to meet a student's unique educational needs may be provided in a variety of settings. Instructional settings may include (a) general education classroom with accommodations, (b) general education classroom with support, (c) resource classroom, (d) self-contained classroom, or (e) a separate campus. Related services necessary for the student to benefit from special education may also be provided.

## Grade Classification Standards Class of 2015 and Beyond

Grade	Criteria for Students Entering 9 <sup>th</sup> Grade Beginning 2011-12
9 <sup>th</sup>	Promotion from middle school
10 <sup>th</sup>	1 year of attendance and 5 credits, including English I and Algebra I
11 <sup>th</sup>	2 years of attendance and 11 credits
12 <sup>th</sup>	3 years of attendance and 17 credits or early graduation plan

## Course Selection and Request for Changes

Students will select courses for the next school year during the spring semester. Factors to be considered in selecting courses are the

- requirements for graduation;
- significance of the course to the student's overall program and educational/career goals;
- purpose of the course; or
- possible prerequisite(s) for other courses.

A decision of this nature should be considered with parental aid. All requests for changes must be submitted in writing by the last day of the spring semester. The following guidelines will be used in honoring changes/requests made after that date.

1. Changes will be made during the first three weeks (first 15 days) of a semester for the following reasons. The student
  - does not meet prerequisite(s) for the course;
  - does not meet grade placement requirement of the course;
  - already has credit in the course;
  - is placed in an inappropriate level; or
  - has not met requirement for K-level, AP, or HORIZONS placement.
2. After consultation with the teacher, students may withdraw from band, dance, JROTC, or athletics at any time, but in each case, they will be assigned to a regular physical education class.
3. No schedule changes are allowed after the third week (first 15 days) of each semester.

## Consequences of Changes

If a student withdraws from a course during the first three weeks of either semester for the reasons listed on page 2, the course will not be shown on the student's record. Students withdrawing from a course after the first three weeks will receive no credit for the course. The students' record will show a "WD" for the semester in which the withdrawal is made. The course will count as one attempted with no credit or grade points allowed. This course will also be calculated in the grade point average and affect class rank.

### **"K" (Accelerated) and Advanced Placement Courses**

K-level (accelerated level) courses are offered in English, mathematics, science, foreign language, College Preparatory Strategies\*, social studies, gifted/talented education, and computer science. Advanced Placement (AP) courses, which prepare students to take College Board exams to earn college credit, are available for students who desire to participate in a rigorous, challenging curriculum. To encourage enrollment in upper-level courses, the district allows students in some third and fourth courses in a sequence to elect to take the course on a pass/fail basis.

HORIZONS is the name of the program for students identified as gifted/talented. The courses are designed to meet the unique needs of gifted students in CFISD. Parents may refer their children to be tested for the gifted program annually through the Open Referral Period beginning October 1 and ending the last school day in November. If you need more information about gifted students and the gifted program, please visit the HORIZONS website and view the PDF, "Should I Refer My Child?" Parents who feel that their child is demonstrating characteristics of gifted behavior would need to contact the director of instruction at the campus during the Open Referral Period to refer students for testing.

*\*For ninth graders entering high school in 2013 (Class of 2017) and beyond, this course will only be offered for local credit.*

Advanced High School Courses Offered in CFISD High Schools

English	English I K or HORIZONS
	English II K or HORIZONS
	English III K, AP, or HORIZONS
	English IV K, AP, or HORIZONS
	Debate III K*
	Independent Study in Speech-Debate IV K*
	Journalism III K*
	College Prep K or HORIZONS**
Mathematics	Geometry K or HORIZONS
	Algebra II K or HORIZONS
	College Algebra K or HORIZONS
	Pre-Calculus K or HORIZONS
	Calculus AP AB or HORIZONS
	Calculus AP BC or HORIZONS
	Statistics AP or HORIZONS
	Advanced Quantitative Reasoning K
Social Studies	World History K, AP, or HORIZONS
	World Geography K or HORIZONS
	World Area Studies K or HORIZONS
	Psychology AP or HORIZONS
	United States History K, AP, or HORIZONS
	European History AP or HORIZONS
	Human Geography AP or HORIZONS
	Government K, AP, or HORIZONS
	Economics K or HORIZONS
	Macro Economics AP or HORIZONS
	Micro Economics AP or HORIZONS
	Comparative Government and Politics AP or HORIZONS
Science	Biology K or HORIZONS
	Biology AP or HORIZONS
	Chemistry K or HORIZONS
	Chemistry AP or HORIZONS
	Physics K or HORIZONS
	AP Physics I or HORIZONS
	AP Physics C or HORIZONS
	Environmental Science AP or HORIZONS
	Anatomy and Physiology K
	Earth and Space Science K or HORIZONS
	Engineering Design & Problem Solving K

Languages Other Than English	Spanish III K
	Spanish IV-V K or AP
	Spanish VI K
	Spanish for Native Speakers III K
	Spanish for Native Speakers IV AP
	French III K
	French IV AP
	French V K
	French VI K
	German III K
	German IV AP
	German V K
	German VI K
	Latin III K
Latin IV AP	
Latin V K	
Latin VI K	
Computer Science and CTE	Computer Programming K
	Computer Science AP
	Advanced Computer Science K*
	Computer Science-Problems/Solutions K*
	Internetworking Technologies I K
	Internetworking Technologies II K
	Money Matters K
Fine Arts	AP Art – Drawing
	AP Art – 2D
	AP Art – 3D
	AP Art – Photography
	AP Art – Digital Art and Media
	AP Art History
	AP Music Theory

\* For ninth graders entering high school in 2014 (Class of 2018) and beyond, these courses will no longer be offered for K-level credit.

\*\* For ninth graders entering high school in 2013 (Class of 2017) and beyond, this course will only be offered for local credit.



## Advanced Classes Entry/Exit Criteria

K-level classes have a more rigorous and in-depth content focus than L-level classes. Classes often move at a faster pace, include different types of assignments, and require additional outside reading. These classes are designed to challenge students beyond grade-level academic courses and prepare them for success in future advanced coursework. Students may require additional encouragement and support from both family and campus staff to be successful in advanced classes. Students enrolled in advanced classes in English, math, science, or social studies should have an interest in and an aptitude for the subject.

### Advanced Classes Entry/Exit Criteria\*

#### Eligibility for Entry into K-level or Advanced Placement (AP) Classes for Grades 9-10

Ninth or 10th graders who were scheduled in Level-1 / K-level courses the previous year will be able to continue in the K-level course sequence if they maintained a 75+ average for the second semester.

1. Students must earn a grade of 85+ yearly average in the previous on-level / L-level class in the same subject; or
2. Students must score Level III – Advanced on STAAR Reading (9<sup>th</sup> graders) or Level III-Advanced on the English I EOC (10<sup>th</sup> graders) to be eligible for K-level English and/or Social Studies or must score Level III – Advanced on STAAR Math (9<sup>th</sup> graders) or Level III-Advanced on the Algebra I EOC (10<sup>th</sup> graders) to be eligible for K-level Math and/or Science; and
3. Students must have parent permission to take a K-level or AP class.

#### Eligibility for Entry into K-level or Advanced Placement (AP) Classes for Grades 11-12

1. Students must earn a grade of “A,” “B,” or “C” in the previous K-level or L-level class in the same subject area.
2. Students must have parent permission to enroll in a K-level or AP class.
3. Eleventh and 12<sup>th</sup> graders who were scheduled in K-level courses the previous year will be able to continue in the K-level course sequence if they maintained a 75+ average for the second semester.

### Removal from K-level or AP Class

1. Students who receive a “D” average for the semester will be removed from the K-level class and placed in an appropriate L-level class for the following semester, if an L-level class is available. Students who receive a “D” average for the semester will be removed from the AP class and placed in the appropriate L-level class for the following semester, if an L-level class is available. A “D” average does not meet the entry criteria for a K-level class. No grade adjustments are made to semester averages.
2. If a student makes an “F” for any grading period, he/she will be placed in an appropriate L-level class for the remainder of the school year.
3. A student making below an 80 average at the end of the third week of a grading period in a K-level class may, upon his/her request and parent approval, be placed in an appropriate L-level class for the remainder of the school year. A student making below an 80 average at the end of the third week of the grading period in an AP class may, upon his/her request and parent approval, be placed in either a K-level or L-level for the remainder of the school year. The student must meet entry requirements specific to his/her grade level to qualify for placement in K-level (85+ for 9<sup>th</sup> and 10<sup>th</sup> graders and 75+ for 11<sup>th</sup> and 12<sup>th</sup> graders). No grade adjustments are made when a student drops from an AP class to a K-level class.
4. A student may, upon his/her request and with parent approval, transfer from a K-level or AP class to an appropriate L-level or K-level class at the end of any grading period.

*\*The K-level entry/exit criteria apply to all HORIZONS students in HORIZONS/K-level cluster classes.*

### Grade Adjustments

When a student changes from a K-level to an L-level course, grade adjustment points will be added to the student's current three-week average (during any grading period) or final average in the first, second, fourth, and fifth grading periods only. No adjustment will be made in grades earned in previous grading periods, nor will adjustments be made in semester averages. Adjustments will not be made to a failing grade that would make that grade higher than 69. A detailed explanation of the K- to L-level grade adjustments is available through the counselors' office.

*Please note: Grade adjustments will not be made to grades of “B” or higher.*

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## Other Learning Opportunities

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High school counselors can provide information, answer questions, and in some instances, help students enroll in courses outside the regular school day. The following options are available to Cypress-Fairbanks I.S.D. students.

### **Credit-by-Exam without Prior Instruction (Original Credit)**

In accordance with the Texas Education Code, Cypress-Fairbanks I.S.D. will administer examinations for specified courses to eligible students. Credit-by-exam will serve primarily as the vehicle for students to be given credit for a course they have not yet taken formally. The passing standard is a grade of 80+. The passing grade and credit earned (L-level) on the credit-by-exam will be placed on the student's transcript and used in GPA and class rank calculations. Students wishing to exercise this option should see their counselor for an application. The exams are scheduled periodically throughout the school year.

### **Credit-by-Exam with Prior Instruction**

Students who have engaged in study in a curriculum that cannot be matched exactly with required TEKS of a course may consider credit-by-exam. These students may have studied in a foreign country, a non-accredited school, home school, or want credit for summer enrichment courses both in and out of state. The passing standard is a grade of 70+. The passing grade and credit earned (L-level) on the credit-by-exam will be placed on the student's transcript and used in GPA and class rank calculations. A fee of \$30.00 is charged for each credit-by-exam with prior instruction. For more information, see your counselor. **Students may not take credit-by-exam during the semester they are enrolled in the same course.**

### **Articulation Agreements**

The Cypress-Fairbanks Independent School District and area community colleges, including North Harris Montgomery Community College District and Houston Community College System, have entered into agreements to award credit for specified course work in high school. Students who successfully complete designated high school courses, meet certain college requirements, including grade average, and enroll in a specified program, receive college hours or advanced standing. This allows students the opportunity to take higher-level courses on the college level. A current list of approved courses is available in the counselors' office.

### **Summer School**

Original credit and make-up credit courses are offered each summer. Students meeting certain criteria may take some courses for original credit prior to the year that the course is required. Courses are offered in English, speech, math, science, social studies, physical education, health, career and technology, and art. All summer school courses, whether taken in or out-of-district, will earn L-level grade points only. (See summer school brochure for more information.)

### **On-line Courses / Texas Virtual School Network**

The Texas Virtual School Network (TxVSN) offers on-line courses for students in grades 9-12. On-line courses selected by a CFISD student must be consistent with the student's high school graduation plan and must meet standards that are of equivalent rigor as the district's standards for the same course provided in a traditional classroom setting. Any student interested in participating in a TxVSN course should contact his/her counselor. The high school counselor registers and approves all on-line student course enrollments.

## High School Course Work – Dual High School/College Credit

Cypress-Fairbanks I.S.D. and Lone Star College have entered into an agreement allowing students, who meet specified criteria, to earn both high school credit and college credit for specific high school courses. Please see your counselor for dual credit eligibility requirements and course availability.

## College Course Work – Dual High School/College Credit

A high school student may earn dual credit toward high school graduation and college credit through successful completion of approved college courses. A student will be awarded credit toward graduation only if he/she obtains prior approval from the appropriate district personnel (or is enrolled in a college course on the high school campus specifically identified as dual credit, see paragraph above).

A student who meets the following criteria is eligible to apply for the opportunity to earn high school credit through a college course:

1. The student must have completed his/her sophomore year in high school.
2. The student must have an overall average for all courses of at least 80, or the student must have an average of at least 80 in the last course taken in the general subject-area of the college-level course.
3. The student must have successfully completed prerequisite courses as identified by district guidelines.
4. The student must meet state exemption criteria or have acceptable scores on college placement exam(s).
5. The student must have completed or updated an application, submitted a transcript, and received prior approval from the high school counselor.
6. The student must have received approval for college admission through the exceptional admissions process, completing all enrollment paperwork required by the college.

Specific requirements and procedures are available in the counselors' office.

### Note:

- *Students are responsible for required fees.*
- *Students may take only two college courses per semester. Students wanting to take an additional course must make a special request. Maximum course load for a part-time student is 11 hours per semester.*

## Advanced Courses on a Pass/Fail Basis

Students in grades eleven and twelve are eligible to earn up to two credits on a pass/fail basis, one as a junior and one as a senior. Any student who wishes to take courses in addition to the 26 required for graduation with a Recommended High School Program or the 22 credits required to accomplish the Minimum High School Program may take such courses on a pass/fail basis. Only certain courses, as designated by district policy, can be taken as pass/fail. The student must declare intent to take such a course on a pass/fail basis within the first 15 days of the semester. Students who have a grade average of 70 or above in such courses shall be awarded credit. Rather than a numerical grade, a "P" will be recorded on the transcript. Conversely, an "F" will be recorded on the transcripts of students who earn a numerical average of less than 70. These courses shall be excluded in the computation of grade point averages. The purpose of the option is to encourage students to take advanced courses in addition to the total number of credits required for graduation.

Students must meet eligibility requirements, including grade level and grades earned in previous courses, and receive approval from parents, counselor, and instructor. Because requirements and courses approved for pass/fail may change from year to year, students should consult with their counselor and/or content-area teacher prior to registration to determine their eligibility to participate in the pass/fail program. Students who take a course under the pass/fail option must complete all assigned work and take the TEKS/benchmark exam and final exam of the course unless they are exempt from the final exam due to the current exemption policy. The student's academic performance in a pass/fail course will affect his/her eligibility to participate in extracurricular activities.

## Correspondence Courses

A high school student may earn two credits toward graduation through correspondence courses. A student will be awarded credit toward graduation only if he obtains approval from the grade-level counselor prior to course enrollment. All grades earned will be entered on the transcript and included in the grade point average.

The student's eligibility for enrollment in a correspondence course is based upon the following criteria:

1. The student must have successfully completed one semester in the ninth grade.
2. The student must have an overall average for all courses taken in high school of at least 75.
3. The student must have at least a 75 average in a previous similar course.
4. The student must have successfully completed prerequisite courses as identified by district guidelines.
5. The student must not be enrolled in another correspondence course.
6. All course work and the final examination must be completed and the grade reported to the counselor before the sixteenth week of the fall semester of the senior year in order for the grade to be posted for graduation purposes.
7. The Texas Education Agency only recognizes courses from the University of Texas at Austin and Texas Tech University.

Correspondence course grades must be received by the counselor or registrar before the beginning of the sixteenth week of the fall semester of a student's senior year, or the student shall be enrolled in the course for the spring at the high school the student is attending or in night school. If the senior is enrolled in a correspondence course in the fall semester and does not complete it before the sixteenth week, the course will be recorded on the student's transcript as a "WD."

If a student does not complete a correspondence course by the designated deadline, the course shall be recorded on the student's transcript as a "WD" –a course attempted-withdrawn/dropped. That is, the course shall count as one attempted with no credit earned and zero grade points allowed. This course shall also be calculated in the grade point average and shall negatively affect class rank.

Students planning to participate in graduation in the summer must sign up for a correspondence course no later than March 1 and must have received all correspondence grades no later than July 1.

### **Early Graduation**

Students may graduate early, subject to the following conditions.

1. Students must complete a Declaration of Intent to Graduate Early form, a document signed by the parent and submitted to the counselor no later than the semester before the intended graduation date. The counselor will review the plan, sign, and forward the plan to the high school registrar.
2. Early graduation options include the following:
  - the June of the third complete year of high school (36 consecutive months)
  - the summer after the third complete year of high school (38 consecutive months)
  - the December of the fourth complete year of high school (43 consecutive months); students choosing this option may participate in the June graduation ceremony

Grade point averages for these mid-term graduates will be treated in the same manner as June graduates in so far as class rank and class honors are concerned.

### **Windfern High School**

Windfern High School, CFISD's "Campus of Choice," is a fully accredited high school with the standard requirements for earning the "Minimum" or "Recommended" diplomas. WHS serves eleventh and twelfth graders who apply for admission from the district's traditional high schools. Students must be recommended by their home campus assistant principal and counselor and must write a statement of why they want to attend Windfern and what they are willing to do to ensure their success.

Students who attend Windfern:

- Credit-deficient students who wish to rectify their graduation plan
- Credit-accelerated students who seek to expedite their coursework, graduating in three or three and a half years

Windfern offers teacher-guided traditional instruction in small-size classes as well as non-traditional credit-earning options (i.e., Digital Learning Program interactive computer-based instruction, credit-by-exam). Students attend 105-minute classes in nine-week semesters. Graduations are held in December and June.

For more information: [www.cfisd.net/campuses/Windfern High School of Choice](http://www.cfisd.net/campuses/Windfern%20High%20School%20of%20Choice).

## Class Ranking \*

Beginning with courses taken between the eighth and ninth grade, all high school courses, including correspondence, night school, college courses taken for dual credit, credit-by-exam, and summer school, are averaged in the class rank with the exception of student assistance, local credit, and courses taken under the pass/fail option. High school courses taken by seventh or eighth-grade students and completed by the end of the eighth-grade year will not count in class rank with the exceptions of Geometry, Biology, and the third or higher levels of a foreign language. Rank will be determined by grade point averages (G.P.A.) of the students. Estimated class rankings are to be determined at the end of the junior year and the first semester of the senior year for the express purpose of college entrance requirements. Another ranking shall be performed at the end of the fifth grading period to identify summa cum laude, magna cum laude, and cum laude graduates. No valedictorian or salutatorian will be officially recognized at graduation.

### Honor Graduate Designation

At graduation ceremonies, graduates will be recognized in the following categories: summa cum laude (6.5 G.P.A.), magna cum laude (6.25 G.P.A.), and cum laude (6.0 G.P.A.). A final calculation of G.P.A. and class rank is determined at the end of the senior year and will be reflected on the final transcript which is sent to colleges.

### Grading Scale

CFISD uses a weighted 6.0 grading scale. Grade points are allocated for a course of study based on the designation of the course as indicated in the chart below.

GRADE	LEVEL OR COURSE			
	K, AP, and HORIZONS Levels	L-Level (on level)	Below Level Adaptive Behavior, ICS-M, NAC, Resource	Life Skills
A (90-100)	7 grade points	6 grade points	5 grade points	4 grade points
B (80-89)	6 grade points	5 grade points	4 grade points	3 grade points
C (75-79)	5 grade points	4 grade points	3 grade points	2 grade points
D (70-74)	4 grade points	3 grade points	2 grade points	1 grade points
F (below 70)	0 grade points	0 grade points	0 grade points	0 grade points

The semester grades are computed by allocating a weight of 2/7 for each grading period average and 1/7 for a semester exam. A student will receive credit for each semester passed. If the course is a two-semester sequence and the student passes the second semester after having failed the first, he/she may receive the credit for both semesters if the yearly average is passing (70+).

Four mathematics and four science courses will be included in a student's GPA calculation. If a student takes Algebra I in 8<sup>th</sup>-grade and takes four math courses in grades 9-12, the four math courses taken in high school will be included in the student's GPA. But, if a student takes Algebra I in 8<sup>th</sup>-grade and only takes three math courses in grades 9-12, the Algebra I course will be included in the student's GPA calculation. Algebra I taken at any time will carry L-level grade points.

### Participation in Commencement

To be eligible to participate in commencement exercises, a student must meet state graduation requirements by earning a minimum of 22 credits in designated courses and pass all required state assessments (see p. 17).

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**Notes Page**

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## Graduation Requirements for the Classes of 2015, 2016, and 2017

Students who enter the ninth grade in the **fall 2011, 2012, and 2013** must enroll in courses necessary to complete the *Recommended High School Program* or the *Distinguished Achievement Program* unless the student, parent, and a school counselor agree that the student should be permitted to take courses under the *Minimum High School Program*. Students should study the table below which outlines requirements for the *Recommended High School Program* and the *Minimum High School Program*. Then, using the list of course descriptions that follow, students should select and register for courses. Note that students graduating under the *Recommended High School Program* will need to schedule additional courses not required for the *Minimum High School Program*. Counselors at each high school will furnish all other information necessary for students to complete registration.

Courses	Recommended High School Program	Minimum High School Program	Notes
English	4	4	<ul style="list-style-type: none"> <li>Business English may be taken in the place of English IV for the Minimum High School Program.</li> </ul>
PACE (Personal, Academic, and Career Exploration)  or  PACE Plus	1/2  or  1	1/2  or  1	<ul style="list-style-type: none"> <li>One-half credit is required in grade 9.</li> <li>One credit is required for all 9<sup>th</sup>-grade students who did not pass all 8<sup>th</sup>-grade core academic classes (language arts, reading, math, science, and social studies) and who have not met the state standards on any 8<sup>th</sup>-grade reading, math, science, and social studies state assessments.</li> <li>Beginning ESL students, intermediate ESL students, and special education students in need of support are also required to take this year-long class.</li> </ul>
Mathematics	4 Algebra I, Geometry, Algebra II, and an additional math course	3 must include Algebra I, Geometry	<ul style="list-style-type: none"> <li>Math Models with Applications may satisfy the requirement for the additional math credit only if taken <u>prior</u> to Algebra II.</li> <li>AP Computer Science may satisfy the requirement for the additional math credit only if taken after successful completion of Algebra II.</li> <li>Four mathematics courses will be included in a student's GPA calculation. If a student took Algebra I in 8th grade and takes four math courses in grades 9-12, the four math courses taken in high school will be included in the student's GPA. But, if a student took Algebra I in 8th grade and takes only three math courses in grades 9-12, the Algebra I course will be included in the student's GPA calculation. Algebra I taken at any time will carry L-level grade points.</li> </ul>
Science	4 Biology, Chemistry, Physics, and an additional science course	2 Integrated Physics and Chemistry, Biology or 3 Biology, Chemistry, and Physics	<ul style="list-style-type: none"> <li>Integrated Physics and Chemistry may satisfy the requirement for the additional science credit if taken <u>prior</u> to Chemistry and Physics.</li> <li>All students entering high school in fall 2010 or beyond will take Biology in ninth grade.</li> </ul>
U.S. History	1	1	
World History	1	1	
World Geography	1		
Government	1/2	1/2	
Economics	1/2	1/2	

**2014-2015 High School Course Offerings**

<b>Courses</b>	<b>Recommended High School Program</b>	<b>Minimum High School Program</b>	<b>Notes</b>
Health or Principles of Health Science	1/2 or 1	1/2 or 1	<ul style="list-style-type: none"> <li>Health may be taken in any grade or taken through correspondence, summer school, or through credit-by-exam.</li> </ul>
Physical Education	1	1	<ul style="list-style-type: none"> <li>Students may earn a maximum of four (4) credits in P.E. toward graduation—including athletics. Students enrolled in the regular physical education program must take Foundations of Personal Fitness.</li> <li>Students may meet the PE requirement through after school participation in the fall semester of marching band and cheerleading, and both semesters of drill team and JROTC. Students may also meet the physical education requirement if they participate in a district-approved Olympic caliber, off-campus training program.</li> <li>Physical education credit may be earned through approved correspondence courses.</li> </ul>
Languages other than English (Foreign Language)	2		<ul style="list-style-type: none"> <li>Students may take any two levels of the same foreign language to meet the requirements for the Recommended High School Program. Foreign language credits earned in middle school will count toward this requirement.</li> </ul>
Speech	1/2	1/2	<ul style="list-style-type: none"> <li>These courses meet the requirement: Professional Communications (1/2), Communication Applications (1/2), Debate I (1), or Oral Interpretation I (1).</li> </ul>
Fine Arts	1	1	<ul style="list-style-type: none"> <li>Approved fine arts courses include art, music, dance, and theatre courses.</li> </ul>
Academic Elective: World Geography or Science Elective		1	
Electives	4 1/2	3 1/2 to 5 1/2	<ul style="list-style-type: none"> <li>Must be state-approved courses.</li> </ul>
<b>Total State Credits Required</b>	<b>26</b>	<b>22</b>	

**Distinguished Achievement Program**

Students desiring to earn the Distinguished Achievement Program transcript must complete the requirements for the Recommended High School Program plus **one additional credit in languages other than English (foreign language)** and any combination of four advanced measures selected from the following options:

- A score of three or above on The College Board Advanced Placement Examination.
- A grade of 3.0 or higher on courses that count for college credit, including tech-prep programs and dual credit courses.
- Original research/project conducted under the direction of mentor(s) reported to an appropriate audience and judged by a panel of professionals in the field that is the focus of the project. Original research may not be used for more than two measures.
- A score on the PSAT that qualifies a student for recognition in one of these ways: (1) Commended Scholar or higher by the National Merit Scholarship Corporation, (2) National Achievement Scholarship Program for Outstanding Black Students, or (3) National Hispanic Scholar Program. *Note: The PSAT score may only count as one advanced measure, regardless of the number of honors received by the student.*

**Note:** *Math Models with Applications and AP Computer Science may not serve as math credits on the Distinguished Achievement Program (DAP). Additionally, Integrated Physics and Chemistry may not serve as a science credit on the DAP.*



## Testing Requirements for High School Graduation

**Beginning with the Class of 2015** (ninth graders entering high school in fall 2011 and beyond), state law requires that students pass five STAAR End-of-Course (EOC) assessments in English, math, science, and social studies, along with meeting their course requirements, to receive a diploma from a Texas public high school. Courses with an EOC assessment are listed in the chart below.

English	Mathematics	Science	Social Studies
English I	Algebra I	Biology	U.S. History
English II			

The STAAR testing program requires that students take the five EOC assessments during the school year in which they are enrolled in the courses. Students who are taking any of these five high school courses in middle school will also take the required EOC assessment. Students may not retake an EOC assessment that they have passed. EOC assessment scores are not included in students' course grades.

## Graduation Requirements for Students in Special Education

Graduation requirements for students in special education are determined by the student's Individual Education Plan (IEP) committee.

Tenth, eleventh and twelfth-grade students who receive special education services, entered ninth grade in the fall of 2004 and thereafter, and complete the same credit, assessments, and curriculum requirements (i.e., no content modifications) as students in general education may graduate under the Minimum, Recommended, the Distinguished Achievement Programs. On the other hand, students who receive special education services with modifications in state assessments and/or curriculum (i.e., are enrolled in ICS-M, resource, adaptive behavior, and/or life skills) will qualify to graduate under the Minimum High School Program only.

## State Programs Supporting Texas Students

The State of Texas has developed several programs to encourage students to pursue a strong academic high school program which will adequately prepare them for further study and to face challenges in the twenty-first century work place. These programs focus on admissions, grants, tuition exemptions, and financial aid, which will enable well-prepared, eligible students to attend public and non-profit institutions of higher learning in the State of Texas. **Some programs specify that students must graduate under the Recommended High School Program.**

### Top Ten Percent Admissions

Applicants from accredited Texas schools who graduate in the top ten percent of their high school class shall be admitted to a general academic institution if the students meet the following conditions:

- ◆ apply no later than two years after graduating from high school;
- ◆ submit a completed application prior to filing deadlines set by the college;
- ◆ graduate under the Recommended High School Program; and
- ◆ provide additional documents requested by the college, including essays, letters of recommendations, admissions tests, and high school transcript.

**Note:** *Colleges may limit the number of first time freshmen eligible for admission due to enrollment caps (i.e., University of Texas). In some instances, students may be admitted to the university but not to the college of choice within the university. Colleges may admit students on a first-come-first-admitted basis or may use a lottery system.*

### Toward Excellence, Access, and Success (TEXAS) Grant Program

The Texas Grant Program establishes grants to cover tuition and fees to Texas public and independent colleges and universities including community colleges and technical schools for students with financial need who successfully complete the Recommended or Distinguished Achievement High School Graduation Programs. To be eligible, students must not have been convicted of a felony or crime involving a controlled substance.

Students who continue in college and who meet program academic standards can receive awards up to 150 semester credit hours or six years, whichever occurs first. In the first year of college, the academic standards are set by the institution. In subsequent years, the requirements are completion of at least 75 percent of the hours taken in the prior semester, plus an overall grade point average in college of at least 2.5 on a 4.0 scale.

Awards will be made through the financial aid office of the college/university. Persons interested in the program should contact the college/university financial aid office to find out about deadlines and procedures.

### Texas Educational Opportunity Grant (TEOG)

The purpose of the program is to provide a grant of money to enable well-prepared eligible students to attend public community colleges, technical colleges, or public state colleges in Texas. Students must be a Texas resident, have a financial need, enroll in the first thirty hours in college, must register with the Selective Services or be exempt, and have not been convicted of a felony or a crime involving a controlled substance.

### Other Texas Financial Aid Programs

Other scholarships, grants, and financial aid, including tuition exemption, loans, and work-study are available including a tuition rebate program from Texas public universities, the Texas B-On-Time student loan program, a student loan with cancellation program for teachers (Teach for Texas), and the Tuition Equalization Grant (TEG). Students should begin preparing for these opportunities early in their high school years. Students should develop a portfolio which shows evidence of high achievement in a strong academic program as well as contributions to the school and community by participating in extracurricular activities and community organizations and projects. **(Reminder: Some financial aid programs require students to graduate under the Recommended High School Program.)**

### General Information

Texas Financial Aid Information Center  
Toll free: 1.877.782.7322 or 1.888.311.8881

Texas Higher Education Coordinating Board  
Web Address: [www.thecb.state.tx.us](http://www.thecb.state.tx.us)

Texas Guaranteed Student Loan Corporation  
Web Address: [www.AdventuresInEducation.org](http://www.AdventuresInEducation.org)

Exemption Information  
1.800.242.3062, ext. 6387 (unmanned)

Tract sheet and links to other sources  
Web Address: [www.collegefortexans.com](http://www.collegefortexans.com)

# Course Offerings

The table on pages 15-27 lists all the high school course offerings with grade placement, credit, prerequisites, and some basic information on each course. This information serves as a brief overview of student requirements for high school graduation. Complete course descriptions will be found on pages 29-105. Course offerings are subject to change each year.

The following abbreviations appear in the table to indicate the type of course:

- **I Independent** Course - May receive credit for each semester passed. Students may enter or exit these courses at the end of the first semester. Students who are enrolled the entire year, pass the second semester and have a passing average for the year, earn one credit.
- **IS Independent Sequential** Course - May receive credit for each semester passed. Students may exit at the end of the first semester, but may not enter at mid-term. Students who are enrolled the entire year, pass the second semester, and have a passing average for the year earn one credit.
- **R** Courses are **required** during the year indicated on the chart.
- **E** Students may **elect** to take the course during the year shown and must meet prerequisites.

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
<b>Language Arts</b>								
<b>English</b>								
English I-IV	R	R	R	R	1 – 4	IS	Taken in sequence	28
English for Speakers of Other Languages	E	E			1 – 2	IS	May count only two credits for English requirements	
Business English				E	1	IS	For students on MHSP only; Touch Systems Data Entry	
PACE (Personal, Academic, and Career Exploration) <b>OR</b> PACE Plus	R R				1/2 1	I IS	Required for all 9 <sup>th</sup> graders Placement determined by district criteria	
* SAT/ACT Preparatory Strategies			E	E	1/2	I		
* Bridge to College Success			E	E	1/2	I		
Creative and Imaginative Writing		E	E	E	1	IS		
<i>*These courses are available to on-level or above-level eleventh- or twelfth-grade students only. For ninth graders entering high school in 2013 (Class of 2017) and beyond, these courses will only be offered for local credit.</i>								
<b>Reading</b>								
Reading I-III	E	E	E	E	1/2 - 3	I	Counselor approval; recommended for students reading below grade level	30
<b>Journalism</b>								
Journalism I	E	E	E	E	1	IS		31
Photojournalism	E	E	E	E	1/2	I		
✓ Advanced Journalism I, II, III K		E	E	E	3	IS	Taken in sequence	
<i>✓ For ninth graders entering high school in 2014 (Class of 2018), Advanced Journalism II and III will no longer be offered for K-level credit.</i>								
<b>Speech and Debate</b>								
Professional Communications	E	E	E	E	1/2	I	Required credit for graduation for students entering high school prior to fall 2014	31

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
** Oral Interpretation I	E	E	E	E	1	IS	Middle school or high school speech; tournaments required	
Oral Interpretation II-III		E	E	E	2	I	Oral Interpretation I; taken in sequence; tournaments required	
** Debate I	E	E	E	E	1	IS	Tournaments required	
✓ Debate II and III K		E	E	E	2	IS	Debate I; tournaments required; taken in sequence;	
✓ Independent Study/Speech or Debate IV K				E	1	IS	Oral Interpretation I-III or Debate I-III K; tournaments required	

\*\* Meets speech credit requirement if student completes full year of course (see course descriptions)

✓ For ninth graders entering high school in 2014 (Class of 2018), Debate III and IV will no longer be offered for K-level credit.

**Social Studies**

World Geography Studies	E	E	E	E	1	IS	Required for RHSP or meets academic elective requirement for MHSP
Human Geography – AP	E	E	E	E	1	IS	May substitute for World Geography
World History Studies		R			1	IS	
World History Studies – AP		E			1	IS	K-level only; may substitute for World History
United States History			R		1	IS	
United States History – AP			E		1	IS	K-level only; may substitute for required U.S. History
United States Government				R	1/2	I	U.S. History and World History
United States Government – AP				E	1/2	I	K-level only; may substitute for required U.S. Government
European History – AP			E	E	1	IS	U.S. History or concurrent enrollment
Economics / Free-Enterprise				R	1/2	I	U.S. History and World History
Macro Economics – AP				E	1/2	I	K-level only; may substitute for required Economics
Micro Economics – AP				E	1/2	I	
Sociology			E	E	1/2	I	
Psychology			E	E	1/2	I	
Psychology – AP			E	E	1/2	I	K-level only
Comparative Government – AP				E	1/2	I	May not substitute for Government
Social Studies Research			E	E	1/2 – 1	I	
<b>Special Topics in Social Studies:</b>							
World Area Studies			E	E	1/2 – 1	I	K-level or HORIZONS only
Street Law			E	E	1/2 - 1	I	

**Mathematics**

Algebra I	R				1	IS	
Geometry	E	R			1	IS	Algebra I
Algebra II		E	E	E	1	IS	Geometry with an A, B, C yearly average
Precalculus			E	E	1	IS	Algebra II

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Calculus – AP			E	E	1	IS	Precalculus	
Statistics – AP			E	E	1	IS	Algebra II	
Mathematical Models with Applications			E	E	1	IS	Geometry with a D yearly average	
Independent Study in Mathematics Advanced Algebra			E	E	1	IS	Algebra II; L-level only	
Independent Study in Math College Algebra K			E	E	1	IS	Algebra II; K-level only	
Advanced Quantitative Reasoning K			E	E	1	IS	Algebra II; K-level only	
Computer Science AP			E	E	1	IS	Algebra II	

**HORIZONS**

*	SAT/ACT Preparatory Strategies HORIZONS			E	E	1/2	I	Identified as Gifted; PACE
	English I HORIZONS	E				1	IS	Identified as Gifted
	English II HORIZONS		E			1	IS	Identified as Gifted
	English III AP / HORIZONS			E		1	IS	Identified as Gifted
	English IV AP / HORIZONS				E	1	IS	Identified as Gifted
	World Geography HORIZONS	E	E	E	E	1	IS	Identified as Gifted
	World Area Studies HORIZONS			E	E	1/2 - 1	I	Identified as Gifted
	World History Studies HORIZONS		E			1	IS	Identified as Gifted/see history req.
	World History Studies AP / HORIZONS		E			1	IS	Identified as Gifted/see history req.
	U.S. History AP / HORIZONS			E		1	IS	Identified as Gifted/see history req.
	U.S. Government AP / HORIZONS				E	1/2	I	Identified as Gifted/see history req.
	European History AP / HORIZONS			E	E	1	IS	Identified as Gifted/see history req.
	Macro Economics AP / HORIZONS				E	1/2	I	Identified as Gifted/see history req.
	Micro Economics AP / HORIZONS				E	1/2	I	Identified as Gifted/see history req.
	Psychology AP / HORIZONS			E	E	1/2	I	Identified as Gifted/see history req.
	Human Geography AP / HORIZONS	E	E	E	E	1	IS	Identified as Gifted/see history req.
	Comparative Government AP / HORIZONS				E	1/2	I	Identified as Gifted/see history req.
	Geometry K / HORIZONS	E	E			1	IS	Identified as Gifted/see math req.
	Algebra II K / HORIZONS		E	E		1	IS	Identified as Gifted/see math req.
	Precalculus K / HORIZONS			E	E	1	IS	Identified as Gifted/see math req.
	Calculus AP / HORIZONS			E	E	1	IS	Identified as Gifted/see math req.
	Statistics AP / HORIZONS			E	E	1	IS	Identified as Gifted/see math req.
	Biology K / HORIZONS	E	E			1	IS	Identified as Gifted/see science req.
	Chemistry K / HORIZONS		E	E	E	1	IS	Identified as Gifted/see science req.
	Physics K / HORIZONS			E	E	1	IS	Identified as Gifted/see science req.

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Biology AP / HORIZONS			E	E	1	IS	Identified as Gifted/see science req.	
Chemistry AP / HORIZONS			E	E	1	IS	Identified as Gifted/see science req.	
Physics B AP / HORIZONS				E	1	IS	Identified as Gifted/see science req.	
Physics C AP / HORIZONS				E	1	IS	Identified as Gifted/see science req.	
Environmental Science AP / HORIZONS			E	E	1	IS	Identified as Gifted/see science req.	

\*For ninth graders entering high school in 2013 (Class of 2017) and beyond, this course will only be offered for local credit.

**Science**

Integrated Physics and Chemistry		E			1	IS	
Biology	R				1	IS	
Chemistry		E	E		1	IS	Biology and Algebra I
Physics		E	E	E	1	IS	Biology
Biology AP			E	E	1	IS	Biology and Chemistry
Chemistry AP			E	E	1	IS	Chemistry and Algebra II
Anatomy and Physiology			E	E	1	IS	Biology and Chemistry
Environmental Science AP			E	E	1	IS	Biology and Chemistry
AP Physics I				E	1	IS	Physics and Algebra II
AP Physics C				E	1	IS	Physics and concurrent enrollment in Calculus required
Astronomy			E	E	1	IS	Completed 3 required science courses or concurrent with 3 <sup>rd</sup>
Aquatic Science			E	E	1	IS	Biology
Environmental Systems			E	E	1	IS	Completed 3 required science courses or concurrent with 3 <sup>rd</sup>
Earth and Space Science			E	E	1	IS	Completed 3 required science courses or concurrent with 3 <sup>rd</sup>
Forensic Science			E	E	1	IS	Biology and Chemistry
Advanced Animal Science				E	1	IS	Biology and Chemistry; Completed 3 required science courses or concurrent with 3 <sup>rd</sup>
Engineering Design and Problem Solving K				E	1	IS	Algebra II, Chemistry, and Physics; K-level only

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
<b>Languages Other Than English</b>								
<b>Modern Languages: French, German, Spanish</b>								
Level I	E	E	E	E	1	IS	} Any two levels of the same foreign language meet the RHSP requirements.	
Level II	E	E	E	E	1	IS		
Level III L	E	E	E	E	1	IS		
Level III K	E	E	E	E	1	IS		
Levels IV AP, V K or AP, and VI K	E	E	E	E	1 - 3	IS		
Spanish for Native Speakers II / III K	E	E	E	E	2	IS	Placement assessment	
Spanish for Native Speakers IV AP	E	E	E	E	1	IS		
<b>Classical Language: Latin</b>								
Latin I	E	E	E	E	1	IS	} Any two levels of the same foreign language meet the RHSP requirements.	
Latin II	E	E	E	E	1	IS		
Latin III K and IV AP	E	E	E	E	1 - 2	IS		

<b>Physical Education / Health</b>								
Foundations of Personal Fitness	E	E	E	E	1/2 - 1	I	Required physical education course	40
Team Sports	E	E	E	E	1/2 - 1	I		
Individual Sports	E	E	E	E	1/2 - 1	I		
Outdoor Education	E	E	E	E	1/2 - 1	I	Foundations of Personal Fitness	
Aerobic Dance	E	E	E	E	1/2 - 1	I	May serve as prerequisite for Dance II	
Athletics I - IV	E	E	E	E	1/2 - 4	I		
Health	E	E	E	E	1/2	I	Required credit for graduation	
Principles of Health Science		E	E	E	1	IS	Satisfies Health credit required for graduation	

<b>Local Credit Courses*</b>								
**	Office Assistant			E		1/2 - 1	I	Counselor approval
**	Teacher Assistant				E	1/2 - 1	I	Counselor approval
**	Cheerleading		E	E	E	1/2 - 1	I	Counselor approval

\*\*Local credits do not count toward required credits for graduation.

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
<b>Fine Arts</b>								
<b>Visual Arts</b>								
*** Art I DP – Drawing and Painting	E	E	E	E	1	IS	First in sequence	41
*** Art I S – Sculpture/Ceramics	E	E	E	E	1	IS	First in sequence	
*** Art I P – Photography	E	E	E	E	1	IS	First in sequence	
*** Art I DM – Digital Art and Media	E	E	E	E	1	IS	First in sequence	
Art II - Drawing/Painting	E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Sculpture/Ceramics	E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Photography	E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Digital Art and Media	E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art III - Drawing/Painting		E	E	E	1	IS	Art II - Drawing/Painting	
Art III - Sculpture/Ceramics		E	E	E	1	IS	Art II - Sculpture/Ceramics	
Art III - Photography		E	E	E	1	IS	Art II – Photography	
Art III - Digital Art and Media		E	E	E	1	IS	Art II - Digital Art and Media	
Art IV - Studio 2D, 3D, Photography, or Digital Art and Media			E	E	1	IS	Level III Art course in the same series	
AP Art - Drawing			E	E	1	IS	Any Level II Art course	
AP Art – 2D			E	E	1	IS	Any Level II Art course	
AP Art – 3D			E	E	1	IS	Any Level II Art course	
AP Art – Photography			E	E	1	IS	Any Level II Art course	
AP Art – Digital Art and Media			E	E	1	IS	Any Level II Art course	
AP Art – Art History			E	E	1	IS		

\*\*\*Only one state credit may be earned at the Art I level.

<b>Theatre Arts</b>								
Theatre Arts I-IV (Drama)	E	E	E	E	1 - 4	IS	Teacher approval for levels II, III, IV	44
Theatre Production I-IV	E	E	E	E	1 - 4	IS	Teacher approval for all levels	
Technical Theatre I-IV	E	E	E	E	1 - 4	IS	Teacher approval for levels II, III, IV	

<b>Music</b>								
Band I	E	E	E	E	1/2 - 1	I or IS	I if pared with PACE; IS for all other students	45
Choral I	E	E	E	E	1/2 - 1	I or IS	I if pared with PACE; IS for all other students	
Orchestra I	E	E	E	E	1/2 - 1	I or IS	I if pared with PACE; IS for all other students	
Band II-IV		E	E	E	1 - 3	IS		
Choir II-IV		E	E	E	1 - 3	IS		
Orchestra II-IV		E	E	E	1 - 3	IS		
Vocal Ensemble I-IV	E	E	E	E	1 - 4	IS	Varsity Mixed Choir; audition; director approval	



Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Music Theory AP			E	E	1	IS	Prerequisite criteria met; concurrently enrolled in band, choir, or orchestra	

Dance								46
Dance I-IV	E	E	E	E	1 - 4	IS	One year's participation in Drill team can substitute for 1 PE credit.	

**Career and Technical Education and Technology Applications**

Agriculture, Food, and Natural Resources								48
Principles of Ag, Food, and Natural Resources	E	E			1	IS	Required of all 9 <sup>th</sup> /10 <sup>th</sup> graders wanting to take an Ag course	
Livestock Production		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Small Animal Management		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Equine Science		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Veterinary Medical Applications			E	E	1	IS	Required prerequisites: Principles of Ag and either Livestock Prod, Small Animal Mgmt, or Equine Science	
Advanced Animal Science				E	1	IS	Required prerequisite: senior and at least one credit in Ag cluster	
Agribusiness Mgmt and Mktg		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Food Technology and Safety		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Wildlife, Fisheries and Ecology Mgmt		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Principles and Elements of Floral Design		E	E	E	1	IS	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Landscape Design and Turf Grass Management		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Horticulture Science		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Agricultural Mechanics and Metal Technologies		E	E	E	1	IS	Required prerequisite (or concurrent) for 10 <sup>th</sup> graders: Principles of Ag	
Agricultural Facilities Design and Fabrication			E	E	1	IS	Required prerequisite: Ag Mech and Metal Tech	
Practicum in Ag, Food, and Natural Resources (Career Prep)			E	E	2	IS	Required prerequisite: at least one credit in Ag cluster	
Problems and Solutions in Ag			E	E	1	IS	Required prerequisite: at least one credit in Ag cluster	

Architecture and Construction								49
Principles of Architecture and Construction	E	E			1	IS		
Construction Technology	E	E	E	E	1	IS	Recommended prerequisite: Principles of Arch and Construction	
Interior Design		E	E	E	1	IS	Recommended prerequisite: Principles of Arch and Construction	
Architectural Design		E	E	E	1	IS	Recommended prerequisite: Geometry and Principles of Architecture and Construction	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Advanced Architectural Design			E	E	2	IS	Required prerequisite: Architectural Design	
Practicum in Architectural Design (work-based)				E	2	IS	Required prerequisite: Architectural Design	
Construction Management		E	E	E	1	IS	Recommended prerequisite: Principles of Architecture and Construction	
Advanced Construction Management			E	E	2	IS	Required prerequisite: Construction Management	
Mill and Cabinetmaking Technology		E	E	E	2	IS	Required prerequisite: Principles of Architecture and Construction or Principles of Manufacturing or Concepts of Engineering	
Practicum in Construction Management (work-based)				E	2	IS	Required prerequisite: Construction Management	
Problems and Solutions in Drafting			E	E	1	IS	Required prerequisite: at least one credit in Architecture and Construction or STEM cluster	

**Arts, A/V Technology, and Communications**

Professional Communications	E	E	E	E	1/2	I	Satisfies speech credit required for graduation for students entering high school prior to Fall 2014	
Animation		E	E	E	1	IS		
Advanced Animation			E	E	2	IS	Required prerequisite: Animation	
Problems and Solutions in Multimedia				E	1	IS	Required prerequisite: Advanced Animation or Web Tech II	
Fashion Design		E	E	E	1	IS		
Advanced Fashion Design		E	E	E	2	IS	Required prerequisite: Fashion Design	
Practicum in Marketing Dynamics I			E	E	3	IS	Required prerequisite: at least one course in Marketing cluster	
Audio/Video Production	E	E	E	E	1	IS		
Audio/Video Production II		E	E	E	1	IS	Required prerequisite: Audio/Video Production	
Audio/Video Production III			E	E	1	IS	Required prerequisite: Audio/Video Production II	
Advanced Audio/Video Production				E	2	IS	Required prerequisite: Audio/Video Production III	

See Visual and Performing Arts sections for additional options in this cluster.

**Business Management and Administration**

Principles of Business, Marketing, and Finance	E	E			1	IS		
Touch System Data Entry	E	E	E	E	1/2	I		
Business Information Management I	E	E	E	E	1	IS	Recommended prerequisite: Touch System Data Entry	
Business Information Management II – MOS		E	E	E	1	IS	Recommended prerequisite: Business Information Management I	
Business English				E	1	IS	Recommended prerequisite: Touch System Data Entry	
Global Business		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Marketing/Finance	
Virtual Business		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Marketing/Finance	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Human Resources Management			E	E	1/2	I	Recommended prerequisite: Principles of Bus/Marketing/Finance	
Business Management			E	E	1	IS	Recommended prerequisite: Principles of Bus/Marketing/Finance	
Practicum in Business Management I (work-based)			E	E	3	IS	Required prerequisite: at least one credit in Business/Marketing/Finance cluster	
Practicum in Business Management II (work-based)				E	3	IS	Required prerequisite: Practicum in Business Management I	

Education and Training								60
Principles of Education and Training	E	E	E		1/2	I		
Instructional Practices in Education and Training – RST! I			E	E	2	IS	Recommended prerequisite: Principles of Education and Training or Child Dev	
Practicum in Education and Training RST! II				E	2	IS	Required prerequisite: Instructional Practices in Educ and Training	

Finance								62
Principles of Business, Marketing, and Finance	E	E			1	IS		
Money Matters K		E	E	E	1	IS		
Banking and Financial Services		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Marketing/Finance	
Securities and Investments		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Marketing/Finance	
Accounting I		E	E	E	1	IS	Recommended prerequisite: Principles of Bus/Marketing/Finance Required prerequisite: Geometry	
Accounting II			E	E	1	IS	Required prerequisite: Accounting I	
Financial Analysis			E	E	1	IS	Recommended prerequisite: Accounting I	
Statistics and Risk Management			E	E	1	IS	Recommended prerequisite: Accounting I Required prerequisite: Algebra II	

Government and Public Administration								64
<i>See Social Studies section for options in this cluster.</i>								

Health Science								65
Medical Terminology	E	E			1/2	I		
Principles of Health Science		E	E	E	1	IS		
Health Science			E	E	2	IS	Required prerequisite: Principles of Health Science and Biology	
Anatomy and Physiology			E	E	1	IS	Required prerequisite: Biology and Chemistry	
Forensic Science			E	E	1	IS	Required prerequisite: Biology and Chemistry	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Practicum in Health Science (certification or work-based)				E	2	IS	Required prerequisite: Principles of Health Science	
Biology AP			E	E	1	IS	Required prerequisite: Biology and Chemistry	
Physics B AP				E	1	IS	Required prerequisite: Physics and Algebra II	
Chemistry AP			E	E	1	IS	Required prerequisite: Chemistry and Algebra II	

See Science section for more course options in this cluster.

<b>Hospitality and Tourism</b>								67
Restaurant Management		E	E	E	1/2	I	Recommended prerequisite: Principles of Hospitality	
Culinary Arts		E	E	E	2	IS	Recommended prerequisite: Principles of Hospitality and Tourism or Lifetime Nutrition and Wellness	
Practicum in Culinary Arts				E	2	IS	Required prerequisite: Culinary Arts	

<b>Human Services</b>								69
Interpersonal Studies		E	E	E	1/2	I	Recommended prerequisite: Principles of Human Services	
Lifetime Nutrition and Wellness		E	E	E	1/2	I	Recommended prerequisite: Principles of Human Services	
Child Development		E	E	E	1/2	I	Recommended prerequisite: Principles of Human Services	
Child Guidance – ECP I			E	E	2	IS	Recommended prerequisite: Principles of Human Services	
Practicum in Human Services – ECP II				E	2	IS	Required prerequisite: Child Guidance	
Counseling and Mental Health		E	E	E	1	IS	Recommended prerequisite: Principles of Human Services	
Introduction to Cosmetology	E	E	E	E	1/2	I		
Cosmetology I		E	E	E	3	IS	Recommended prerequisite: Intro to Cosmetology	
Cosmetology II			E	E	3	IS	Required prerequisite: Cosmetology I	

<b>Information Technology</b>								72
Computer Programming K	E	E	E	E	1	IS	Required prerequisite: Algebra I	
Computer Science AP		E	E	E	1	IS	Required prerequisite: Computer Programming recommended <u>or</u> Geom K	
✓ Advanced Computer Science K			E	E	1	IS	Required prerequisite: Computer Science AP	
✓ Computer Science – Problems and Solutions K			E	E	1	IS	Required prerequisite: Computer Programming K	
Digital and Interactive Media		E	E	E	1	IS		
Web Technologies I	E	E	E	E	1	IS		

2014-2015 High School Course Offerings

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Web Technologies II		E	E	E	1	IS	Required prerequisite: Web Technologies I	
Problems and Solutions in Multimedia				E	1	IS	Required Prerequisite: Advanced Animation or Web Tech II	
Telecommunications and Networking Essentials/A+		E	E	E	1	IS		
Internetworking Technologies I K – CCENT			E	E	1	IS	Recommended prerequisite: any technology course	
Internetworking Technologies II K – CCNA				E	2	IS	Recommended prerequisite: Telecommunications and Networking or Internetworking Tech I or Computer Programming	

✓ For ninth graders entering high school in 2014 (Class of 2018), Advanced Computer Science and Computer Science – Problems and Solutions will no longer be offered for K-level credit.

Law, Public Safety, Corrections, and Security								75
Forensic Science			E	E	1	IS	Required prerequisite: Biology and Chemistry	

See AFJROTC section for more course options in this cluster.  
See Social Studies section for other options in this cluster.

Manufacturing								77
Principles of Manufacturing	E	E	E		1	I		
Welding		E	E	E	2	IS	Required prerequisite: Principles of Manufacturing or Ag Mech and Metal Tech	
Advanced Welding		E	E	E	2	IS	Required prerequisite: Welding	
Precision Metal Manufacturing	E	E	E	E	1	IS	Required prerequisite: Principles of Manufacturing	
Flexible Manufacturing	E	E	E	E	1	IS	Required prerequisite: Principles of Manufacturing	
Advanced Flexible Manufacturing		E	E	E	2	IS	Required prerequisite: Flexible Manufacturing	
Practicum in Manufacturing			E	E	2	IS	Required prerequisite: Welding or Prec Metal Manuf or Flexible Manuf	
Problems and Solutions in Tech Ed			E	E	1	IS	Required prerequisite: at least one credit in Architecture and Construction, Manufacturing, or STEM cluster	

Marketing								80
Principles of Business, Marketing, and Finance	E	E			1	IS		
Advertising and Sales Promotion		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Mktg/Finance	
Retailing and E-tailing		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Mktg/Finance	
Sports and Entertainment Marketing		E	E	E	1	IS	Recommended prerequisite: Principles of Bus/Mktg/Finance	
Practicum in Marketing Dynamics I			E	E	3	IS	Required prerequisite: at least one course in Marketing cluster or related area	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Practicum in Marketing Dynamics II				E	3	IS	Required prerequisite: Practicum in Marketing Dynamics I	

**Science, Technology, Engineering and Mathematics (STEM)**

82

Concepts of Engineering and Technology	E	E			1	IS	
Engineering Design and Presentation	E	E	E	E	1	IS	
Advanced Engineering Design and Presentation		E	E	E	2	IS	Required prerequisite: Engineering Design and Presentation
Electronics	E	E	E	E	1	IS	
Robotics and Automation	E	E	E	E	1	IS	
Practicum in STEM			E	E	2	IS	Required prerequisite: Engineering Design or Electronics
Problems and Solutions in Tech Ed			E	E	1	IS	Required prerequisite: Architecture and Construction, Manufacturing, or STEM cluster

**Transportation, Distribution, and Logistics**

85

Principles of Transportation, Distribution, and Logistics	E	E	E	E	1/2	I	
Automotive Technology		E	E	E	2	IS	
Advanced Automotive Technology			E	E	2	IS	Required prerequisite: Automotive Technology
Practicum in Transportation, Distribution, and Logistics				E	3	IS	Required prerequisite: Automotive Technology


**Career and Technical Courses for Students in Special Education**

86

CTED Business Information Management I	E	E	E	E	2	IS	IEP committee recommendation
CTED Digital and Interactive Media		E	E	E	2	IS	IEP committee recommendation and CTED BIM I
CTED Horticulture	E	E	E	E	2	IS	IEP committee recommendation
CTED Plant and Soil Science		E	E	E	2	IS	IEP committee recommendation and CTED Horticulture
CTED Lifetime Nutritional Wellness		E	E	E	2	IS	IEP committee recommendation
CTED Career Preparation		E	E	E	2	IS	IEP committee recommendation

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
<b>Vocational Training Courses for Students in Special Education</b>								88
Business Media Production Systems		E	E	E	2 - 4	IS	IEP committee recommendation	
Commercial Food	E	E	E	E	2	IS	IEP committee recommendation	
Vocational Adjustment Class (VAC)			E	E	1 - 10	IS	IEP committee recommendation	
Occupational Training			E	E	1 - 2	IS	IEP committee recommendation	

<b>Leadership</b>								88
Teen Leadership	E	E	E	E	1/2 - 1	I		
Student Leadership			E	E	1/2 - 1	I	For student leaders only	
PAL I-II			E	E	1 - 2	IS	Application and interview with teacher	
AFJROTC	E	E	E	E	1 - 4	IS		

 A clock icon is used to designate elective courses requiring additional practice/rehearsal time outside of the regular school day. Schools will limit practice/rehearsal time to a maximum of eight hours per week, Monday through Thursday, per activity. Additional practices/rehearsals (beyond the eight hours) may be required after school on Friday and/or on Saturday. Competitions for these courses are generally scheduled on Friday and/or Saturday. Schedules for specific activities will be provided by the teacher.

## LANGUAGE ARTS

### ◆ *English*

#### **English I** **1 credit**

This course concentrates on the fundamental language skills of reading, writing, conventions of written and oral language, research, and listening/speaking in an effort to build a foundation for student success in advanced high school English classes. Students practice both reading and writing as a process and perform an array of reading strategies as they work to become proficient in understanding and responding appropriately to a variety of texts. Students refine their reading comprehension skills through the study of fiction, literary nonfiction, poetry, drama, and informational text throughout the year. Students write for varied audiences and purposes and work to develop ideas, voice, word choice, fluency, and organization in their writing while applying conventions of the English language. Throughout the year, students develop skills to enhance media literacy.

#### **English I SOL (for Speakers of Other Languages)** **1 credit**

This course focuses on the fundamental English language skills of reading, writing, speaking and listening in an effort to build a foundation for student success in advanced high school English classes. Students practice both reading and writing as a process. Students perform an array of reading strategies as they work to become proficient in understanding and responding appropriately to a variety of texts. Students write for varied audiences and purposes and work to develop ideas, voice, word choice, fluency, and organization in their writing while applying conventions of the English language. Instruction in such skills is accommodated to meet the varying needs of students who are at different stages of English language acquisition. The strategies and methodologies of English as a Second Language are utilized throughout this program that parallels with English I.

#### **English II** **1 credit**

This course emphasizes continuing development of oral language and composition skills. Included within the study are the identification of literary themes and forms, use of effective reading strategies, and development of speaking/listening skills. Students write for varied audiences and purposes and work to apply effective ideas, voice, word choice, fluency, organization, and conventions in their writing. Reading selections for this level include poetry, drama, fiction, literary nonfiction,

and informational texts.

#### **English II SOL (for Speakers of Other Languages)** **1 credit**

This course emphasizes continuing development of the fundamental English language skills of reading, writing, speaking and listening in an effort to continue to build the foundation for student success in advanced high school English classes. Included within the study are the identification of literary themes and forms, use of effective reading strategies, and development of speaking/listening skills. Students write for varied audiences and purposes and work to apply effective ideas, voice, word choice, fluency, organization, and conventions in their writing. Instruction in such skills is accommodated to meet the varying needs of students who are at different stages of English language acquisition. The strategies and methodologies of English as a Second Language are utilized throughout this program that parallels with English II.

#### **English III** **1 credit**

This course presents advanced work in composition and reading. Students practice both reading and writing as a process. The course provides an overview of American literature from the Colonial Period to the Contemporary Period, allowing students to examine samples of traditional, classic, and multi-ethnic selections that represent this country's cultural diversity. Selections include poetry, drama, fiction, literary nonfiction, and informational texts. As students read, they are asked to focus on comprehension, analysis, and evaluation. As they write for varied audiences and purposes, students work to develop their ideas and apply effective voice, word choice, fluency, logical organization of material, and appropriate conventions of language. In addition to process pieces, students produce in-class, timed writings. The skills of listening/speaking and the enhancement of media literacy are addressed in the fabric of the course.

#### **English III SSL (for Speakers of Other Languages)** **1 credit**

This course is designed for students previously enrolled in English I SOL and English II SOL and/or for speakers of other languages who need to develop proficiency in the use of English. The strategies and methodologies used to aid speakers of other languages in developing skills in English are utilized throughout this course. Thus, in considering the individual student's oral proficiency and other academic competency skills in English, this course is accommodated to enhance the critical processes and features of second language acquisition. Focus of the course is on an overview of American



literature, including samples of traditional and multi-ethnic selections that represent this country's cultural diversity. Writing occurs in a variety of ways as appropriate, including the formal essay and creation of business forms. Correct English grammar and syntax are approached through direct instruction and/or through the writing process. Research is assigned as fits the students' needs and English skills. Practice in listening and speaking occurs throughout the course.

### **English III-Advanced Placement/HORIZONS**

**1 credit**

English III H/AP engages students in becoming skilled readers of a variety of prose selections and skilled writers who compose for varied audiences and purposes. Students become adept at identifying and analyzing varied rhetorical features used in writing as these features contribute to purpose and meaning of a selection. The course provides an overview of American literature, including samples of traditional, classic, and multi-ethnic selections. Reading selections include fiction, poetry, drama, literary nonfiction, and informational texts. Fused with the study of literature is the refinement of composition skills, usage skills and research skills. Practice in listening/speaking and the enhancement of media literacy occur throughout the course. This course of study is equivalency to an introductory college English course and is available to the student interested in taking the Advanced Placement Examination in English Language and Composition.

### **English IV**

**1 credit**

(English IV Academic)

This course continues an emphasis on fundamental reading strategies and composition techniques aligned with college learning outcomes. Selections include fiction, poetry, drama, literary nonfiction, and informational texts from selected British, World, and Contemporary literature. In conjunction with the study of literature is the refinement of composition skills, usage skills, and research skills. Emphasis is placed on students' practice of reading and writing as a process. Opportunities to practice listening/speaking and an emphasis on media literacy are inherent in the course.

### **English IV SSL (for Speakers of Other Languages)**

**1 credit**

This course is designed to aid speakers of other languages in developing skills in English and to take these speakers of other languages through a program of English composition and a variety of readings from British and world literature. Strategies and methodologies for aiding these students in acquiring increasing competency in English are utilized throughout this course with modifications in the English IV program occurring to meet the language learning needs of the individual student. Students write in a variety of forms, work on appropriate research skills, and use multiple strategies during the reading process. Appropriate and correct English grammar is approached through direct instruction and/or through the writing process. Opportunities for

practice of listening and speaking are inherent in the course.

### **English IV-Advanced Placement/HORIZONS**

**1 credit**

English IV H/AP engages students in close reading and written analysis of literature. Students become adept at identifying and analyzing varied literary techniques as these techniques contribute to the purpose and meaning of a selection. Selected writings from the literature of other countries, with an emphasis on British literature from various time periods, serve as the basis for reading and for writing literary analysis. Selections include fiction, poetry, drama, literary nonfiction, and informational texts. Fused with the study of these selections is the continued refinement of composition skills, usage skills, and research skills. Students have opportunities to practice listening/speaking, and media literacy is emphasized. This course of study is equivalent to an introductory college English course and is available to the student interested in taking the Advanced Placement Examination in English Language and Composition and/or English Literature and Composition.

### **Business English**

**1 credit**

The Business English course allows students to enhance their reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students edit their work for clarity, engaging language, and the correct use of the conventions and mechanics of written English to produce final, error-free drafts for business reproduction. Having quality written and verbal communication is key to success in business as there is often no second chance to make a first impression.

- ◆ Grades 12
- ◆ Recommended prerequisite: Touch System Data Entry
- ◆ This course may satisfy the 4<sup>th</sup> English credit required for graduation on the Minimum High School Plan.

◆ **PACE**

**PACE- Personal, Academic, and Career Explorations**

**1/2 credit**

This one semester course is designed to assist students in the transition from middle school to high school and build skills that will assist them in future transitions to career, college, adulthood, and independence. PACE will link relevant concepts so that students understand the "big picture" in preparing for life after high school while still in high school. Students will actively work to develop a personalized plan for life success based on their career aspirations. Coursework is focused around the skill areas of personal/social, academic, and career and life.

- ◆ Required in Grade 9

**PACE Plus**

**1 credit**

This two-semester course is required of all 9<sup>th</sup>-grade students who did not pass all 8<sup>th</sup>-grade core academic classes (language arts, reading, math, science, and social studies) and who have not met the state standards on all 8<sup>th</sup>-grade reading, math, science, and social studies STAAR tests. Beginning ESL students, intermediate ESL students, and special education students in need of support are also required to take this year-long class. The course must be taken in grade nine to fulfill Cypress-Fairbanks' graduation requirements. PACE Plus is designed to assist students in the transition from middle school to high school and build skills that will assist them in future transitions to career, college, adulthood, and independence. This course will link relevant concepts so that students understand the "big picture" in preparing for life after high school while in high school. Students will actively work to develop a personalized plan for life success based on their career aspirations. Coursework is focused around the skill areas of personal/social, academic, and career and life. PACE Plus will provide students with additional academic support in all core areas.

**SAT/ACT Preparatory Strategies**

**1/2 credit**

This one-semester elective course is open to eleventh-grade students and fall semester twelfth-grade students who are college-ready and enrolled primarily in above-grade courses. The course is designed to provide students with strategies to meet the academic requirements and demands of post-high school studies and to prepare students to successfully take college entrance exams. Units of study include preparation for college entrance exams (SAT and ACT), vocabulary expansion, objective test-taking skills, research and critical thinking, attitudes, goal setting, and time management. Strategies necessary for successfully reading, comprehending, and studying advanced-level content textbooks both in high school and in college will also be addressed.

- ◆ This course is classified on the transcript as Independent Study in English.
- ◆ Open to 11<sup>th</sup>- and 12<sup>th</sup>- grade students only
- ◆ K-level only

- ◆ For ninth graders entering high school in 2013 (Class of 2017) and beyond, this course will only offered for local credit.

**Bridge to College Success**

**1/2 credit**

This one-semester elective course is open to twelfth-grade students who are enrolled primarily in L-level courses. The course is designed to help students prepare for college placement exams and successfully transition to college. Units of study include the importance of post-secondary education/training, applying critical thinking in reading, writing, and math as it pertains to college placement exams, using technology to be more academically successful, listening with focus, using effective communication skills, and creating and using a master study plan. This course is classified on the transcript as Independent Study in English.

- ◆ Open to 12<sup>th</sup>-grade students only
- ◆ L-level only
- ◆ This course is aligned to HUMD 0330 at Lone Star
- ◆ College-CyFair, and the requirement to take the course will be waived for students who successfully complete it in high school.

**Creative and Imaginative Writing**

**1 credit**

This study of creative and imaginative writing allows high school students to develop increased skill, creativity, and versatility as writers. In the class, students will be provided the time to write independently and to share and critique their writings with others. In their efforts to perfect selected pieces of work, students will be expected to demonstrate an understanding of the recursive nature of the writing process, applying the conventions of usage and the mechanics of written English. Throughout the year, students will study and create a variety of genres such as essays, short stories, poetry, and drama. As a means of extending their knowledge of effective techniques and forms of writing, students will critically examine models of various types written by professional authors.

◆ **Reading**

**Reading I-III**

**1/2 - 3 credits**

Reading I, II, III offers students instruction in fluency, word study, vocabulary, and comprehension strategies. The curriculum emphasizes the six critical reading processes that are part of the state secondary reading curriculum and TAKS/STAAR. Students are given opportunities to locate information in varied sources, to read critically, to evaluate sources, and to draw supportable conclusions. Students learn how various texts are organized, and how authors choose language for effects. All of these strategies are applied, using reading material from all subject areas.

## ◆ Journalism

### **Journalism I** **1 credit**

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. Students are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Students will become analytical consumers of media and technology to enhance their communication skills. Writing, technology, visual, and electronic media are used as tools for learning as students produce effective communications. Journalism students will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principals of publication.

### **Photojournalism** **1/2 credit**

Photojournalism introduces students to the world of photography and journalism. The law, ethics, and history of photography complement the major units of study: operation and care of the digital camera, taking pictures, teamwork, and management skills. In addition, students will have opportunities to use state-of-the-art computer-aided publishing tools and other hands-on production tools.

- ◆ Students must have their own digital camera, and a fee will be charged for necessary photographic supplies.
- ◆ This course requires work outside of class to complete assignments.

### **Advanced Journalism I, II, II K, III K - Newspaper** **1 - 3 credits**

Students enrolled in Advanced Journalism: Newspaper I, II, III communicate in a variety of forms for a variety of audiences and purposes. Students are expected to plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Students are expected to become analytical consumers of media and technology to enhance their communication skills. In addition, students will learn journalistic ethics and standards. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce school newspapers.


- ◆ Students must have the recommendation of the publications teacher to enroll in this class.
- ◆ Courses must be taken in sequence.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, Advanced Journalism II, III/Newspaper will no longer be offered for K-level credit.

 Production of the newspaper may require 3 to 8 hours of after-school activities per week.

### **Advanced Journalism I, II, II K, III K - Yearbook** **1 - 3 credits**

Students enrolled in this course learn all the skills required to develop a school yearbook. Students learn advanced publishing skills, interviewing techniques, design and layout expertise, and sophisticated writing skills. They become adept at using complex software that is used in the professional publishing industry. In addition, they learn how to work as leaders and as a team as they manage this production process.

- ◆ Students must have the recommendation of the publications teacher to enroll in this class.
- ◆ Courses must be taken in sequence.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, Advanced Journalism II, III/Yearbook will no longer be offered for K-level credit.

 Production of the yearbook may require 3 to 8 hours of after-school activities per week.

## ◆ Speech and Debate

### **Professional Communications** **1/2 credit**


This high school speech course is designed to provide opportunities for students to understand and develop effective interpersonal communication skills for the 21<sup>st</sup> Century. Professional Communications blends written, oral, and graphic communication in a career-based, business environment. Students will prepare, present, and evaluate a variety of multi-media presentations that are appropriate for the professional setting.

- ◆ Grades 9 – 12
- ◆ This course satisfies the speech credit required for graduation for students entering high school prior to Fall 2014.

### **Oral Interpretation I-III** **1 - 3 credits**

Oral Interpretation I-III are courses designed for students who wish to compete in speech tournaments in interpretive events. Students will develop knowledge of the following: literary merit of selections, analysis, selection adaptation, evaluative criteria, the role of the interpreter, and specific performance techniques. Participation in competitive speech and debate events is a requirement for this course.


- ◆ Students who remain in Oral Interpretation I for the full year will meet their speech graduation requirement. Students will earn ½ credit in Oral Interpretation and ½ credit in Professional Communications.
- ◆ Courses must be taken in sequence.

 Students involved in Speech/Debate competitions may be required to work after school to prepare. Preparation time will be limited to 8 hours per week on Monday through Thursday. After 2:30 on Friday, there is no limit on the number of hours students may work. Speech competitions are held on Friday evening and Saturday. Student fees for competition are required.

**Debate I, II, III K****1 - 3 credits**

Gaining a general understanding of the major forms of debate, studying logic and reasoning and learning to prepare and present actual debates, oratories, and extemporaneous speeches, are the objectives of this course in argumentation. Participation in competitive speech and debate events is a requirement for this class. Debate II-III build on the fundamentals and continue to develop speech and debate skills.

- ◆ Students who remain in Debate I for the full year will meet their speech graduation requirement. Students will earn ½ credit in Debate and ½ credit in Professional Communications, awarded in the spring semester only.
- ◆ Courses must be taken in sequence.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, Debate III will no longer be offered for K-level credit.

- ◆  Students involved in Speech/Debate competitions may be required to work after school to prepare. Preparation time will be limited to 8 hours per week on Monday through Thursday. After 2:30 on Friday, there is no limit on the number of hours students may work. Speech competitions are held on Friday evening and Saturday. Student fees for tournament competition are required.

**Independent Study/Speech or Debate IV K****1 credit**

Activities designed for high achieving students to conduct research, produce original work in print or some other medium, develop an advanced speaking skill and study extensively in a specific area of interest are provided in this course. The prerequisites for enrollment in this course are three years of speech and teacher approval.

- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, this course will no longer be offered for K-level credit.

**SOCIAL STUDIES****World Geography Studies****1 credit**

In this required course, students analyze the relationships between people, places, and environments. Students use problem-solving and decision-making skills to ask and answer geographic questions. A significant portion of the course will center around physical processes, places, and regions, the environment, the political, economic and social processes that shape cultural patterns, human systems such as population distribution and urbanization patterns, and the economic conditions which have led to and reinforced the developed and developing world.

**Human Geography-Advanced****Placement/HORIZONS****1 credit**

Human Geography is about making connections through the study of patterns and processes which shape human understanding, use, and modification of the Earth's surface. In today's world where places are increasingly interdependent, it is important to have an understanding of how events in one region of the world can have a major impact on events in other regions. Human Geography provides framework to understand how this world is spatially organized and interdependent. In this rigorous course, students will develop a sophisticated view of the world enabling them to use geographic concepts and tools to make sense of why things happen where they do. **This course may substitute for World Geography or be used as an elective.**

**World History Studies****1 credit**

The purpose of this required one-year course is to provide students with a chronological study of world history. The major emphasis of this course is on the study of significant people, events, and issues from the earliest times to the present. Students will examine historical points of reference, evaluate the causes and effects of economic imperialism, the historic origins of contemporary economic systems, trace the historical development of law, and analyze the impact of major religious and philosophical traditions. Students will analyze the connections between major developments in science and technology and the growth of industrial economies.

**World History Studies--Advanced Placement/  
HORIZONS****1 credit**

The purpose of the Advanced Placement World History course is to develop greater understanding of world processes and contacts, in interaction with different types of human societies. Building on a short summary of cultural and institutional world history prior to 1000 C.E. (AD), the course focuses primarily on the last 1000 years of global experience. Using a chronological approach, the curriculum uses six major themes as unifying threads, helping students to put what is particular about each time period or society into a larger framework. Knowledge of major developments that illustrate or link

the six thematic areas and of major civilizations in Asia, sub-Saharan Africa, Europe, and the Americas is expected. **This course may be substituted for World History Studies.**

### **United States History 1 credit**

This course is a required one-year study of the United States from 1877 to the present. The time span of the course is divided into units such as the Progressives, Civil Rights, and the Cold War. Within each unit events are looked at from several perspectives such as geographic, political, economic, social, and international influences. Emphasis is placed on relating the effects of past events to the present. The course is enriched with various activities which help students learn social studies skills as well as historical content.

### **United States History-Advanced Placement/HORIZONS 1 credit**

The United States History AP course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and historical resources of U.S. history. Students will learn to assess historical materials to determine the relevance of those materials to a given problem, and to evaluate the reliability and importance of selected materials. Students will develop skills necessary to make informed judgments and to present reasons and evidence clearly and persuasively in essay format. This course of study is the equivalent of a college introductory course and is available to juniors or seniors interested in taking the AP examination in American history.

- ◆ Should a student enroll in United States History AP and drop the course at the end of the first semester, the student will have to take both semesters of U.S. History. In this situation, the first semester of U.S. History AP can count as an elective.

### **United States Government 1/2 credit**

The primary objective of this required one-semester course is to prepare the student for decision-making within the framework of the American political system. The course begins with an overview of basic concepts found in all political systems, the philosophical background which led to our constitutional development, and the basic concepts found in the Constitution. The executive, legislative, and judicial branches of the federal government, including current issues of interest such as foreign affairs, will be studied. In addition, students study the fields of civil rights and liberties, political parties and suffrage, the Texas Constitution, and state and local government.

- ◆ Prerequisite: U.S. and World History

### **United States Government-Advanced Placement/HORIZONS 1/2 credit**

The United States Government Advanced Placement course is designed to provide students with an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis

of specific case studies. Students will also engage in an in-depth study of the various institutions, groups, beliefs and ideas that constitute the U.S. political system. Students are guided to use specific information critically to evaluate general propositions about government and politics, as well as to present basic data relevant to government and politics in sustained written arguments. This course of study is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in U.S. Government.

- ◆ Prerequisite: U.S. History and World History

### **European History-Advanced Placement/HORIZONS 1 credit**

The Advanced Placement European History course focuses on European history from the High Renaissance (approximately 1450) to the present. The themes studied are intellectual and cultural history, political and diplomatic history, and social and economic history. Students will analyze historical evidence and learn to apply their analysis in essays and in multiple choice questions. The course is an elective and does not meet the state standards for substitution for the World History Studies required course.

- ◆ Prerequisite: U.S. History or concurrent enrollment
- ◆ May not substitute for World History Studies

### **Economics with Emphasis on the Free-Enterprise System and its Benefits 1/2 credit**

This one-semester required course deals with the way that individuals and societies, particularly our society, have chosen to use scarce resources for the production of alternative goods. Students will learn how these scarce resources are distributed among the various peoples and groups in society. The course emphasizes the economic principles upon which the free enterprise system is based. Students will study the role government plays in this system and compare the American economic system to other types of economic systems. Students will also receive practical information in the field of personal finance.

- ◆ Prerequisite: U.S. and World History

### **Macro Economics-Advanced Placement/HORIZONS 1/2 credit**

The Economics Advanced Placement course focuses on the concepts of macroeconomics by providing students an understanding of the principles of economics that apply to an economic system as a whole. Particular emphasis is placed on the study of national income and price determination. The course develops students' familiarity with economic performance measures, economic growth, and international economics. This course of study is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in Macroeconomics.

- ◆ K-level only; may substitute for required Economics
- ◆ Prerequisite: U.S. History and World History

**Micro Economics-Advanced****Placement/HORIZONS 1/2 credit**

The Advanced Placement Microeconomics course focuses on the principles of economics from the perspective of individual decision-makers, both consumers and producers. Particular emphasis is placed on supply and demand, resource allocation, prices, cost and profit, the production process, market structure, international trade and government intervention. This course of study is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in Microeconomics.

- ◆ Prerequisite: U.S. and World History
- ◆ May not substitute for required Economics

**Sociology 1/2 credit**

Sociology is designed for students who are interested in enhancing their understanding of themselves and the society in which they live. The course deals with typical situations which people meet in their daily lives. Institutions, which are found in all societies, are studied, and emphasis is placed on the relationships people have within them. Study is also made of societal problems, including such topics as growing up, divorce, current events, etc.

**Psychology 1/2 credit**

Psychology is designed to acquaint students with the concept of human behavior. This elective provides a general introduction to the field of psychology. Specific topics include the following: learning and creativity, perception, theories of personality, human growth and development, and abnormalities. Psychology involves group work, laboratory experiments, independent reading/research, and active participation by the student.

**Psychology-Advanced Placement/HORIZONS 1/2 credit**

The Psychology Advanced Placement course is designed to provide students with an analytical perspective about the field of psychology. After a general introduction to the methods, application, and history of the study of psychology, several areas of emphasis will be explored. These include sensation and perception, states of consciousness, learning, cognition, motivation and emotions, personality, abnormal psychology, and treatment of psychological disorders. The course is available to juniors and seniors interested in taking the Advanced Placement exam in Psychology.

**Comparative Government and Politics – Advanced Placement/HORIZONS 1/2 credit**

Comparative Government and Politics AP is a college preparatory course which will consist of both a theoretical framework for comparing political systems and an in-depth study of the political systems of United Kingdom, France, China, and Russia as well as various developing nations. The course will include the following concepts: the legitimacy of the political systems; the diversity of the political culture and the effects this diversity causes; political participation of the various factions within the

country; the structures of governments; and how government changes. This course is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in Comparative Government and Politics.

- ◆ Prerequisite: U.S. History and World History
- ◆ This course is an elective and does not substitute for U.S. Government credit.

**Social Studies Research 1/2 - 1 credit**

This course is designed for students wishing to conduct advanced research on a selected issue, problem, or area of interest, using qualitative and quantitative methods of inquiry. The student will write a rationale, generate preliminary ideas for the research method to be used, and organize a process approach to a research problem. The student will collect information about a selected topic from a variety of sources (primary, secondary, oral, and written), using various techniques such as questionnaires, interviews, library research, CD-ROMS and the Internet. Ethical aspects of collecting, storing, and using data will be explored. Students will present their findings and make predictions based on conclusions drawn from the research.

**Special Topics in Social Studies – World Area Studies – HORIZONS 1/2 - 1 credit**

World Area Studies is designed to provide eleventh- and twelfth-grade students the opportunity to study the historical, political, and economic developments of selected regions and countries around the world. Current world problems, such as world population explosion, global pollution, nuclear weapons and arms control, world hunger, and AIDS, to name a few, will be introduced at the outset and the regional studies will include an analysis of how the area is impacted by these problems as well as a study of solutions being offered by that region and their relative success. Five major regions of the world will be studied, but the course allows for discretionary study of selected specific countries within each region that are presently embroiled in conflict. Culture and geography, which many times are the root causes of these conflicts, will also be studied. Suggested methods for resolving international problems will be analyzed in the course.

- ◆ Students enrolling in this course must meet K-level or HORIZONS entry criteria.

**Special Topics in Social Studies-Street Law 1/2 - 1 credit**

This elective course will give students a deeper understanding of the impact of law upon their daily lives. Court structure, criminal procedure, civil rights, and other legal issues will be examined. Criminal law would be the primary focus one semester and civil law the other semester. This course is available to juniors and seniors only.

# MATHEMATICS

## Algebra I

**1 credit**

Algebra I begins the study of functions. Functions represent the systematic dependence of one quantity on another. Students use functions to represent and model problem situations and to analyze and interpret relationships. Students work in many situations to set up equations and inequalities and use a variety of methods to solve them. A variety of representations (concrete, numerical, algorithmic, and graphical), tools, and graphing calculators are used to model mathematical situations and solve meaningful problems. Coursework concentrates on foundations for functions, linear functions, and quadratic and other nonlinear functions. All ninth-grade students who did not take Algebra I in eighth grade will enroll in this course.

## Geometry

**1 credit**

Geometry consists of the study of geometric figures of zero, one, two, and three dimensions and the relationships having to do with size, shape, location, direction, and orientation of these figures. The students use a variety of representations, tools, and technology to solve meaningful problems by representing figures, transforming figures, analyzing relationships, and proving things about them. Topics will include congruency, similarity, dimensionality, and patterning of all geometric figures.

- ◆ Prerequisite: Algebra I

## Algebra II

**1 credit**

Algebra II continues the study of functions that began in Algebra I, utilizing a more sophisticated approach. Students use functions and equations as a means for analyzing and understanding a broad variety of relationships and as a useful tool for expressing generalizations. The course emphasizes the use of equations and functions to represent geometric curves and figures and the connections between algebra and geometry as tools to help solve problems in the other. Functions studied include quadratic and square root, rational, and exponential and logarithmic. Conic sections (non-functions) are also studied. Computers and graphing calculators will be used extensively. Students wishing to attend college should take Algebra II.

- ◆ Prerequisite: Geometry (A, B, or C yearly average)

## Precalculus

**1 credit**

In Precalculus, students use functions, equations, and limits as useful tools for expressing generalizations and as means for analyzing and understanding a broad variety of mathematical relationships. Functions are used to represent and connect ideas in geometry, probability, statistics, trigonometry, and calculus and to model physical situations. Topics include polynomial, rational, radical, exponential, logarithmic, trigonometric, and piecewise-defined functions, sequences and series, parametric representations of conic sections, and

vectors. Computers and graphing calculators will be extensively integrated in the coursework.

- ◆ Prerequisite: Algebra II

## Calculus AB or BC-Advanced Placement/ HORIZONS

**1 credit**

The courses follow the AB or BC outline prescribed by the College Board and, as such, the Calculus AP test given in May for college placement is encouraged. Limits of functions, continuity, and derivatives are studied in detail. Both indefinite and definite integrals are explored, with applications to area and volume. The antiderivative, sequences and series, and differential equations are also included along with analytic geometry. The student will study the line, vectors in a plane, the circle, conics, relations, functions and their graphs, the intersections of loci, non-linear inequalities in the plane, parametric equations, polar coordinated, and solid analytic geometry. Computers and graphing calculators will be used extensively.

- ◆ Prerequisite: Precalculus

## Statistics-Advanced Placement/HORIZONS

**1 credit**

This course follows the AP outline prescribed by the College Board. Distribution functions, and descriptive and inferential statistics will be studied. Students are encouraged to take the Statistics AP exam in May in order to earn college credit.

- ◆ Prerequisite: Algebra II

## Mathematical Models with Applications

**1 credit**

In this course, student use algebraic, graphical, and geometric reasoning to recognize patterns and structure, to model information, and to solve problems from various disciplines. Students use mathematical methods to model and solve real-life applied problems involving money, data, chance, patterns, music design, and science. Math models from algebra, geometry, probability, and statistics and connections among these are used to solve problems from a wide variety of advanced applications in both mathematical and non-mathematical situations.

- ◆ Prerequisite: Geometry (D yearly average)

## Independent Study in Mathematics – Advanced Algebra

**1 credit**

Advanced Algebra continues the study of functions from Algebra II, focusing on improving mathematical fluency in simplifying expressions and solving equations and inequalities of various types, including quadratic, exponential, logarithmic, absolute value, radical, polynomial, rational equations. Students will also study graphs and characteristics of piece-wise functions, factoring, simplifying radicals, operations of rational expressions, inverse and composite functions, operations on functions, matrices and systems of linear equations. Technology will be incorporated as a means of exploring attributes of functions such as symmetry and transformations. Students will use various functions to

solve real-life problem situations.

- ◆ Prerequisite: Algebra II
- ◆ L-level only
- ◆ Successful completion of this course with an A or B yearly average qualifies a student to enroll in College Algebra at Lone Star without the TSI math assessment. Students who qualify must enroll in College Algebra the summer or fall session immediately after graduation.

### **Independent Study in Mathematics – College Algebra K**

**1 credit**

College Algebra continues the study of functions from Algebra II, focusing on improving mathematical fluency in simplifying expressions and solving equations and inequalities of various types, including linear, quadratic, exponential, logarithmic, absolute value, radical, polynomial, and rational. Students will study piece-wise functions, inverse and composite functions and operations on functions, matrices and solve systems of linear equations. Geometric properties of functions and relations, such as symmetry and transformations, along with technology will be incorporated. Students will use various functions to solve real-life problem situations. Students will be prepared to take a college entrance test in order to earn dual credit upon successful completion of this course.

- ◆ Prerequisite: Algebra II
- ◆ K-level only

### **Advanced Quantitative Reasoning K**

**1 credit**

Advanced Quantitative Reasoning (AQR) is designed for students who may pursue a non-mathematics major in college as well as for students who may enter workforce training programs after high school graduation. AQR includes a strong emphasis on statistics and financial applications, as well as on the use of mathematical models involving algebra, geometry, and trigonometry to solve problems in collaborating, conducting research, and making presentations. AQR does satisfy the fourth required mathematics on the Recommended High School Program.

- ◆ Prerequisite: Algebra II
- ◆ K-level only

### **Computer Science AP**

**1 credit**

Computer Science AP is a programming course designed to cover the Advance Placement (AP) Computer Science AP Exam topics. The curriculum will build upon the topics addressed in Computer Programming K. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and the AP Case Study.

- ◆ Grades 10 – 12 (9<sup>th</sup> graders may enroll if concurrent with Algebra II)
- ◆ Technology Applications credit
- ◆ Required prerequisite: Computer Programming K recommended or Geometry K
- ◆ This course may satisfy the 4<sup>th</sup> math credit required

for graduation if taken after completing Algebra II.

- ◆ Lab supplies or fee may be required.

## **HORIZONS Academically Gifted Program**

The courses in this section are exclusively for identified gifted (HORIZONS) students and are designed to meet their specific nature and needs.

### **HORIZONS SAT/ACT Preparatory Strategies**

**1/2 credit**

This one-semester elective course is open to HORIZONS students. It is designed to provide students with strategies to meet the academic requirements demanded in post-high school studies and to approach successfully the taking of college entrance exams. Units of study include SAT/ACT preparation, vocabulary preparation for college entrance exams, objective test-taking, research and critical thinking, attitudes, goals, and time management.

- ◆ Prerequisite: PACE
- ◆ For ninth graders entering high school in 2013 (Class of 2017) and beyond, this course will only be offered for local credit.

### **HORIZONS English I**

**1 credit**

This course, designated for HORIZONS students only, follows the curriculum established for all levels of English I in the District (see English I course description). In addition, the course offers differentiated instruction to meet the needs of the HORIZONS student. Enrichment, choice, and performance of independent projects is inherent in English I HORIZONS.

### **HORIZONS English II**

**1 credit**

Limited to HORIZONS students only, this course follows the District English II curriculum. (See English II curriculum.) The course is modified to meet the needs of HORIZONS students through insertion of differentiated offerings and instruction. Enrichment, choice, and performance of independent projects are inherent in English II HORIZONS.

### **HORIZONS World Geography**

**1 credit**

This course is designed to provide ninth- to twelfth-grade HORIZONS students the opportunity to study the world as it is today. This course focuses on the major themes of geography. The curriculum includes an emphasis on physical geography of the world and human geography including historical, political, and economic developments of selected regions of the world. Environment and society will be emphasized by studying interaction of physical and human systems and identifying the central role of resources in the environment. Students will also develop geographic skills including the ability to acquire, arrange, and use geographic information.



**HORIZONS World Area Studies 1/2 - 1 credit**

World Area Studies is designed to provide eleventh- and twelfth-grade students the opportunity to study the historical, political, and economic developments of selected regions and countries around the world. Regional studies will include an analysis of how the area is impacted by current world problems as well as a study of solutions being offered by that region and their relative success. Five major regions of the world will be studied, but the course allows for discretionary study of selected specific countries within each region that are presently embroiled in conflict. Culture and geography, which many times are the root causes of these conflicts, will also be analyzed in the course. Students enrolling in this course must meet HORIZONS entry criteria.

**HORIZONS World History Studies 1 credit**

Students in HORIZONS World History will follow a thematic approach to the study of world history. Because these units of study are organized into themes, the course lends itself to extension into universal concepts. These themes include science and technology, civilizations, philosophy and belief systems, government, cooperation and conflict, and humanities. The curriculum allows gifted students to explore topics through problem solving, role-playing, simulations, and independent research.

**Other Courses Appropriate for HORIZONS Students**

HORIZONS students are encouraged to take the above-listed courses along with other courses identified as appropriate for HORIZONS students. These courses may be identified as K-level or Advanced Placement and are available in the core academic areas of English, math, science, and social studies. HORIZONS students may also want to consider Advanced Placement courses in foreign language, technology applications, and art.

<b>SCIENCE</b>
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**Integrated Physics and Chemistry 1 credit**

I P & C is a lab-oriented course that introduces basic concepts of physics and chemistry. The two disciplines are integrated in the topics of motion, waves, energy transformation, properties of matter, changes in matter, and solution chemistry. This course serves as a background for subsequent courses in chemistry and physics.

- ◆ Students who take IP&C for the first time in 2010-2011 or beyond must then complete Chemistry and Physics for the Recommended Program regardless of when they entered high school.

**Biology 1 credit**

In Biology, students conduct laboratory and field investigations, use scientific methods during

investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment.

**Chemistry 1 credit**

In Chemistry, students conduct laboratory and field investigations, use of scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives.

- ◆ Prerequisite: Biology and Algebra I

**Physics 1 credit**

In Physics, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: laws of motion; changes within physical systems and conversion of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical thinking skills.

- ◆ Prerequisites: Biology

**Biology Advanced Placement 1 credit**

Biology AP is a college preparatory course designed to extend the understanding of biology concepts. Major emphasis is placed on the latest theories and concepts dealing with molecular biology, biochemistry, cellular processes, human genetics, and bioethics. Other topics include plant and animal taxonomy, ecology, and evolution. The course is also heavily lab-oriented to familiarize the student with some of the techniques and processes currently used in scientific research. This course is recommended for students planning to major in any area of science in college. Students who take the course will be prepared for the AP Biology exam.

- ◆ Prerequisites: Biology and Chemistry

**Chemistry Advanced Placement 1 credit**

Comparable to a first-year college course, this course is an in-depth study of the principles and concepts in chemistry. Students are required to demonstrate an understanding of these principles through application in a laboratory situation. Content includes structure and bonding, stoichiometry, thermodynamics, kinetics, and

quantitative analysis. This course is designed toward advanced placement for the college-bound student. Students who take the course will be prepared for the AP Chemistry exam.

- ◆ Prerequisite: Chemistry and Algebra II

### **Anatomy and Physiology of Human Systems** **1 credit**

Anatomy and Physiology is a college preparatory course designed to extend the student's knowledge and understanding of the human body in respect to its structure and function. A survey of each organ system is presented with initial emphasis upon its anatomy, followed by an in-depth study of its physiology. This course is lab-oriented and teaches proper dissection techniques as well as various physiological phenomena. This course is recommended for students pursuing an education in the medical sciences.

- ◆ Prerequisite: Biology and Chemistry

### **Environmental Science Advanced Placement** **1 credit**

This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Students who take the course will be prepared for the AP Environmental Science exam.

- ◆ Prerequisite: Biology and Chemistry

### **AP Physics I** **1 credit**

AP Physics I is the equivalent of a first semester college course in algebra based physics but it is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits. The course may substitute for Physics.

- ◆ Prerequisite: completion of Algebra II.

### **AP Physics C** **1 credit**

This course stresses application of mathematics to physical situations and principles of mechanics, electricity, and magnetism. Considerable emphasis is placed on laboratory investigation and student research. This course is designed toward advanced placement for the college-bound student. Students who take the course will be prepared for the AP Physics-C exam.

- ◆ Prerequisites: Physics
- ◆ Concurrent enrollment in Calculus required

### **Astronomy** **1 credit**

In Astronomy, students conduct laboratory and field investigations, use scientific methods, and make informed decisions using critical thinking and scientific problem solving. Students study the following topics:

astronomy in civilization, patterns and objects in the sky, our place in space, the moon, reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.

- ◆ Prerequisite: Completed 3 required science courses in high school or concurrent with 3<sup>rd</sup>

### **Aquatic Science** **1 credit**

In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Investigations and field work in this course will emphasize fresh water and marine aspects of aquatic science. Students who successfully complete Aquatic Science will acquire knowledge about a variety of aquatic systems, conduct investigations and observations of aquatic environments, work collaboratively with peers, and develop critical-thinking and problem-solving skills.

- ◆ Prerequisite: Biology

### **Environmental Systems** **1 credit**

In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationships between carrying capacity and changes in populations and ecosystems, and changes in environments.

- ◆ Prerequisite: Completed 3 required science courses in high school or concurrent with 3<sup>rd</sup>

### **Earth and Space Science (ESS)** **1 credit**

ESS is a capstone course designed to build on students' prior scientific and academic knowledge and skills to develop an understanding of Earth's systems in space and time. Students will spend time studying the geosphere (solid Earth) hydrosphere (water), and atmosphere systems. Students will focus on how these systems interact with each other and how they interact with the biosphere (life). In addition, students will investigate how the Earth is part of the much larger solar and stellar systems.

- ◆ Prerequisite: Completed 3 required science courses in high school or concurrent with 3<sup>rd</sup>

### **Forensic Science** **1 credit**

Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprints analysis, ballistics, and blood spatter analysis. Students will learn

the history, legal aspects, and career options for forensic science.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Biology and Chemistry
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation.

### **Advanced Animal Science** **1 credit**

This course is designed for students preparing for careers in the field of animal science. Emphasis will be placed on the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

- ◆ Grade 12
- ◆ Required prerequisite: at least one credit in Ag cluster
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation if taken after completing Biology and Chemistry.

### **Engineering Design and Problem Solving K** **1 credit**

Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students apply critical thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.

- ◆ Grade 12
- ◆ Algebra II, Chemistry, and Physics
- ◆ K-level only
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation.

## **LANGUAGES OTHER THAN ENGLISH**

Students may take any two levels of the same foreign language to meet the requirements for the Recommended High School Program.

### ◆ **MODERN LANGUAGES:** **French, German, Spanish**

#### **Level I** **1 credit**

The goal of the study of beginning levels modern languages is communicative competence. This course introduces students to language and develops novice-level proficiency in speaking, listening, reading and writing. At the end of the course, students should be in the Novice High Learner proficiency range and able to engage in simple conversations within the limits of practiced vocabulary and structure. Students will also gain perspective and insight into the cultures of the countries where the language is spoken. Classes are conducted in the language as much as possible.

#### **Level II** **1 credit**

Level II provides opportunities to further develop proficiency in listening, speaking, reading and writing. Emphasis is placed on expanding accuracy in vocabulary and structure and on broadening knowledge of cultural understanding. Classes are conducted in the language as much as possible. At the end of the course, students should be in the Intermediate Low Learner proficiency range.

#### **Level III (L or K)** **1 credit**

Level III classes are conducted in the language and provide opportunities to develop intermediate language proficiency in speaking, listening, reading and writing. By the end of the course students should have adequate control of all basic structural patterns and should be able to express themselves. In addition, students will have an in-depth understanding of language and cultural perspectives associated with it. K-level prepares students for IV AP. At the end of the course, students should be in the Intermediate Mid Learner proficiency range.

#### **Level IV AP, V K or AP, and VI K** **1 - 3 credits**

While there is a continued emphasis on proficiency, the Level IV-VI class, which is conducted in the language, pursues a more in-depth study of language, culture, and literature. Refinement of grammatical concepts and vocabulary enrichment are stressed. At the end of the course students have the option to take the Advanced Placement Exam.

## PHYSICAL EDUCATION / HEALTH

### **Spanish for Native Speakers II / III K      2 credits**

This course is for students whose native language is Spanish and who have received a 70+ on the district placement test. Students will complete Spanish II during the first semester and Spanish III K during the second semester. Both courses will focus on the refinement of reading and writing skills. Students must pass the first semester with a 70+ to be eligible for III K in the spring. Successful completion of these two courses will prepare students to take Spanish for Native Speakers IV AP the following year.

### **Spanish for Native Speakers IV AP      1 credit**

Spanish for Native Speakers IV AP is designed for students who have successfully completed Native Speakers II / III K. This course will follow the College Board expectations and will prepare students to take the Spanish Language AP Exam in the spring, if they choose to do so.

## ◆ **CLASSICAL LANGUAGES: Latin**

### **Latin I      1 credit**

This course introduces students to Latin and focuses on the development of skills in reading and writing, with an emphasis on reading comprehension, the development of both oral and written skills and vocabulary derivatives. Studies of the ancient Roman world, daily life, mythology and history are included.

### **Latin II      1 credit**

As the course continues, new grammar and structural concepts are included with an increased emphasis on reading, writing, speaking and listening and the culture of the Roman Empire.

### **Latin III K – IV AP      1 - 2 credits**

Latin III emphasizes the work of major Latin authors with an introduction of Cicero. Latin IV introduces Virgil and *The Aeneid*. In both courses, focus is on the continued development of the four language skills. Students in Level IV will follow the College Board Advanced Placement Curriculum and will have the option of taking the Advanced Placement Exam.

## ◆ **Physical Education**

Physical Education is offered each year of high school. A student is required to take physical education two semesters and may earn a maximum of two (Class of 2013) or four credits toward graduation, including athletics. A criterion-reference fitness test is administered in all physical education classes each semester.

### **Foundations of Personal Fitness      1/2 - 1 credit**

This course enables students to incorporate health and physical behaviors into their lifestyles. Emphasis will be on giving students knowledge and skills in the following areas: components of physical fitness, consumer issues, biomechanical and physiological principles, safety practices, lifestyle assessment, assessment of individual fitness levels, and design of a personal fitness program. Students enrolled in the regular physical education program must take Foundations of Personal Fitness.

### **Team Sports      1/2 - 1 credit**

Instruction and skill development are offered in a variety of team sports. This instruction is planned to meet the needs of the individual students. The emphasis will be for students to develop and demonstrate physical skills, stamina, and an interest in physical activity and overall wellness. This curriculum framework will allow every student to become a physically-educated person.

### **Individual Sports      1/2 - 1 credit**

Instruction and skill development are offered in a variety of individual, dual and leisure sports. This instruction is planned to meet the needs of the individual students. The emphasis will be for students to develop and demonstrate physical skills, stamina, and an interest in physical activity and overall wellness. This curriculum framework will allow every student to become a physically-educated person.

### **Outdoor Education      1/2 - 1 credit**

Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment and that can be enjoyed for a lifetime. Knowledge and skills will be gained through activities such as: camping, backpacking, canoeing, orienteering, basic first aid and CPR, casting and angling, participating in the challenge course and developing creative thinking with outdoor activities, and correlating nature and the environment with different subject areas.

◆ Prerequisite: Foundations of Personal Fitness

**Aerobic Dance**

**1/2 - 1 credit**

This course is a comprehensive study of the components of aerobic fitness. Dance aerobics is an exercise that combines the rhythmic steps of aerobics with graceful dance movement. It can be broadly divided into four types; high impact exercises, low impact exercises, step aerobics, and water aerobics all of which address the development of strength, endurance, flexibility, and the creation of a sense of well-being with the individual student. Dance is a natural method for learning and a powerful ally for developing the physical, emotional, social and cognitive attributes of students.


- ◆ May serve as a prerequisite for Dance II

**Off Campus PE**

Students may also meet the physical education requirements if they participate in a district-approved Olympic caliber, off-campus training program. Contact the school counselor for more information

**Athletics**

Athletics is offered each year of high school and includes choices from twenty different sports for both men and women. A student enrolled in Athletics may earn a maximum of four credits toward graduation. Athletics is an instructional model designed to provide athletes with an authentic, in-depth sport experience. It is intended to move isolated skill practice into sequential, progressive, and realistic game situations with the primary objective of developing highly competitive team members. Taking responsibility for personal and social behavior, and respecting differences among people in sport settings are all inherent within the team model. Athletes are actively engaged in the sport of choice, working on skills for game play situations under the direction of their head coach. Students are placed in athletics as the result of student performance criteria conducted in pre-season tryout sessions and ultimate recommendation from the head coach. Students elected to participate must maintain academic eligibility as mandated by the University Interscholastic League.

 In accordance with UIL rules, schools limit practice for in-season athletic activities to a maximum of eight hours per school week (Monday through Friday until 2:30 p.m.) per activity, in addition to a maximum of 60 minutes per school day, Monday through the end of the school day on Friday. One athletic competition may be held outside of school Monday through Thursday. After 2:30 p.m. on Friday and on Saturday, practice time and/or competitions are not limited by UIL. A schedule will be provided regularly by the coach/school.

◆ **Health**

**Health - Grades 9-10**

**1/2 credit**

In Health, students develop skills, including CPR, that will make them health-literate adults. Students gain a deeper understanding of the knowledge and behaviors they use to safeguard their health, particularly pertaining to health risks. Students are taught how to access accurate

information that they can use to promote health for themselves and others. Students use problem-solving, research, goal-setting and communication skills to protect their health and that of the community.

Specific topics in the abstinence-based sex education curriculum include decision-making concerning dating, love, relationships, and marriage and family. Other issues addressed are the problems of teen pregnancy and parenthood, sexually transmitted diseases, sexual harassment and abuse, rape prevention and the failure rate of contraceptive methods when used either to prevent pregnancy or disease. Parents will have an opportunity to attend a preview night of the curriculum. Also, take-home assignments will provide avenues for parent/student communication.

Because of the sensitive nature of these topics and the information about lifelong choices, students should consider their goals and maturity level when choosing the best time to take this course. With parent permission, this course may be delayed until grade 11 or 12, or taken by correspondence. The health requirement may also be met by successful completion of one credit of Health Science Technology Education, or students may take Anatomy and Physiology and receive credit for health upon successful completion of the health credit-by-exam.

**Principles of Health Science**

**1 credit**

This course is designed for students interested in medical and associated health careers. It gives an overview of the therapeutic, diagnostic, environmental, and informational systems of the health care industry. Topics include career requirements, medical history, trends in financing health care, ethical and legal responsibilities, human anatomy and physiology as related to the health care profession, client care, safety, first aid, and CPR. This course prepares the student for the transition to clinical and/or work-based experiences available in the advanced health science courses.

- ◆ Grades 10 – 12
- ◆ This course satisfies the health credit required for graduation.
- ◆ Lab supplies or fee may be required.

**FINE ARTS**

◆ **Visual Arts**

Students will develop skills in observation, problem solving, visual communication, manipulation of art media, self-expression, and critique. The student is responsible for purchasing basic art supplies. A list of these supplies is given to the student the first week of school. Some consumables may need to be replenished during the course of the year. Additional charges may occur for special projects (primarily in upper level art courses. Only

one state credit may be earned from the following Art I courses: Art I DP or Art I S or Art I P or Art I DM.

### **Art I DP -Drawing/Painting** **1 credit**

Art I Drawing and Painting is a foundation course that uses primarily drawing and painting materials to teach the elements and principles of design. A variety of problems and other media are also incorporated as well as history and criticism. Students will develop a portfolio that shows their skill in media and problem-solving. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art I S –Sculpture/Ceramics** **1 credit**

Art I Sculpture is a foundation course that uses primarily three-dimensional materials to teach the elements and principles of design. A variety of problems and other media are also incorporated as well as history and criticism. Students will develop a portfolio that shows their skill in media and problem-solving. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art I P - Photography** **1 credit**

Art I Photography is a foundation course that uses primarily film photography with a manual camera to teach the elements and principles of design. A variety of problems and other media are also incorporated as well as history and criticism. Students will develop a portfolio that shows their skill in media and problem-solving. Having a 35mm SLR film camera of their own is beneficial to students taking this class, but not required. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art I DM – Digital Art and Media** **1 credit**

Art I Digital Art and Media is a foundation course that uses computers and other digital media to teach the elements and principles of design. A variety of problems and other media are also incorporated as well as history and criticism. Students will develop a portfolio that shows their skill in media and problem-solving. Having a Digital SLR camera of their own is beneficial to students taking this class, but not required. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art II Drawing/Painting** **1 credit**

This second-year art course provides students who have successfully completed an Art I course an opportunity to further develop their drawing and painting skills through the use of advanced concepts and processes. Development of a portfolio is required.

- ◆ Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art II Sculpture/Ceramics** **1 credit**

This second-year art course provides students who have successfully completed an Art I course an opportunity to further develop their three-dimensional skills through the use of advanced concepts and processing in clay and a variety of other media. Development of a portfolio is required.

- ◆ Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art II Photography** **1 credit**

This second-year art course provides students who have successfully completed an Art I course, an opportunity to further develop their photography skills and expand on concepts presented in Art IP. Development of a portfolio is required.

- ◆ Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art II Digital Art and Media** **1 credit**

This second year art course focuses on creating art works that communicate visual ideas and concepts by incorporating the elements/principles of design and drawing skills into a digital format. Various design software such as Adobe Photoshop, Illustrator, and other software will be explored. Emphasis will be placed on creativity, originality, and problem-solving skills.

- ◆ Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art III Drawing/Painting** **1 credit**

This third-year course provides an in-depth study of the concepts, techniques, and self-expression of drawing and painting on an advanced level. Completion of a cohesive portfolio is required.

- ◆ Prerequisite: Art II Drawing/Painting
- ◆ Supplies are required.
- ◆ A course fee will be charged.

### **Art III Sculpture/Ceramics** **1 credit**

This third-year course provides an in-depth study of the concepts, techniques, and self-expression of 3D artwork on an advanced level. Completion of a cohesive portfolio is required.

- ◆ Prerequisite: Art II Sculpture
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**Art III Photography 1 credit**

This third-year course provides an in-depth study of the concepts, techniques, processes, and self-expression through photography on an advanced level. Completion of a cohesive portfolio is required.

- ◆ Prerequisite: Art II Photography
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**Art III Digital Art and Media 1 credit**

This third-year course provides an in-depth study of digital concepts, techniques, and self-expression on an advanced level. Completion of a cohesive portfolio is required.

- ◆ Prerequisite: Art II Digital Art and Media
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**Art IV Studio – Drawing/Painting, Sculpture/Ceramics, Photography, or Digital Art and Media 1 credit**

The experiences given and skills developed in the first three levels of art courses prepare students for in-depth study of special problems based on their previous credits. They will produce a body of artwork in their chosen area of art (drawing, painting, sculpture, ceramics, electronic media, photography, printmaking) and develop evaluative criteria for selecting artworks to include in a portfolio. Preparation of a portfolio is required.

- ◆ Prerequisite: Students must have completed the Level III art course in the same series.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**◆ Advanced Placement Art Courses**

Students can take AP at either the Art III or Art IV Level.

These courses are designed to help students mature as artists and find their personal style and direction. Students will be continuously involved in the investigation of formal and conceptual issues. The student will work towards developing a strong cohesive portfolio that meets the AP requirements in Quality, Concentration, and Breadth.

AP Art - Drawing

AP Art - 2D Design

AP Art - 3D Design

AP Art - Photography (see AP Art-2D)

AP Art - Digital Art and Media (see AP Art-2D)

- ◆ Juniors or seniors
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art – Drawing 1 credit**

The drawing portfolio course is designed to address a very broad interpretation of drawing issues. Painting, printmaking, abstract, and observational works are included in a drawing portfolio. This portfolio allows for a more specific course of study that readily parallels specialized drawing curriculums and programs in college and university art departments as well as in art schools. Works presented in the portfolio may have been produced in art classes and may cover a period longer than a single school year. Work presented in an Advanced Placement Drawing portfolio may not be included in other Advanced Placement portfolios at another time. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.

- ◆ Prerequisite: Students must have completed a Level II course.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art – 2D Design 1 credit**

The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.

- ◆ Prerequisite: Students must have completed a Level II course.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art – 3D Design 1 credit**

The 3D Design portfolio course is intended to address a very broad interpretation of sculptural issues in depth and space. Such elements and concepts can be articulated through additive, subtractive, and/or fabrication processes. A variety of approaches might include jewelry, traditional sculpture, architectural models, apparel, ceramics, fiber arts, or metal works. The portfolio is submitted as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.

- ◆ Prerequisite: Students must have completed a Level II course.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art – Photography 1 credit**

The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.

- ◆ Prerequisite: Students must have completed a Level II course.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art – Digital Art and Media 1 credit**

The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.

- ◆ Prerequisite: Students must have completed a Level II course.
- ◆ Supplies are required.
- ◆ A course fee will be charged.

**AP Art History 1 credit**

Students will explore and examine the concepts of creativity, originality, self-expression, style, and aesthetics. Students will identify art elements and design principles, applying them to the studies of ancient and modern civilizations. Preparation for the College Board examination is integrated throughout the course for the AP candidates.

- ◆ Juniors or seniors
- ◆ Supplies are required.
- ◆ A course fee will be charged.

◆ **Theatre Arts**

Students involved in theatre productions will be required to attend rehearsals or crew calls after school or in the evenings. The amount of time required will not exceed 8 hours per week from Monday through Thursday. Students may be expected to attend rehearsals or work days on

Friday and Saturday. Specific rehearsal times will vary by school, and the theatre arts teacher will provide a complete rehearsal schedule.

**Theatre Arts I 1 credit**

This is a course in the fundamentals of theatre production designed to acquaint the student with pantomime, improvisation, and the rudiments of acting, as well as the technical aspects of theatre such as sets, props, costumes, and makeup.

- ◆ A course fee will be charged.

**Theatre Arts II-IV 1 - 3 credits**

These courses are designed for the student who shows exceptional ability in drama and who wishes to take advanced courses in production. Emphasis is on dramatic production in dramatic presentations.

- ◆ Prerequisite: Teacher approval
- ◆ Completion of previous level theatre course required
- ◆ A course fee will be charged.

**Theatre Production I 1 credit**

The purpose of this course is to study the theatre in relation to the total theatrical process and to apply good acting techniques to actual productions. Topics and activities included will be design and construction of scenery including lighting, costume design, production of sound effects, and actual production of dramatic events.

- ◆ Prerequisite: Teacher approval
- ◆ A course fee will be charged.

**Theatre Production II-IV 1 - 3 credits**

The purpose of these courses is to continue to study the theatre in relation to the total theatrical process and to apply good acting techniques to actual productions. Topics and activities included will be design and construction of scenery including lighting, costume design, production of sound effects, and actual production of dramatic events.

- ◆ Prerequisite: Teacher approval
- ◆ Completion of previous level theatre course required
- ◆ A course fee will be charged.

**Technical Theatre I 1 credit**

This course includes development and application of skills and basic theories of design in color, drawing, lighting, costuming, props, and interpretation in stage design.

- ◆ A course fee will be charged.
- ◆ Students taking only one semester must be scheduled in the fall.

**Technical Theatre II-IV 1 - 3 credits**

These courses include further development and application of skills and basic theories of design in color, drawing, lighting, costuming, props, and interpretation in stage design.

- ◆ Prerequisite: Teacher approval
- ◆ Completion of previous level of theatre course required.
- ◆ A course fee will be charged.



## ◆ Music

Possible costs include an instrument and accessories, instrument repairs, and uniform cleaning fees. Other required costs determined by the director may include shirts for marching band and concert uniforms, socks, and marching band shoes. Optional costs could include fees for region auditions, solo and ensemble contest, accompanist fees for solo and ensemble contest, trip costs, and private lessons.

### **Band I-IV** **1/2 - 4 credits**

The high school band program provides four to five levels of band classes during the school day. Instructional priorities include instrumental technique, musicianship, critical listening, cultural growth, basic music theory, creative self-expression, rehearsal and concert etiquette, self-discipline, responsible citizenship, effective communication, problem solving, and production of quality products. Band students receive instruction on both marching and concert fundamentals. During marching season, students learn marching fundamentals, marching chart reading, how to play and march simultaneously, spatial awareness, kinesthetic awareness and movement memory. A variety of musical styles are performed. Physical conditioning is also emphasized. Students should be in good physical condition to participate. Concert season is ongoing and provides students an opportunity to continue musical growth and experience music literature. Individual, small, and large ensemble concepts and skills are emphasized. Three or more levels of performing bands are offered at each school. Students are placed in each level by specific performance criteria including an audition. Performances during the concert season include 3-5 concerts and 3-5 festival performances. Students may also participate in a series of auditions related to the all-state process as well as solo and ensemble contests. Attendance at after school, section rehearsals is required.

Students participating in marching band will receive 1/2 credit of PE for after school participation.

🕒 Students in the marching band rehearse 6-8 hours per calendar week beginning the first week of school until the final marching contest of the season usually around the beginning of November. Summer marching rehearsals begin the last week of July or August 1 depending on the needs of the band program and the school calendar. Freshman marching training sessions are sometimes held in June. Marching band students attend all varsity football games including playoff games. Marching rehearsal requirements for playoff games are significantly reduced to 1 or 2 hours per week. Members of competition marching bands participate in 3-5 marching contests as well. Marching bands may advance to the UIL Area and State Marching Championships. Band membership requires, a 1-2 hour weekly section rehearsal during concert season. More advanced performing groups may

require an additional weekly full ensemble rehearsal of 1-2 hours. Additional full group rehearsals often occur leading up to major performances. Specific rehearsal and performance requirements for each orchestra are provided by the director.

### **Choral Music I-IV** **1/2 - 4 credits**

This course is designed to develop and refine music reading skills and to encourage artistic expression through choral singing. Rehearsals focus on choral techniques through proper vocal production. Theory and sight-reading techniques are also emphasized with continued development of the knowledge and skills in musicianship and performance. Students will sing literature from the Renaissance to popular and show choir music. This enables the students to gain an appreciation for different vocal styles, composers, form, periods, and cultures. Choir classes are ability-based and placement is determined by various performance criteria developed by the choral staff and may include an audition. A student with no prior experience may enroll in the program and will be placed in the appropriate group by the director. Attendance at after-school rehearsals and performances is a requirement for the performing choirs. Students will participate in three to four concerts per year, solo and ensemble contest, UIL concert and sight-reading contest, and a music festival.

🕒 After school rehearsals are held prior to contests and performances. These sessions are scheduled through the director. A calendar with specific rehearsal and performance requirements for each choir is provided by the director at the beginning of the school year and updated as needed.

### **Vocal Ensemble I - IV** **1 - 4 credits**

This small group of top vocal students is comprised of the most highly skilled and motivated students in the choral program. A student must be chosen as a member of the varsity mixed choir in the program to be considered for membership in this very select ensemble. Emphasis is placed on carrying an independent part in a small ensemble group, and students must exhibit the appropriate level of vocal technique, sight-reading ability, and work ethic in order to be considered for this course. This group is focused on advanced literature and performs music selected from a wide variety of musical styles including traditional choral music, madrigals, motets, and Broadway and popular literature. Performance is stressed, and some time will be devoted to choreography. The name of such a group may differ with the high school in which it is organized. Prerequisite: Varsity mixed choir; audition and approval of the choral director

◆ Prerequisite: Varsity mixed choir; audition and approval of the choral director.

🕒 Attendance at extra rehearsals, competitions, and numerous performances of this ensemble is required.

**Music Theory AP****1 credit**


The main objective of the AP Music Theory Course is for students to develop aural, sight singing, written, composition, and analytical skills in music. This course covers material typically taught at the college freshman level with emphasis placed on basic pitch and rhythmic notation or scale structures, pitch intervals, chord structure and movement, part writing, ear training, harmonization, and music composition. Upon completion of this course, students will be prepared to take the College Board Advanced Placement Music Theory Examination.

Prerequisite:

- ◆ 11<sup>th</sup> and 12<sup>th</sup> graders
- ◆ Minimum of two years membership in high school band, choir, or orchestra and taken concurrently with band, choir, or orchestra OR
- ◆ A minimum proficiency score on the CFISD Advanced Theory Placement Test

**Orchestra I-IV****1/2 - 4 credits**

The high school orchestra program provides one to four levels of classes during the school day. Instructional priorities include instrument technique, musicianship, critical listening, cultural growth, basic music theory, creative self-expression, rehearsal and concert etiquette, self-discipline, responsible citizenship, effective communication, problem solving, and production of quality products. Orchestra students are given an opportunity to continue musical growth and experience quality music literature. Several large ensemble, small ensemble, and individual performance opportunities are provided for students in performing orchestras. Performances include 3-5 concerts and 3-5 festival performances. Students may also participate individually in a series of auditions related to the all-state process as well as solo and ensemble contests.

 Orchestra membership requires a 1-2 hour weekly section rehearsal. More advanced performing groups may require an additional weekly full ensemble rehearsal of 1-2 hours. Additional full group rehearsals often occur leading up to major performances. Specific rehearsal and performance requirements for each orchestra are provided by the director.

◆ **Dance**

Possible costs include costumes, practice apparel, camps, trips, individual entry fees, and other items specific to each school. Specific costs expectations vary from campus to campus and are available from the dance instructor. Costs for the first year of drill team are the highest. Students with established financial need should contact the director if there are concerns about being a member of the group.

**Dance I****1 credit**

Dance I students will learn fundamental skills in these dance techniques: ballet, modern, jazz, tap, folk, character, and ethnic. In addition, course objectives will emphasize (1) creative expression through movement; (2) awareness of space, time, and energy in dance technique and improvisational studies; (3) development of self-confidence through the use of the body as an expressive instrument; and (4) appreciation of dance as an art form.


**Dance II****1 credit**

Dance II students will build on skills and techniques learned in Dance I, including creative expression, improvisation, and appreciation of dance as an art form. Qualities of movement are also explored. These include swinging, percussion, suspension, sustained, collapsing, and vibrancy. Kinesthetic awareness and movement memory is emphasized as well. Dance techniques explored may include ballet, modern, jazz, tap, folk, character, and ethnic.

- ◆ Prerequisite: Dance I or Aerobic Dance

**Dance II, III, IV (Drill Team)****1 - 3 credits**

Instructional priorities of the high school dance program include development of dance techniques learned in Dance I, creative expression, improvisation, and appreciation of dance as an art form. Qualities of movement are also explored. These include swinging, percussion, suspension, sustained, collapsing, and vibrancy. Kinesthetic awareness and movement memory is emphasized as well. Dance techniques explored may include ballet, modern, jazz, tap, folk, character, and ethnic. As students progress from Dance II to IV more advanced techniques and skills are acquired. Placement of students in Dance II-IV (Drill Team) is determined by various criteria including a tryout. Drill Team will meet the requirement of 1 PE credit for after school participation.

 Rehearsal and performance requirements vary from campus to campus. Dance teams generally practice 8 hours per week after school from Monday to Thursday. An additional 2 to 4 hours of rehearsal is required on selected weekends. The drill team performs at all varsity football games including playoff games, participates in 3 to 5 spring contests, and produces a Spring show. Other performance opportunities are determined by the director.

## CAREER AND TECHNICAL EDUCATION

Students participating in elective career and technical courses such as agriscience, industrial technology, and family and consumer sciences may incur some additional expense if they choose to construct a class project that is to be taken home for personal use. Cost of the personal project will vary, depending upon the type of project, its size, and the materials used.

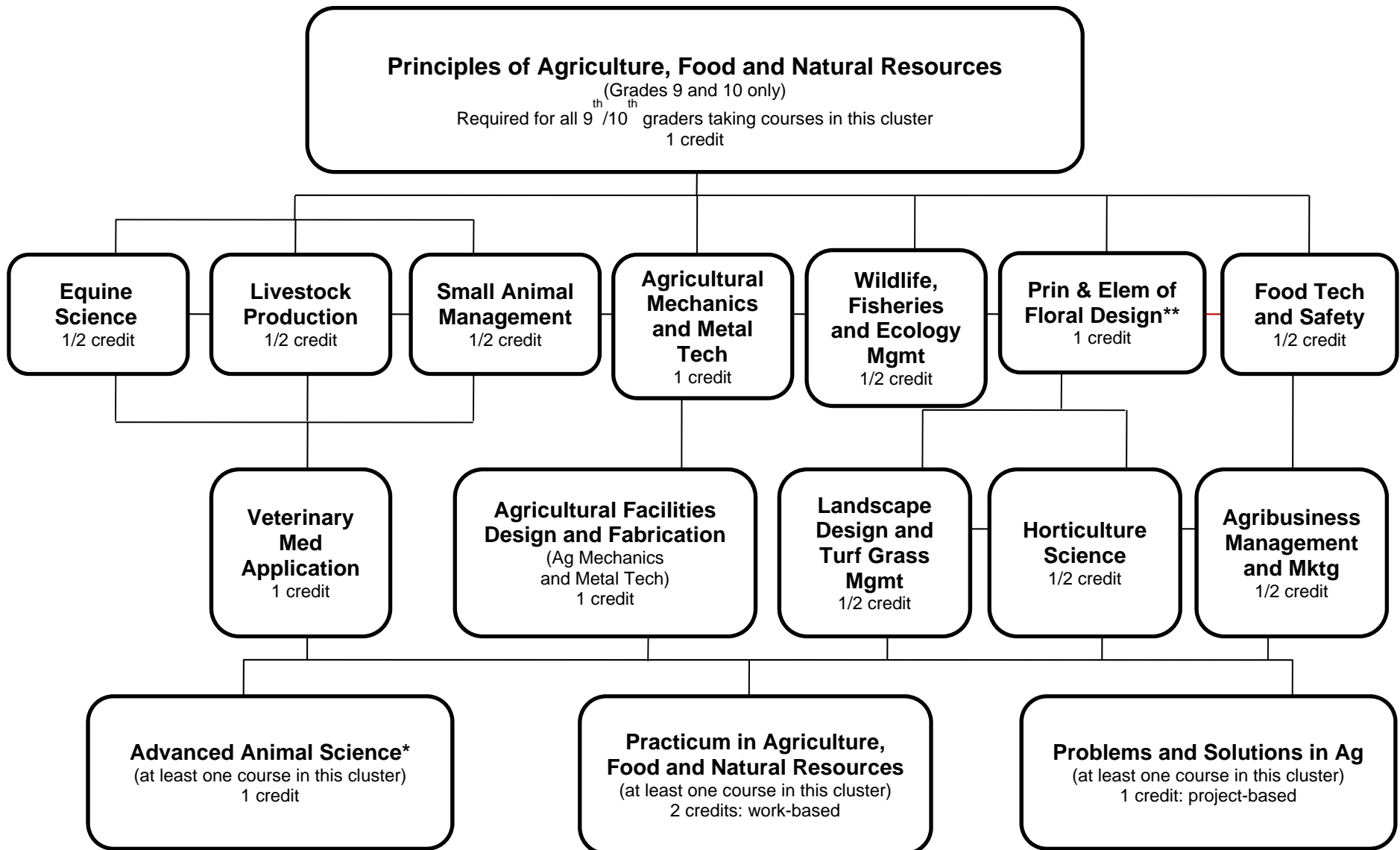
- ⌚ Students may choose to participate in extra-curricular contests related to the coursework. Preparation for contest events may be held after school for approximately one to two hours per week.

Some of the courses in Career and Technical Education may be eligible for articulated college credit or concurrent/dual credit with local community colleges. Some CTE courses may offer students industry certifications. See your counselor for more details.

If any student chooses to raise an animal as a project, this choice is strictly an option for the student - not a course requirement. All costs are the responsibility of the student. Estimated costs for raising personal projects may be obtained by contacting the agriscience teacher(s) at the student's high school.

- ⌚ Feeding and care of livestock projects are after-school activities. Animal projects may require one to two hours of daily care depending upon the type of animal being raised.

# Agriculture, Food and Natural Resources



(Required Prerequisite)

\*Course approved for 4<sup>th</sup> Science credit

\*\*Course approved for Fine Arts credit

### **Principles of Agriculture, Food, and Natural Resources** **1 credit**

This course is an introductory class that prepares students for careers in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.

- ◆ Grades 9 – 10
- ◆ Required of all 9<sup>th</sup>/10<sup>th</sup> graders wanting to take an Ag course
- ◆ Lab supplies or fee may be required.

### **Livestock Production** **1/2 credit**

This course is an in-depth study to develop knowledge and skills pertaining to all areas and kinds of livestock production. Topics which give the student an insight into livestock management include animal foods, nutrition and growth, reproduction, animal health, animal handling techniques, and livestock sales.

- ◆ Grades 10 - 12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Lab supplies or fee may be required.

### **Small Animal Management** **1/2 credit**

This course is designed for students preparing for careers in the field of animal science. Small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Lab supplies or fee may be required.

### **Equine Science** **1/2 credit**

In this concentrated study of horses, topics covered will include breeds, selection, uses, and other horse-related aspects of the agribusiness industry. Nutrition, reproduction, health and management of horses, and related enterprises will be emphasized.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Lab supplies or fee may be required.

### **Veterinary Medical Applications** **1 credit**

This course is designed for students preparing for careers in the field of animal science. Topics covered include, but are not limited to career opportunities, entry requirements, industry expectations, animal systems, and veterinary practices as they relate to both large and small animal species.

- ◆ Grades 11-12
- ◆ Required prerequisites: Principles of Agriculture, Food, and Natural Resources and either Livestock Production, Small Animal Management, or Equine

Science

- ◆ Assessment for verification of industry-recognized training is available for a fee.
- ◆ Lab supplies or fee may be required.

### **Advanced Animal Science** **1 credit**

This course is designed for students preparing for careers in the field of animal science. Emphasis will be placed on the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

- ◆ Grade 12
- ◆ Required prerequisite: at least one credit in Ag cluster
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation if taken after completing Biology and Chemistry.
- ◆ Lab supplies or fee may be required.

### **Agribusiness Management and Marketing** **1/2 credit**

Agribusiness introduces the student to management of agricultural enterprises. It covers marketing and sales of agricultural goods and machinery, and it includes a study of economic principles, banking, loans, budgets, record keeping, finance, business law, and careers in agribusiness.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Lab supplies or fee may be required.

### **Food Technology and Safety (an Ag course)** **1/2 credit**

Food Technology and Safety is designed to acquaint the student with world food production. Areas investigated will be marketing and transportation of food products, including preparation, processing, preservation and packaging for the consumer. Students learn about government regulations, sanitation, occupational opportunities, safety, and leadership development.

- ◆ Grades 10-12
- ◆ Prerequisite: Principles of Agriculture, Food, and Natural Resources (or concurrent) for 10<sup>th</sup> graders
- ◆ While this is not a Culinary Arts course, it may be an appropriate complement to courses in the hospitality cluster that focus more on food preparation.
- ◆ Lab supplies or fee may be required.

### **Wildlife, Fisheries and Ecology Management** **1/2 credit**

This course is designed to inform the students about wildlife management and outdoor recreation. Hunting and fishing skills and safety are taught as well as water and boating safety. State certification in these areas is available to students who qualify (state-mandated fee required for certification). Wise use of our natural

resources and career opportunities are also covered.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Assessment for verification of industry-recognized training is available for a fee.

### **Principles and Elements of Floral Design**

**1 credit**

This course is designed to develop a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Horticulture systems, career opportunities, entry requirements, and industry expectations will also be covered.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Lab supplies or fee may be required.
- ◆ This course may satisfy the fine arts credit required for graduation.

### **Landscape Design and Turf Grass Management**

**1/2 credit**

This course is for students who want to develop skills in designing, constructing, and maintaining planted areas. Proper selection of plants for various areas, seasonal growth, and locations will be emphasized. Construction of structures will be examined. Career opportunities, leadership activities, and cost analyses related to the landscaping industry will be investigated.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources

### **Horticulture Science**

**1/2 credit**

This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. Landscape design, turf maintenance, plant nutrition, plant use and identification, plant chemical uses and precautions are introduced along with tools and equipment used in the industry.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources

### **Agricultural Mechanics and Metal Technologies**

**1 credit**

This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques. Construction of a project or demonstration of skills will fulfill the requirements of the Supervised Agricultural

Experience Program.

- ◆ Grades 10-12
- ◆ Required prerequisite (or concurrent) for 10<sup>th</sup> graders: Principles of Agriculture, Food, and Natural Resources
- ◆ Assessment for verification of industry-recognized training is available for a fee.
- ◆ Lab supplies or fee may be required.

### **Agricultural Facilities Design and Fabrication**

**1 credit**

The student will have the opportunity to develop skills in electric arc welding, in oxy-fuel welding, and in the construction of equipment needed in agriculture uses. Areas will include safety procedures, use and identification of metals, design of structures, repairs of equipment, and use of hand and power tools related to metal fabrication.

- ◆ Grades 11-12
- ◆ Required prerequisite: Agriculture Mechanics and Metal Technology
- ◆ Lab supplies or fee may be required.

### **Practicum in Agriculture, Food, and Natural Resources**

**(work-based course)**

**2 credits**

This course allows students to apply agricultural concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in Ag cluster and age 16
- ◆ if paid training site

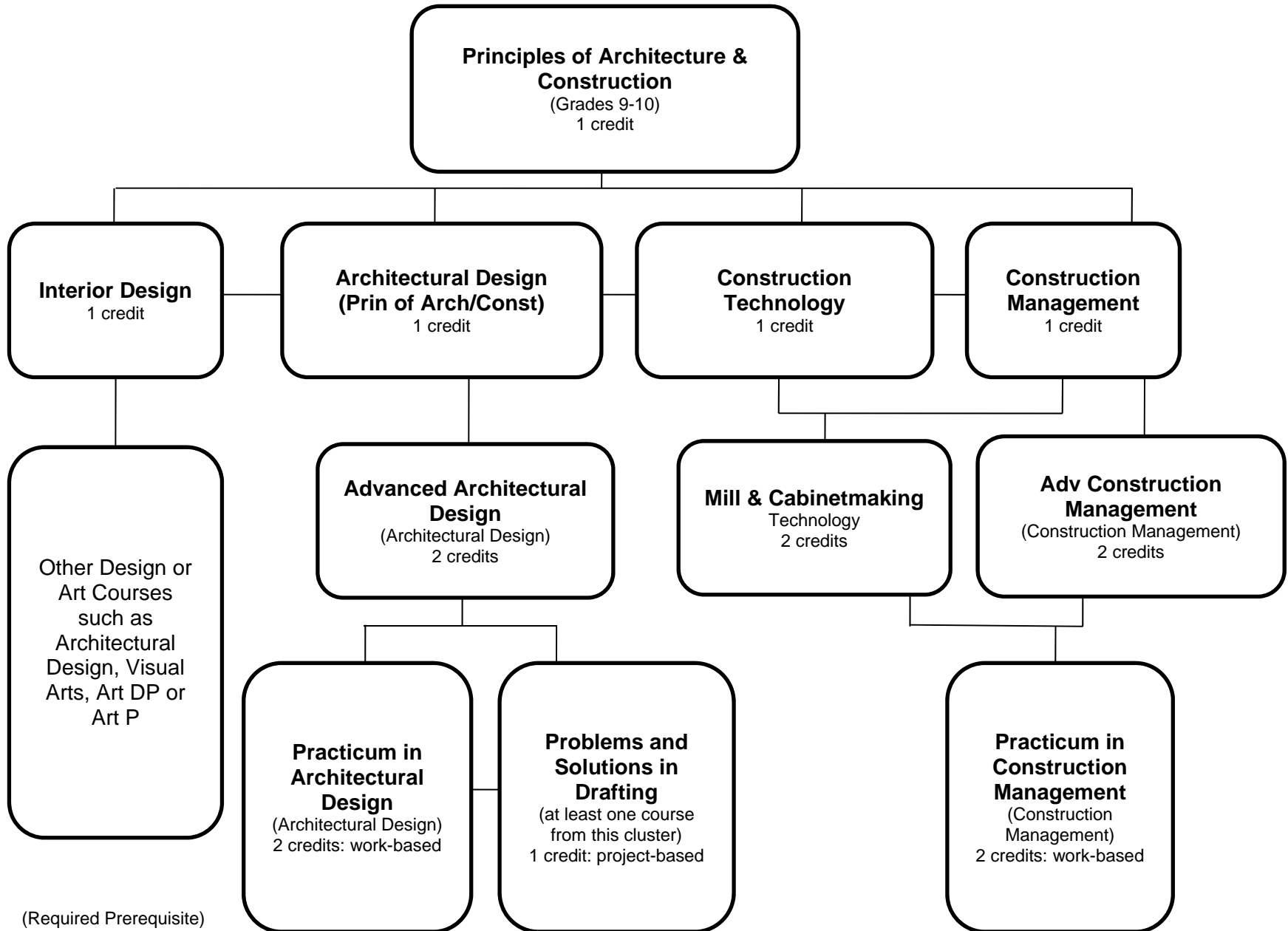
### **Problems and Solutions in Agriculture, Food, and Natural Resources**

**1 credit**

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous agriscience courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in Agriculture, Food and Natural Resources cluster
- ◆ Lab supplies or fee may be required.

# Architecture and Construction



**Principles of Architecture and Construction****1 credit**

Students will explore the various fields of architecture, construction science, and construction technology. The emphasis is on design, drafting, reading technical drawings, estimating and construction science. Students will use a variety of tools to accomplish hands-on activities related to model construction. This course is highly recommended for students planning a career in architecture or construction.

- ◆ Grades 9 – 10
- ◆ Lab supplies or fee may be required.

**Construction Technology****1 credit**

Students will gain knowledge and skills specific to those needed to enter the work force or prepare for a postsecondary degree in the construction, architecture, or engineering field. Students will acquire knowledge and skills in safety, tool and machine usage, building materials, codes, and framing.

- ◆ Grades 9 – 12
- ◆ Recommended prerequisite: Principles of Architecture and Construction
- ◆ Lab supplies or fee may be required.

**Interior Design****1 credit**

This technical course provides students the opportunity to acquire knowledge and skills related to interior and exterior environments. This course provides instruction in the basic principles and elements of design and construction including the use of color, textiles, furniture, wall, window and floor coverings, space planning, and lighting in residential and non-residential environments. Students will investigate and prepare for career opportunities in construction, housing and interior design related fields.

- ◆ Grades 10-12
- ◆ Recommended prerequisite: Principles of Architecture and Construction
- ◆ Lab supplies or fee may be required.

**Architectural Design****1 credit**

Students explore the design, planning, and development of architectural drawings. Emphasis is placed on the production of construction documents and presentation media through traditional and computer-aided equipment. This course is highly recommended for students planning a career in architecture or a construction-related trade.

- ◆ Grades 10-12
- ◆ Recommended prerequisite: Geometry and Principles of Architecture and Construction
- ◆ Lab supplies or fee may be required.

**Advanced Architectural Design****2 credits**

Students will gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction. Advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

- ◆ Grades 11-12
- ◆ Required prerequisite: Architectural Design
- ◆ Lab supplies or fee may be required.

**Practicum in Architectural Design****2 credits****(work-based course)**

An occupationally specific course designed to provide technical instruction in architectural design. Instruction may be delivered through an unpaid laboratory training or through paid career preparation delivery arrangements. Students are required to work 10 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grade 12
- ◆ Required prerequisite: Architectural Design and age 16 if paid training site
- ◆ Lab supplies or fee may be required.

**Construction Management****1 credit**

Students will gain knowledge and skills specific to those needed to enter the work force or build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. The design techniques and tools related to the management of architectural and engineering projects will be emphasized.

- ◆ Grades 10-12
- ◆ Recommended prerequisite: Principles of Architecture and Construction
- ◆ Lab supplies or fee may be required.

**Advanced Construction Management****2 credits**

Students will gain advanced knowledge and skills specific to those needed to enter the work force or build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. Emphasis on the design techniques and tools related to the management of architectural and engineering projects.

- ◆ Grades 11-12
- ◆ Required prerequisite: Construction Management
- ◆ Lab supplies or fee may be required.



**Mill and Cabinetmaking Technology 2 credits**

Students will gain knowledge and skills specific to mill work and cabinet manufacturing and installation. Emphasis on cabinet design, tool usage, jointing methods, materials, finishes, and numerical and computer control production methods.

- ◆ Grades 10-12
- ◆ Required prerequisite: Principles of Architecture and Construction or Principles of Manufacturing or Concepts of Engineering
- ◆ Lab supplies or fee may be required.

**Practicum in Construction Management****(work-based course) 2 credits**

This course allows students to apply construction management concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

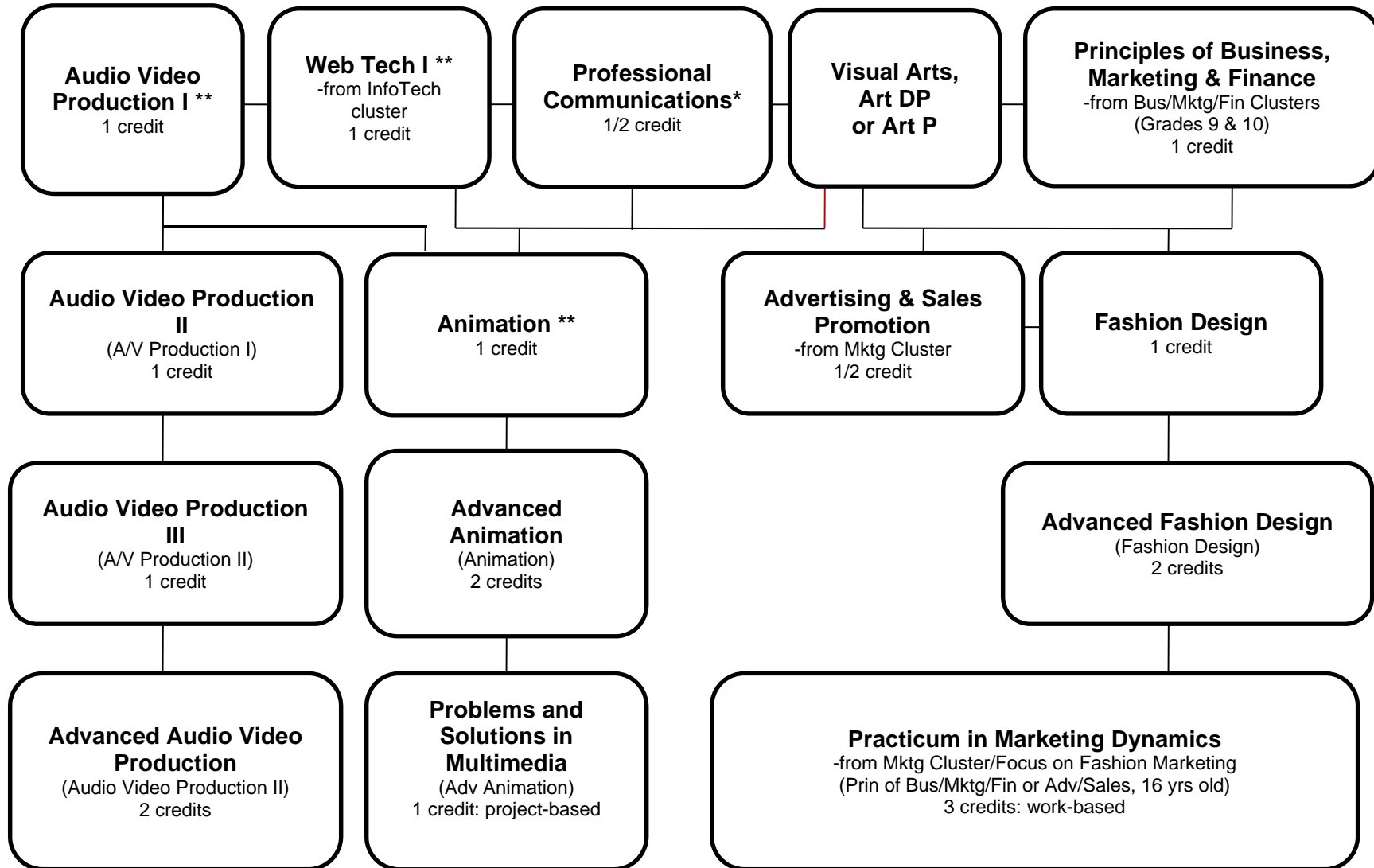
- ◆ Grades 12
- ◆ Required prerequisite: Construction Management and age 16 if paid training site
- ◆ Lab supplies or fee may be required.

**Problems and Solutions in Drafting****1 credit**

This course is a supervised research study project-based class where students will apply knowledge and skills from previous drafting courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in the Architecture and Construction or Science, Technology, Engineering and Mathematics cluster
- ◆ Lab supplies or fee may be required.

# Arts, A/V Technology and Communications



(Required Prerequisite)

\*Course approved for Speech credit

\*\*Course approved for Technology Applications credit

**Professional Communications 1/2 credit**

This high school speech course is designed to provide opportunities for students to understand and develop effective interpersonal communication skills for the 21<sup>st</sup> Century. Professional Communications blends written, oral, and graphic communication in a career-based, business environment. Students will prepare, present, and evaluate a variety of multi-media presentations that are appropriate for the professional setting.

- ◆ Grades 9 – 12
- ◆ This course satisfies the speech credit required for graduation for students entering high school prior to fall 2014.

**Animation 1 credit**

This course allows students to create animation projects using principles of design to combine graphics, images and sound. A variety of techniques will be explored, including storyboarding, scripting/programming, interactivity, flip books, claymation, and rendering. The emphasis will be on utilizing the features in Adobe Flash included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grades 10 – 12 (Ninth graders may enroll with credit for BIM I in 8th grade.)
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Advanced Animation 2 credits**

This course provides students the opportunity to expand upon the animation knowledge and skills mastered in the first animation course. A variety of advanced techniques will be explored, including orthographic and isometric drawing, framing, lighting, exaggeration, additive color, layers, and transitions. Products will be created utilizing industry-recognized technologies.

- ◆ Grades 11-12
- ◆ Required prerequisite: Animation
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Problems and Solutions in Multimedia 1 credit**

This course is a supervised research study project-based class where students will apply knowledge and skills from previous animation and/or web technologies courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grade 12
- ◆ Required prerequisite: Advanced Animation or Web Technologies II
- ◆ Lab supplies or fee may be required.

**Fashion Design 1 credit**

This course emphasizes careers in fashion which span all aspects of the textile and apparel industries. Students interested will develop an understanding of the industry by participation in fashion, textile, and apparel projects, as well as exposure to laws governing the industry, skills related to commercial care of clothing, safety regulations, and general knowledge and skills leading to success in the Arts, Audio/Video Technology, and Communications career cluster.

- ◆ Grades 10 – 12
- ◆ Lab supplies or fee may be required.

**Advanced Fashion Design 2 credits**

This course builds upon skills learned in Fashion Design. Students continue to develop and refine their understanding of fashion figures, garment details, and construction. Students will develop an understanding of the industry by participation in fashion projects.

- ◆ Grades 10-12
- ◆ Prerequisites: Fashion Design
- ◆ Lab supplies or fee may be required.

**Practicum in Marketing Dynamics I 3 credits**

This course allows students to apply marketing concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of marketing functions such as selling, advertising, display, the free enterprise system, inventory control systems, marketing mathematics, and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: At least one course in Marketing cluster or related area and age 16 with reliable transportation
- ◆ Assessment for verification of industry-recognized training is available for a fee.
- ◆ Students in Fashion Design may pursue job in fashion industry.

**Audio/Video Production 1 credit**

This course is a basic introduction to the equipment and techniques of video production. Students gain basic knowledge and experience with hands-on assignments involving video cameras, video and audio editing, writing and special effects.

- ◆ Grades 9-12
- ◆ A \$30 supply fee is required for this course.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Audio/Video Production II 1 credit**

This course involves every aspect of producing a professional quality video including planning, filming, and editing. This class presents a hands-on experience that prepares students for a life-long career in video production. Practical applications include broadcasts of school news, District School Board meetings, Cy-Fair TV's (Channel 16) district news, and video news releases.

- ◆ Grades 10-12
- ◆ Prerequisites: Audio/Video Production and teacher approval
- ◆ A \$30 supply fee is required for this course.
- ◆ Students may be required to work additional hours after school at the teacher's discretion.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Audio/Video Production III 1 credit**

This course extends students' understanding of audio/video production through studying of advanced techniques such as claymation, advanced special effects, and green screen. This class presents a hands-on experience that prepares students for a life-long career in video production. Practical applications include broadcasts of school news, District School Board meetings, Cy-Fair TV's (Channel 16) district news, and video news releases.

- ◆ Grades 11-12
- ◆ Prerequisites: Audio/Video Production II and teacher approval
- ◆ A \$30 supply fee is required for this course.
- ◆ Students may be required to work additional hours after school at the teacher's discretion.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Advanced Audio/Video Production 2 credits**

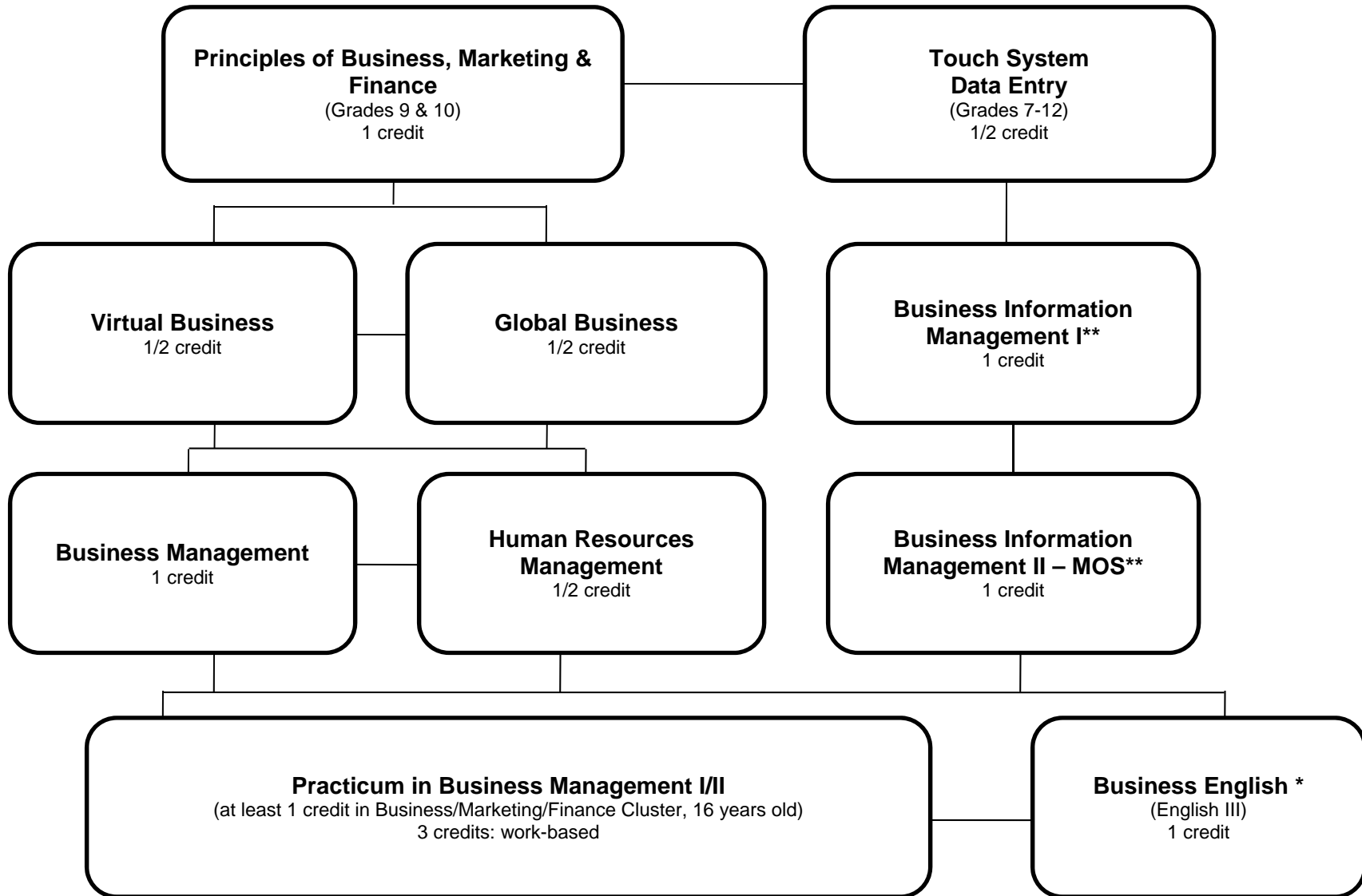
Advanced Audio Video Production is designed and structured to work as an open and largely self-directed course that allows students to expand and deepen the skills they learned in Audio/Video Production I-III. A wide variety of production projects will be produced during the year. All students will compile a portfolio (video resume) of their work.

- ◆ Grade 12
- ◆ Prerequisites: Audio/Video Production III and teacher approval
- ◆ A \$30 supply fee is required for this course.
- ◆ Assessment for verification of industry-recognized training is available for a fee.
- ◆ Students may be required to work additional hours after school at the teacher's discretion.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**See Visual and Performing Arts sections for more course options in this cluster.**

# Business Management and Administration

(Also see Marketing and Finance Clusters for Closely Related Courses)



(Required Prerequisite)

\*Course approved for 4<sup>th</sup> English on Minimum Plan

\*\*Course approved for Technology Applications credit

## Principles of Business, Marketing, and Finance **1 credit**

In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.

- ◆ Grades 9 – 10

## Touch System Data Entry **1/2 credit**

The Touch System Data Entry course provides students the opportunity to improve their speed and accuracy on the keyboard. In addition, the course focuses on document formatting skills applicable in many personal, educational, and workplace settings. With an ever increasing focus on technology, these skills are valuable for all students.

- ◆ Grades 9 – 12
- ◆ Strongly recommended for all students
- ◆ Lab supplies or fee may be required.

## Business Information Management I **1 credit**

BIM I prepares students to apply personal, interpersonal, and technology skills in other content area, the workplace, and post-secondary education. The applications utilized in this course will include word processing, spreadsheets, multimedia presentations, databases, Internet research, and a look at emerging technologies. While an emphasis will be placed on simulations related to business, finance, and marketing, this introductory technology course is appropriate for students whose career interests fall within any of the 16 career clusters.

- ◆ Grades 9 – 12
- ◆ Recommended prerequisite: Touch System Data Entry
- ◆ Lab supplies or fee may be required.

## Business Information Management II – MOS **1 credit**

Students will complete this course with an advance level of proficiency in word processing, spreadsheet, database and presentation applications that is expected in the world of business. Lessons are aligned with the content on the Microsoft Office Specialist exams. This certification is globally recognized as the standard for demonstrating mastery of Microsoft Office Suite skills and may be a valuable addition to your credentials for current and future employment. On-site certification assessment is available at all campuses.

- ◆ Grades 10 – 12 (Ninth graders may enroll with credit for BIM I in 8<sup>th</sup> grade.)
- ◆ Recommended prerequisite: Business Information Management I
- ◆ Lab supplies or fee may be required.

Assessment for verification of industry-recognized training is available for a fee.

## Business English **1 credit**

The Business English course allows students to enhance their reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students edit their work for clarity, engaging language, and the correct use of the conventions and mechanics of written English to produce final, error-free drafts for business reproduction. Having quality written and verbal communication is key to success in business as there is often no second chance to make a first impression.

- ◆ Grades 12
- ◆ Recommended prerequisite: Touch System Data Entry
- ◆ Lab supplies or fee may be required.
- ◆ This course may satisfy the 4<sup>th</sup> English credit required for graduation on the MHSP.

## Global Business **1/2 credit**

International markets have the potential to provide growth and profit not available to businesses that operate only within the domestic marketplace. In Global Business, students explore theories in trading and investing across national borders. This course includes topics related to differing laws, cultures and societies, and their impact on the application of basic business principles. Students taking this course should consider also taking Virtual Business and/or Retailing and E-tailing.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing and Finance

## Virtual Business **1/2 credit**

Brick and mortar are no longer required to open a business. This course provides students exposure to issues related to operating a business in a virtual environment. Students will learn how to locate customers, set fees, develop client contracts, and provide administrative, creative, and technical services using technological modes of communication and data delivery. The culminating project will include building a functional website that incorporates the essentials of a virtual business. Students taking this course should consider also taking Global Business and/or Retailing and E-tailing.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance
- ◆ Lab supplies or fee may be required.

**Human Resources Management 1/2 credit**

Typically, it is the employees that make or break a business. In this course, students analyze the primary functions of human resources management, which include recruitment, selection, training, development, and compensation. Topics will incorporate social responsibility of business and industry to its employees. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of human resources in order to become competent managers, employees, and entrepreneurs.

- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

**Business Management 1 credit**

In Business Management, students analyze the primary functions of management and leadership in this rapidly evolving global business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate management decisions. This course is strongly recommended for those who strive to be their own boss one day. Students taking this course should consider also taking Financial Analysis.

- ◆ Grades 11 – 12
- ◆ Strongly recommended for all students wanting to pursue a degree in Business
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

**Practicum in Business Management I (work-based course) 3 credits**

This course allows students to apply business concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of office-related skills such as communication, ethics, office technology (Microsoft Office and Adobe applications), and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

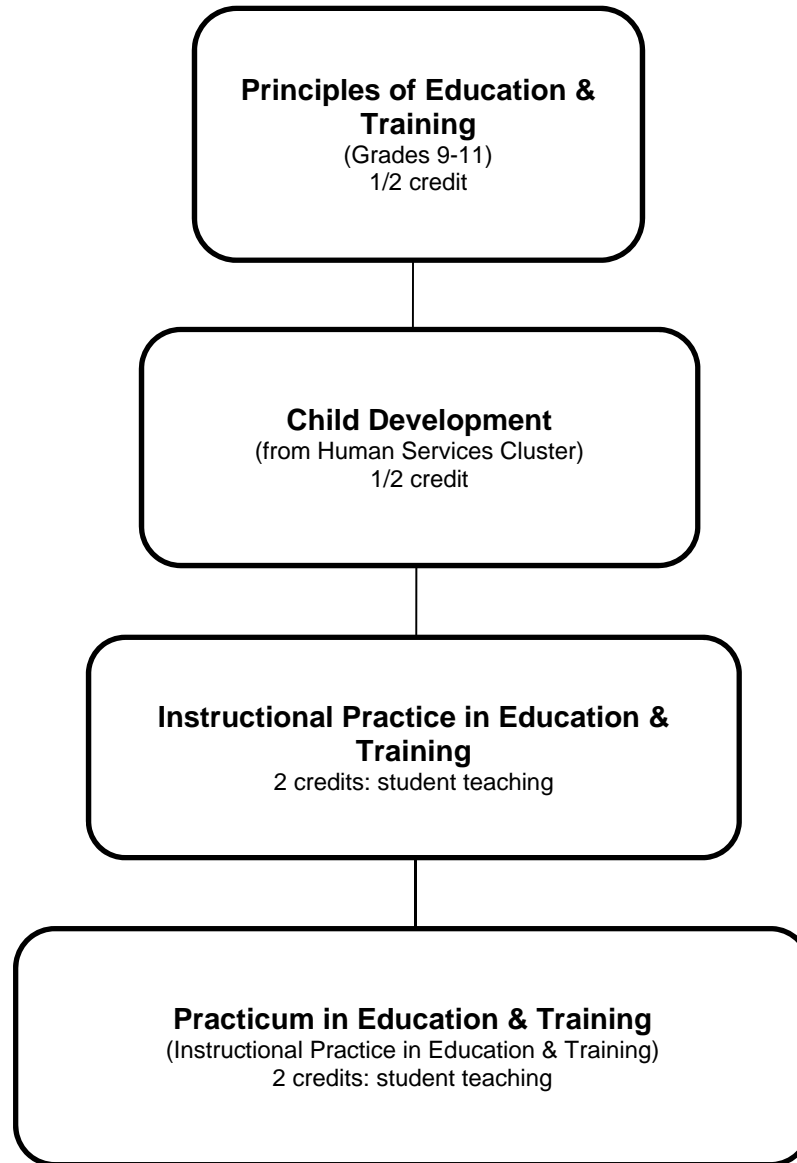
- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in Business, Marketing, and Finance cluster and age 16 with reliable transportation
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Practicum in Business Management II (work-based course) 3 credits**

This second-year work-based course allows students to build upon the basic business concepts and principles mastered in the first course. In the classroom portion of the course, students will integrate skills from academic subjects, office technology (additional Microsoft Office and Adobe applications), interpersonal communication, and supervisory/ management training to make responsible decisions. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grades 12
- ◆ Required prerequisite: Practicum in Business Management I and age 16 with reliable transportation
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

# Education and Training



(Required Prerequisite)



**Principles of Education and Training 1/2 credit**

This course is designed to introduce learners to the various careers and the basic knowledge and skills essential for success within the Education and Training career cluster. Students will study political and historical trends that have influenced the development of education and the cultural and societal changes that have affected educational systems across the United States. They will utilize labor market information, knowledge of technology, and societal or economic trends to forecast job profiles within the cluster. Students will develop a graduation plan that leads to a specific career choice in their area of interest in the Education and Training cluster.

- ◆ Grades 9 – 11

See AFJROTC section for more course options in this cluster.

**Instructional Practices in Education and Training – Ready, Set, Teach! I 2 credits**

This course is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators or trainers in direct instructional roles with elementary students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. Standard professional dress is required when on “cooperating” school campuses.

- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: Principles of Education and Training or Child Development
- ◆ Lab/uniform fee may be required.

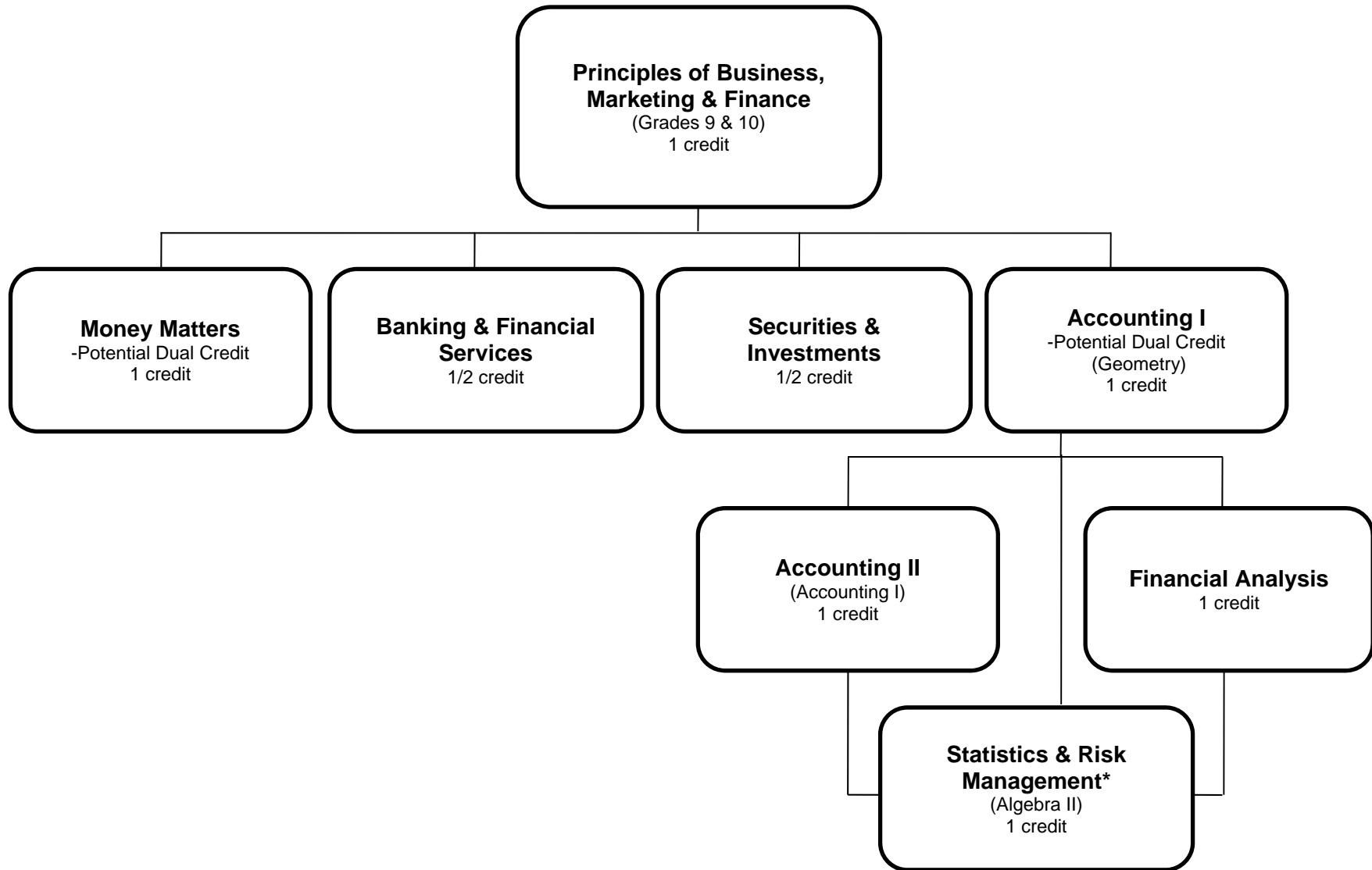
**Practicum in Education and Training – Ready, Set, Teach! II 2 credits**

This course is the continuation of a field based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in this course mentor the students in Instructional Practices in Education and Training (RST I) course and are assigned to a secondary “cooperating” school environment . Here they continue to plan and direct individualized instruction and group activities, prepare instructional materials, assist with recordkeeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

- ◆ Grades 12
- ◆ Required prerequisite: Instructional Practices in Education and Training
- ◆ Lab/uniform fee may be required.

# Finance

(Also see Business and Marketing Clusters for Closely Related Courses)



(Required Prerequisite)

\* Course approved for 4<sup>th</sup> Math Credit if taken after completion of Algebra II

## Principles of Business, Marketing, and Finance **1 credit**

In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.

- ◆ Grades 9 – 10

## Money Matters K **1 credit**

In Money Matters, students will gain an understanding of the fundamental principles of money and personal financial planning. Special emphasis is placed on bank record management, use of credit, investing, insurance, and budgets. In addition, students are introduced to financial market and securities analysis. Current economic events indicate that it is never too early for students to gain an awareness of factors that will impact their short-term and long-term financial plans.

- ◆ Grades 10 – 12
- ◆ Strongly recommended for all students
- ◆ Dual credit option for 11<sup>th</sup> and 12<sup>th</sup> graders

## Banking and Financial Services **1/2 credit**

While most students are aware of, and many utilize, the multitude of banking and financial institutions in our neighborhoods, few students (and adults) have a real understanding of the products and services these institutions provide. This course allows students with the opportunity to take on the roles and responsibilities of those in the banking and financial industry. As a result, not only will students gain information on potential careers in this field, they will be better informed customers and able to make the most of the services available. Students taking this course should consider also taking Securities and Investments.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

## Securities and Investments **1/2 credit**

Securities and investments have become top story items in today's news. Knowing what a security is (and is not), how profit is generated, regulations and taxation issues, real estate law and the nature of investment risk will not only help students understand the news, but gain insight into options for their own personal financial planning as well. You, too, can soon own a part of your favorite company. Students taking this course should consider also taking Banking and Financial Services.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

## Accounting I **1 credit**

Accounting I students investigate the field of accounting, including how it is impacted by industry standards as well

as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students formulate and interpret financial information for use by management to make decisions. Because they often drive decisions that affect the running of an organization, an understanding of the accounting processes is beneficial for more than the accountants. For this reason, most, if not all, business degrees will include at least one course in accounting.

- ◆ Grades 10 – 12
- ◆ Strongly recommended for all students wanting to pursue a degree in Business
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance
- ◆ Required prerequisite: Geometry

## Accounting II **1 credit**

Students continue the investigation of the field of accounting in this advanced course, emphasizing corporate accounting and integrated financial analysis. Students reflect on this knowledge as they engage in various managerial and cost accounting activities. This course is vital for students planning to major in finance or seeking an entry-level position in accounting.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Accounting I

## Financial Analysis **1 credit**

Part of managing a successful and solvent business is evaluating performance in areas such as income, profitability, liquidity, working capital, debt, cash flow, etc. Students will also analyze accounting systems to examine their contribution to the fiscal stability of a business. By the end of the course, students will be able to evaluate company case studies and discuss the financial stability and value of the company. Students taking this course should also consider taking Business Management.

- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: Accounting I

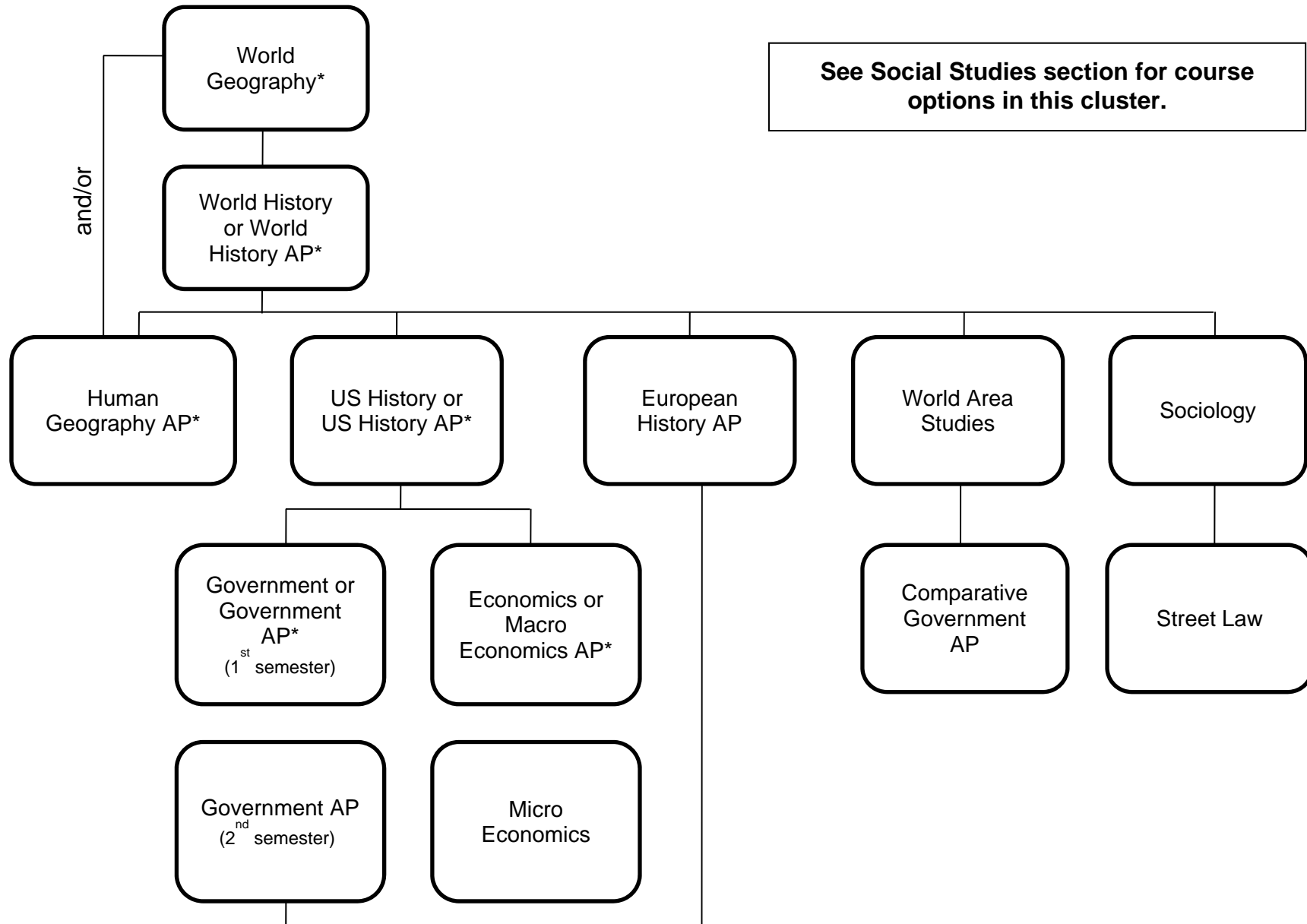
## Statistics and Risk Management **1 credit**

The role of a risk manager is to minimize loss while protecting the long-term stability of a business. Statistics and Risk Management is an applied mathematics course in which students will use a variety of graphical and numerical techniques to analyze patterns and departures from patterns to identify and manage risk that could impact an organization. Students will use probability as a tool for anticipating and forecasting data within business models to make decisions and ensure their conclusions are valid.

- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: Accounting I
- ◆ Required prerequisite: Algebra II
- ◆ Lab supplies or fee may be required.
- ◆ This course may satisfy the 4<sup>th</sup> math credit required for graduation if taken after completing Algebra II.

# Government and Public Administration

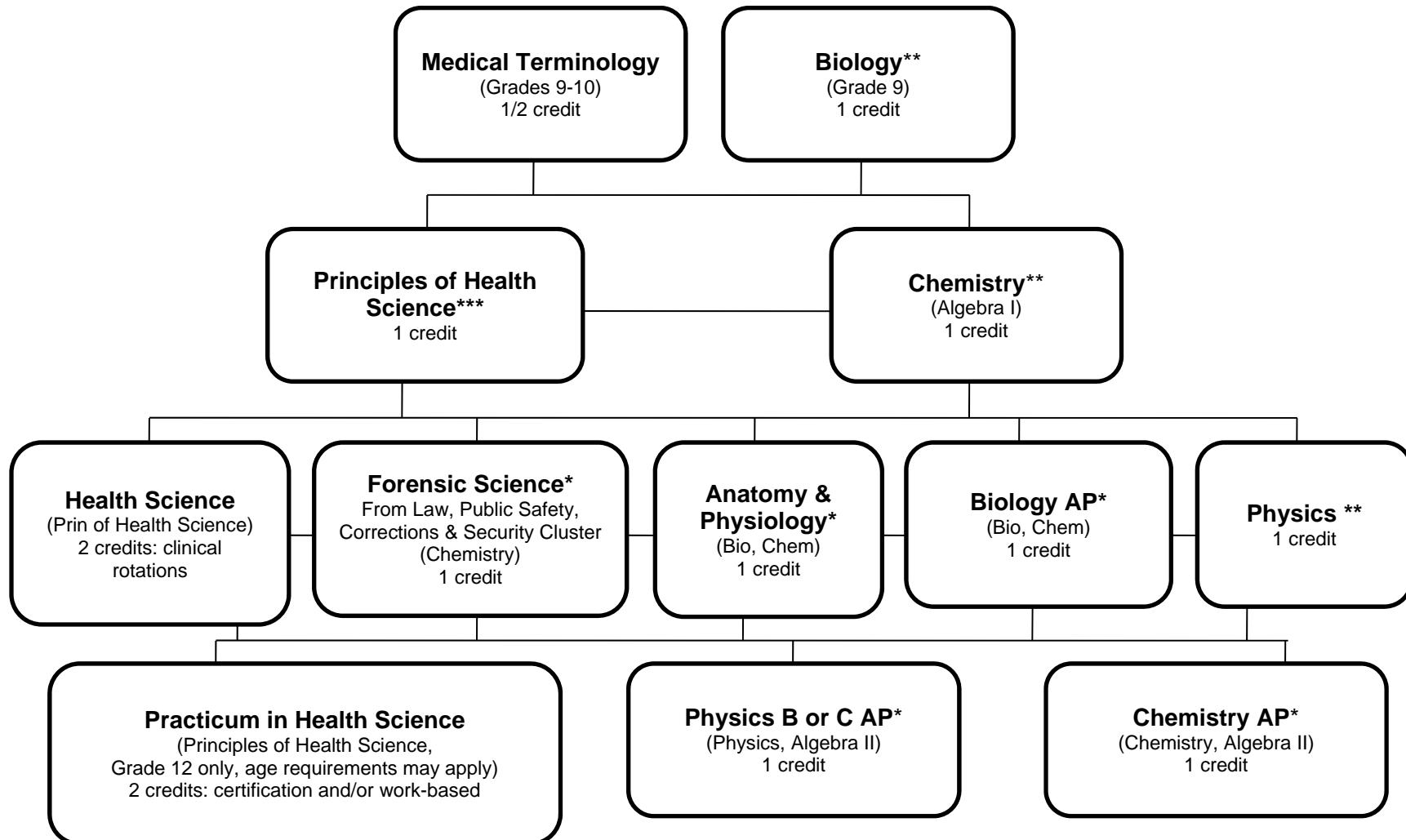
**See Social Studies section for course options in this cluster.**



(Required Prerequisite)

\*Required for Graduation

# Health Science



(Required Prerequisite)

\*Course approved for 4<sup>th</sup> Science credit

\*\*Required for Graduation

\*\*\*Course approved for Health credit

**Medical Terminology** **1/2 credit**

This course allows students to develop a working knowledge of the language of medicine by introducing them to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. Comprehending this terminology will not only be beneficial in understanding other science and health science related courses taken in high school, but will also enhance their ability to secure employment or pursue further education in this industry.

- ◆ Grades 9-10
- ◆ Recommended to be taken prior to Principles of Health Science

**Principles of Health Science** **1 credit**

This course is designed for students interested in medical and associated health careers. It gives an overview of the therapeutic, diagnostic, environmental, and informational systems of the health care industry. Topics include career requirements, medical history, trends in financing health care, ethical and legal responsibilities, human anatomy and physiology as related to the health care profession, client care, safety, first aid, and CPR. This course prepares the student for the transition to clinical and/or work-based experiences available in the advanced health science courses.

- ◆ Grades 10 – 12
- ◆ This course satisfies the health credit required for graduation.
- ◆ Lab supplies or fee may be required.

**Health Science** **2 credits**

Health Science provides in-depth knowledge and skills related to a wide variety of career opportunities, advanced medical terminology, anatomy and physiology, and pathophysiology as related to the health care profession. Key components of this course are CPR certification, standard precautions, and ethics. The students will apply these concepts and practice entry-level occupational skills in both classroom and clinical settings such as hospitals or other medical-related agencies.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Principles of Health Science and Biology and verification of immunization requirements
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.
- ◆ An application may be required if demand exceeds number of available slots.

**Anatomy and Physiology of Human Systems****1 credit**

Anatomy and Physiology is a college preparatory course designed to extend the student's knowledge and understanding of the human body in respect to its structure and function. A survey of each organ system is presented with initial emphasis upon its anatomy,

followed by an in-depth study of its physiology. This course is lab-oriented and teaches proper dissection techniques as well as various physiological phenomena. This course is recommended for students pursuing an education in the medical sciences.

- ◆ Grades 11-12
- ◆ Required prerequisite: Biology and Chemistry
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation if taken after completing Biology and Chemistry.

**Forensic Science** **1 credit**

Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprints analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

- ◆ Grades 11-12
- ◆ Required prerequisite: Biology and Chemistry
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation if taken after completing Biology and Chemistry.

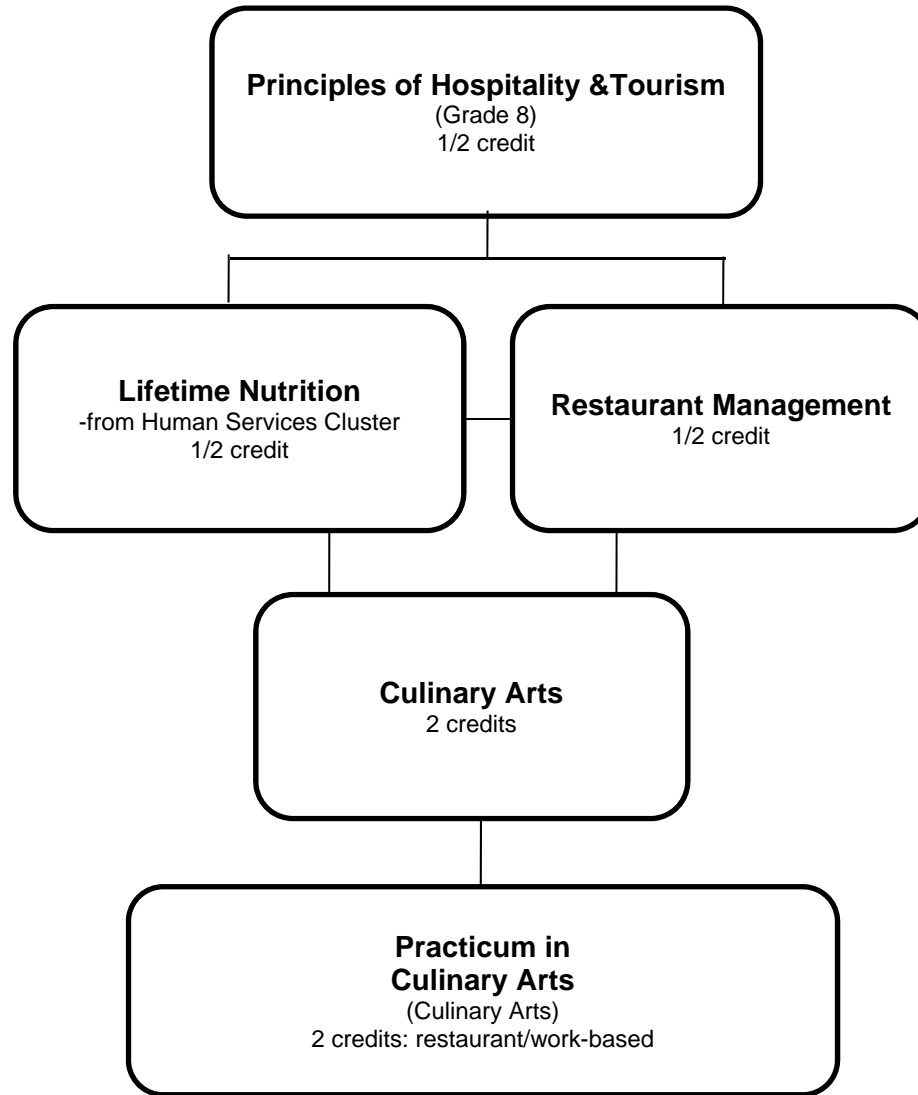
**Practicum in Health Science** **1-2 credits**

While earlier courses in health science provide students with an overview of the industry, this course allows students to select and pursue a specialization. Students will have the opportunity to gain knowledge and develop advanced clinical skills needed for a specific certification or licensure in an allied health career such as Pharmacy Technician, Certified Nursing Aide (CNA), or Emergency Medical Technician. Because training requirements vary by specialization, an application process is required to determine the most appropriate method(s) of instruction. These may include classes on a college campus, pre-employment labs in the classroom, clinical internships or employment, or a combination.

- ◆ Grade 12
- ◆ Required prerequisite: Principles of Health Science and application to Lone Star College for EMT/CNA.
- ◆ An application may be required for areas other than EMT/CNA if demand exceeds number of available slots.
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training available for a fee.
- ◆ Students participating in EMT or CNA classes may enroll in this course for one semester.

**See Science section for more course options in this cluster, including Biology AP, Chemistry AP, and Physics B AP.**

# Hospitality and Tourism



(Required Prerequisite)

**Restaurant Management** **1/2 credit**

This specialty course will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations - table, buffet, and fast food. It will provide insight into the operation of a well-run restaurant by requiring students to write menus, develop, deliver, and critique presentations; infer how scientific principles are used in the restaurant industry; analyze various marketing strategies for a restaurant or food venue; demonstrate use of technology applications to perform workplace tasks; prepare complex multimedia publications; demonstrate knowledge and use of point-of-sale systems; investigate quality-control standards and practices; and understand the importance of health, safety, and environmental management systems. CPR and First Aid training will be provided.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Hospitality

**Culinary Arts** **2 credits**

Culinary Arts is now available in all high schools as a two period laboratory FCS course, beginning with student instruction in the fundamentals and principles of the art of cooking and the science of baking, including management and production skills and techniques. Students are encouraged to pursue a national sanitation certification, a Texas culinary specialist certification or any other appropriate industry certification which would assist in immediate employment in a restaurant setting. This course would provide the foundation needed for students to progress to the Practicum in Culinary Arts the following school year.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Hospitality and Tourism or Lifetime Nutrition and Wellness
- ◆ Lab/uniform fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

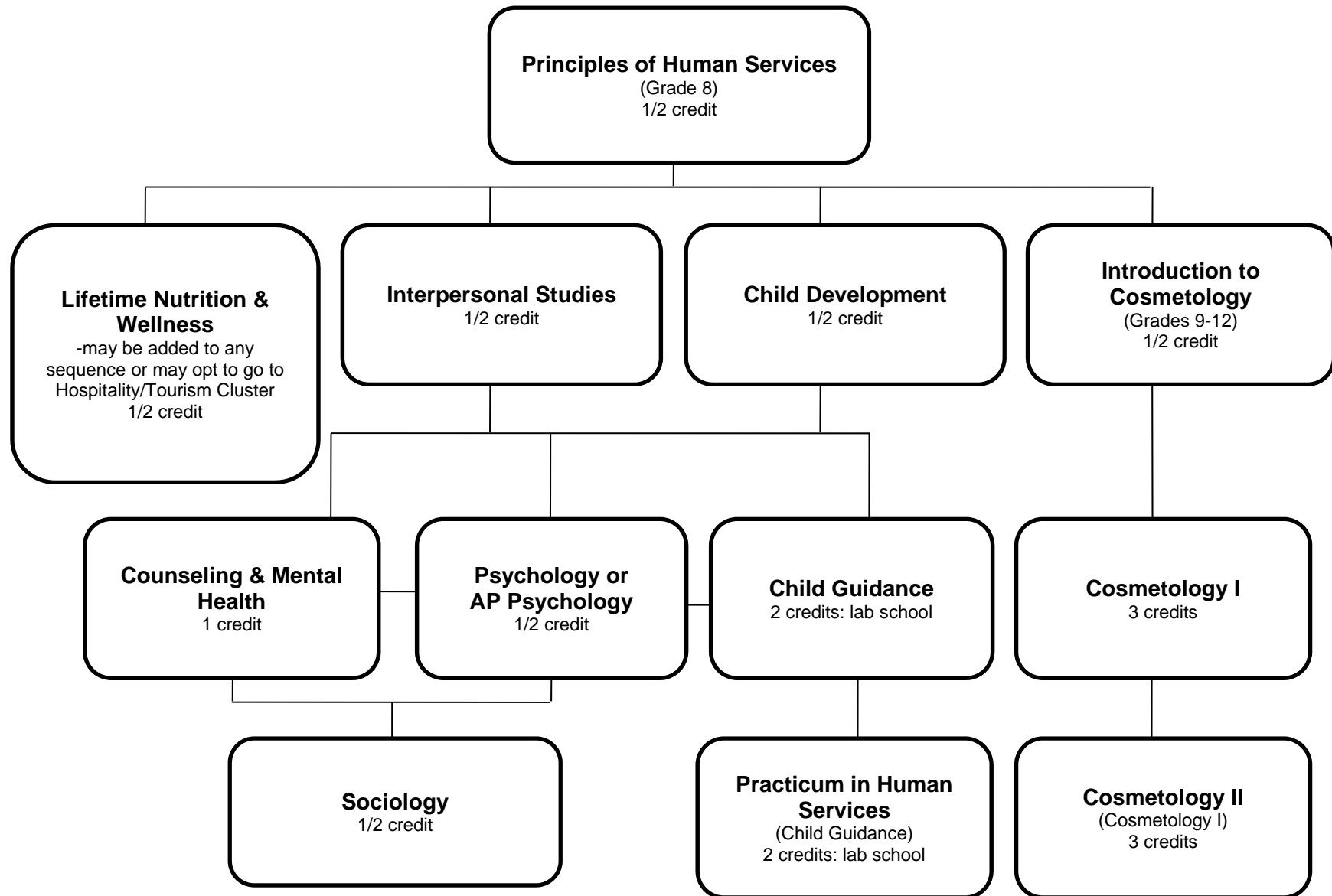
**Practicum in Culinary Arts** **2 credits**

This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education with the goal of preparing students with a variety of skills in a fast-changing workplace. The students are actually major participants in operating a restaurant and catering business. The course will be taught on the Cy-Fair High School campus only.

- ◆ Grades 12
- ◆ Required prerequisite: Culinary Arts
- ◆ An application may be required if demand exceeds number of available slots.
- ◆ Lab/uniform fee may be required.



# Human Services



(Required Prerequisite)

**Interpersonal Studies** **1/2 credit**

This interesting, introspective course is a study of how the relationships between individuals and relationships in and out of the family significantly affect one's quality of life. Learners are exposed to strategies that promote physical, emotional, intellectual, and social development. The careers connected to this course are in the areas of counseling and mental health services, as well as social work.

- ◆ Grades 10, 11, and 12 (9<sup>th</sup> graders may enroll after taking Principles of Human Services or Principles of Hospitality or Tourism in 8<sup>th</sup> grade)
- ◆ Recommended prerequisite: Principles of Human Services

**Lifetime Nutrition and Wellness** **1/2 credit**

This combination classroom/laboratory course allows students to apply the principles of lifetime wellness and nutrition to assist them in making informed choices that promote good health, as well as pursue careers related to nutrition. Students study the principles of nutrition, digestion, calories, and metabolism, diet-related diseases, food allergies, therapeutic/fad dieting, and safety and sanitation in food preparation. Some cooking lab experiences will be included.

- ◆ Grades 10, 11, and 12 (9<sup>th</sup> graders may enroll after taking Principles of Human Services or Principles of Hospitality or Tourism in 8<sup>th</sup> grade)
- ◆ Recommended prerequisite: Principles of Human Services
- ◆ Lab supplies or fee may be required.

**Child Development** **1/2 credit**

This popular, high interest course addresses knowledge and skills related to child growth and development from prenatal through school-age children. It equips future parents with child development skills to promote the well-being and healthy development of children. Also emphasized are legislation and public policies affecting children. Careers in this area include early childhood educators, child care center employees, neonatal medical professions, and all future parents of children.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Human Services

**Child Guidance** **2 credits**

This technical laboratory course replaces the popular ECP I course. In a "hands-on" laboratory setting, students work with three- and four- year-old students in a preschool educational environment, applying knowledge and skills related to child growth and guidance.

- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: Principles of Human Services or Child Development
- ◆ Required prerequisite: application and interview
- ◆ Lab supplies or fee will be required.

**Practicum in Human Services – Child Guidance II** **2 credits**

This course, formerly ECP II, continues the emphasis of laboratory experiences in a preschool setting. In the Practicum in Human Services, students mentor the Child Guidance (ECP I) students and continue participating in extended learning/teaching experiences with the three- and four-year-old children in the preschools located in the high schools. They model ethical behaviors, comply with laws and regulations, and assist in establishing a physically and psychologically healthy environment to inspire client confidence in services provided. The students are expected to produce a professional portfolio.

- ◆ Grade 12
- ◆ Required prerequisite: Child Guidance and application
- ◆ Lab supplies or fee will be required.

**Counseling and Mental Health** **1 credit**

This course is dedicated to students who wish to pursue careers in counseling and mental health care. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity and confidentiality in counseling and mental health care careers is also emphasized.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Human Services

**Introduction to Cosmetology** **1/2 credit**

This exploratory course is highly recommended for students who are interested in a career in cosmetology, It also assists students who have an interest, but are unsure this is the career path they wish to follow. Learners explore areas such as bacteriology, sterilization and sanitation, hair styling, manicuring, shampooing, as well as the principles of hair cutting, hair coloring, skin care, and facial makeup. Connected to this is the study of careers in the personal care services industry. To be successful in this profession, students should possess skills/aptitudes relative to the industry, as well as academic knowledge and motivation. Attendance is critical to the earning of the 1000 clock hours of supervised classroom instruction and demonstration needed before students qualify to take the state board test for licensing. Students in this course may begin to earn clock hours toward state licensing requirements.

- ◆ Grades 9 – 12
- ◆ Semester only if taken prior to Cosmetology I
- ◆ May not be taken concurrently with Cosmetology I
- ◆ May be taken as semester or year concurrently with Cosmetology II with teacher approval (verifying need for additional hours)
- ◆ Lab/kit/uniform supplies or fee may be required.

**Cosmetology I****3 credits**

This 3-hour block laboratory instructional sequence course continues the integration of academic, career, and technical knowledge and skills designed to provide job-specific training for employment in cosmetology careers. All the skills listed above in the Introduction course are continued for skill enhancement in this course. In addition, analysis of career opportunities, requirements, expectations, and development of workplace skills are included. Attendance is critical to the earning of the monitored 1000 clock hours required for qualification for taking the state examination for licensing.

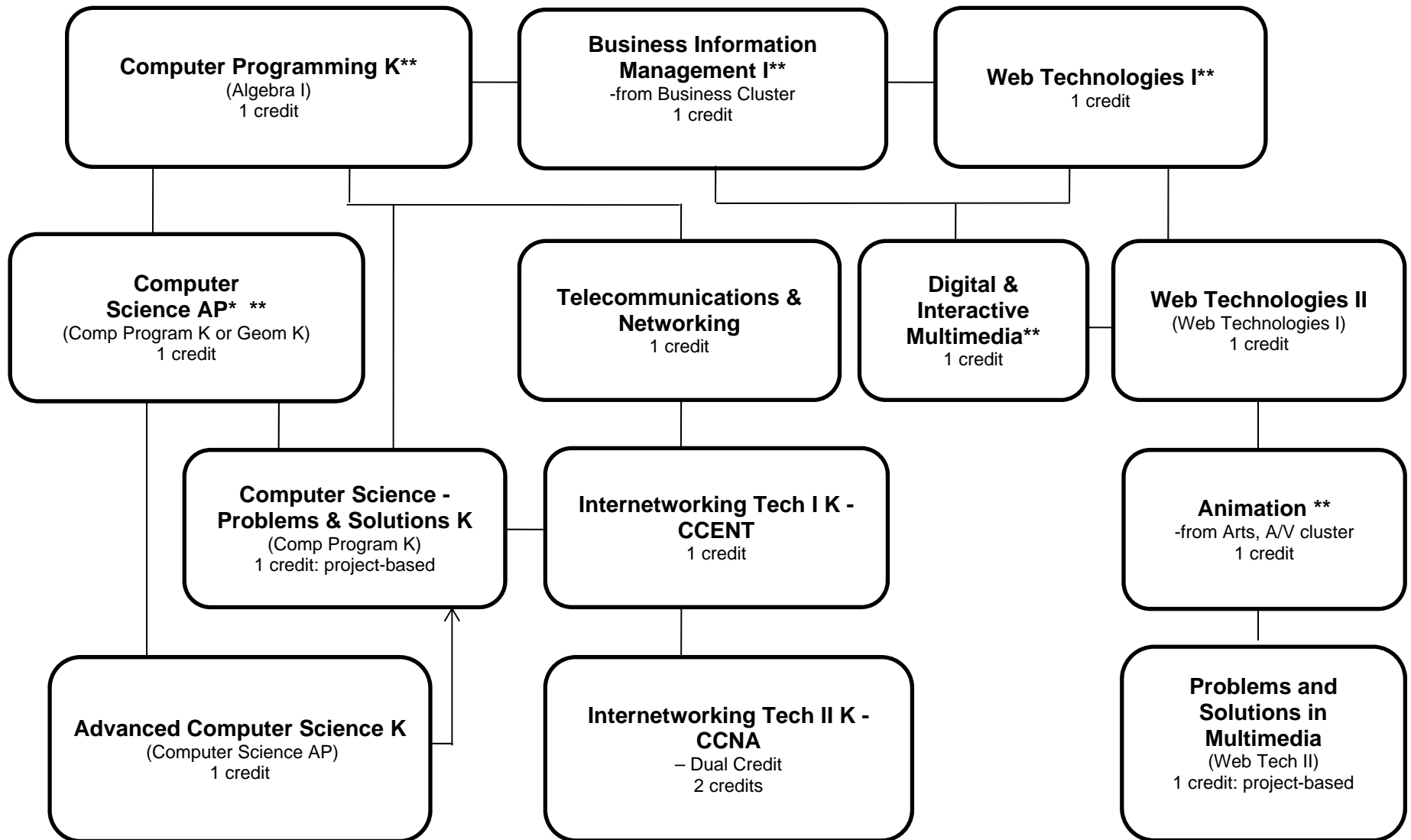
- ◆ Grades 10 – 12, priority given to 10<sup>th</sup>/11<sup>th</sup> graders
- ◆ An application may be required if demand exceeds the number of available slots.
- ◆ Lab/kit/uniform supplies or fee may be required.

**Cosmetology II****3 credits**

This course provides the final advanced training for employment in cosmetology careers (see list of trainings in the description of the Intro course). The course meets the Texas Department of Licensing and Regulation requirements for licensure upon completing the required 1000 clock hours of licensed instructor monitoring student classroom instruction/application and a passing grade on the state examination. Good attendance is necessary to be successful in this lucrative career path training.

- ◆ Grades 11 and 12
- ◆ Required prerequisite: Cosmetology I
- ◆ Lab/kit/uniform supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

# Information Technology



(Required Prerequisite)

\* Course approved for 4<sup>th</sup> Math credit if taken after completion of Algebra II  
 \*\*Course approved for Technology Applications credit

**Computer Programming K 1 credit**

Computer Programming is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science AP.

- ◆ Grades 9 – 12
- ◆ Required prerequisite: Algebra I
- ◆ Lab supplies or fee may be required.

**Computer Science AP 1 credit**

Computer Science AP is a programming course designed to cover the Advance Placement (AP) Computer Science AP Exam topics. The curriculum will build upon the topics addressed in Computer Programming K. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and the AP Case Study.

- ◆ Grades 10 – 12 (9<sup>th</sup> graders may enroll if concurrent with Algebra II)
- ◆ Required prerequisite: Computer Programming K recommended or Geometry K
- ◆ This course may satisfy the 4<sup>th</sup> math credit required for graduation if taken after completing Algebra II.
- ◆ Lab supplies or fee may be required.

**Advanced Computer Science K 1 credit**

Advanced Computer Science K is a continuation of Computer Science AP and builds upon such topics as object-oriented programming, inheritance, and classes. Students go on to address advanced topics such as stacks, queues, advance recursion, linked lists, binary trees, and advanced sorting, and searching topics in preparation for and alignment with college-level computer science.

- ◆ Grades 11 and 12 (Tenth graders may enroll after taking Computer Science AP.)
- ◆ Required prerequisite: Computer Science AP
- ◆ Lab supplies or fee may be required.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, this course will no longer be offered for K-level credit.

**Computer Science –Problems and Solutions K 1 credit**

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous computer science courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should

specify the additional languages and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 11-12
- ◆ Required prerequisite: Computer Programming K
- ◆ Lab supplies or fee may be required.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, this course will no longer be offered for K-level credit.

**Digital and Interactive Media 1 credit**

Through the study of digital and interactive media and its application in information technology, students will design and create multimedia projects that address customer needs. Although multiple technologies will be explored, the emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grades 10 – 12 (Ninth graders may enroll with credit for BIM I in 8<sup>th</sup> grade.)
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training available for a fee.

**Web Technologies I 1 credit**

Students will learn how to design, create, and maintain web pages including campus pages on the district website. Projects will incorporate tools such as HTML, Dreamweaver, Photoshop, Flash, Fireworks, digital cameras, and scanners. The emphasis will be on utilizing the features in Adobe Dreamweaver included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grades 9 – 12
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training available for a fee.

**Web Technologies II 1 credit**

This course is a supervised research study/project-based extension of Web Technologies I. Students will focus on advanced web page concepts and applications, including the incorporation of web-based programming languages such as JavaScript, Perl or MySQL. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional languages and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 10 – 12
- ◆ Required prerequisite: Web Technologies I
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Problems and Solutions in Multimedia 1 credit**

This course is a supervised research study project-based class where students will apply knowledge and skills from previous animation and/or web technologies courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grade 12
- ◆ Required prerequisite: Advanced Animation or Web Technologies II
- ◆ Lab supplies or fee may be required.

**Telecommunications and Networking****– Cisco IT Essentials/CompTIA A+ 1 credit**

Upon completion of this course, students will understand the fundamentals of computer hardware and software such that they can assemble a computer system, install an operating system, and troubleshoot any issues that arise. Other topics include preventative maintenance, networking and security. The content of this course is in alignment with industry-recognized computer technician certifications such as Cisco's IT Essentials and CompTIA's A plus. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grades 10 – 12
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Internetworking Technologies I K****– Cisco CCENT 1 credit**

Internetworking Technologies I prepares students to install, operate and troubleshoot a home or small business enterprise branch network. The content of this course is in alignment with Cisco's Certified Entry Networking Technician (CCENT) exam, as this is an industry-recognized certification in this field. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

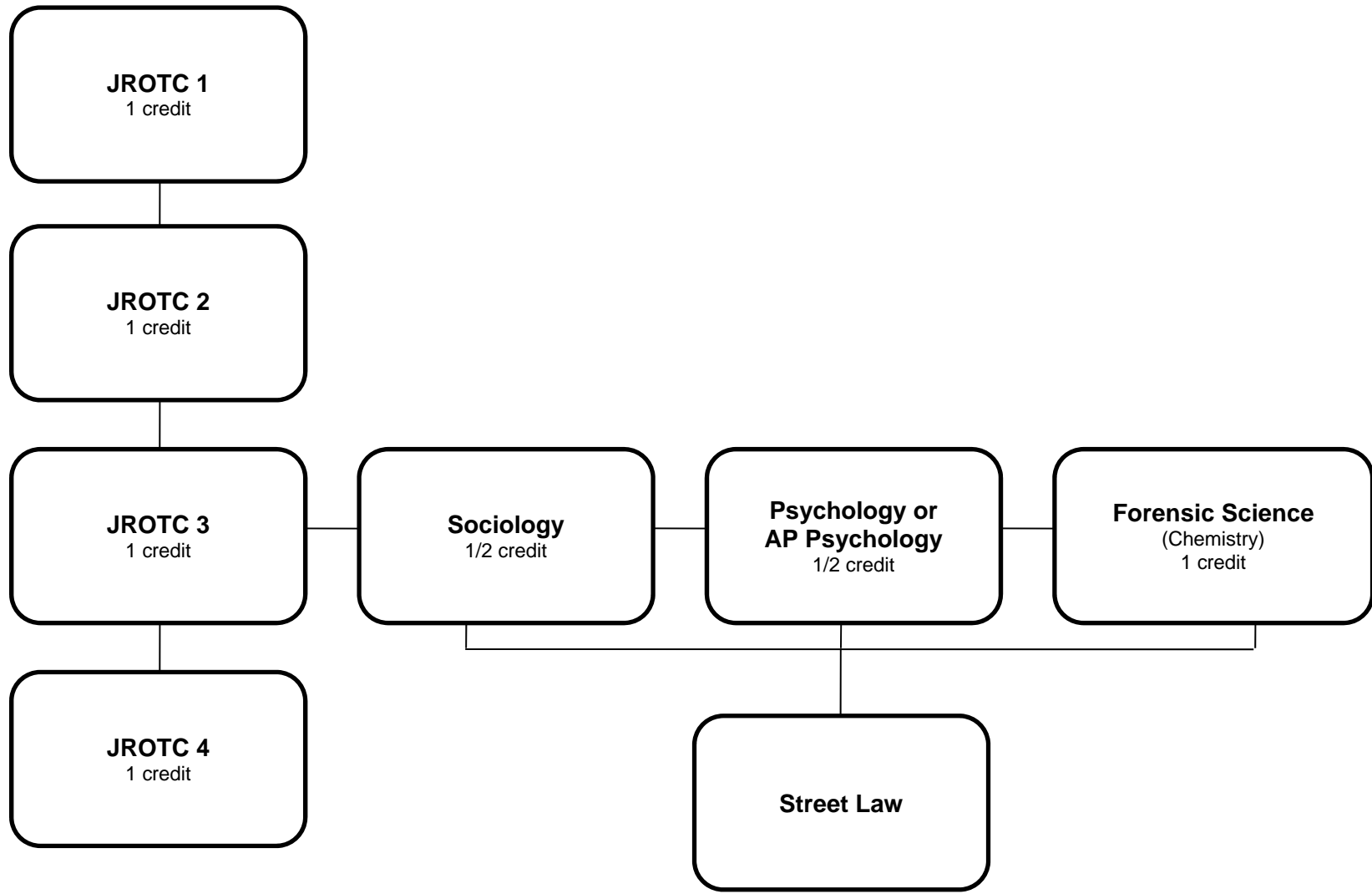
- ◆ Grades 11 – 12
- ◆ Recommended prerequisite: any technology course
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

**Internetworking Technologies I-II K****– Cisco CCENT/CCNA 2 credits**

Internetworking Technologies I-II prepares students to install, operate and troubleshoot a medium-sized business enterprise branch network. The content of this course is in alignment with Cisco's Certified Entry Networking Technician (CCENT) exam and Cisco's Certified Network Associate (CCNA) exam, as this is an industry-recognized certification in this field. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grade 12
- ◆ Recommended prerequisite: Telecommunications and Networking or Internetworking Tech I or Computer Programming
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

# Law, Public Safety, Corrections and Security



(Required Prerequisite)

**Forensic Science**

**1 credit**

Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprints analysis, ballistics, and blood spatter analysis.

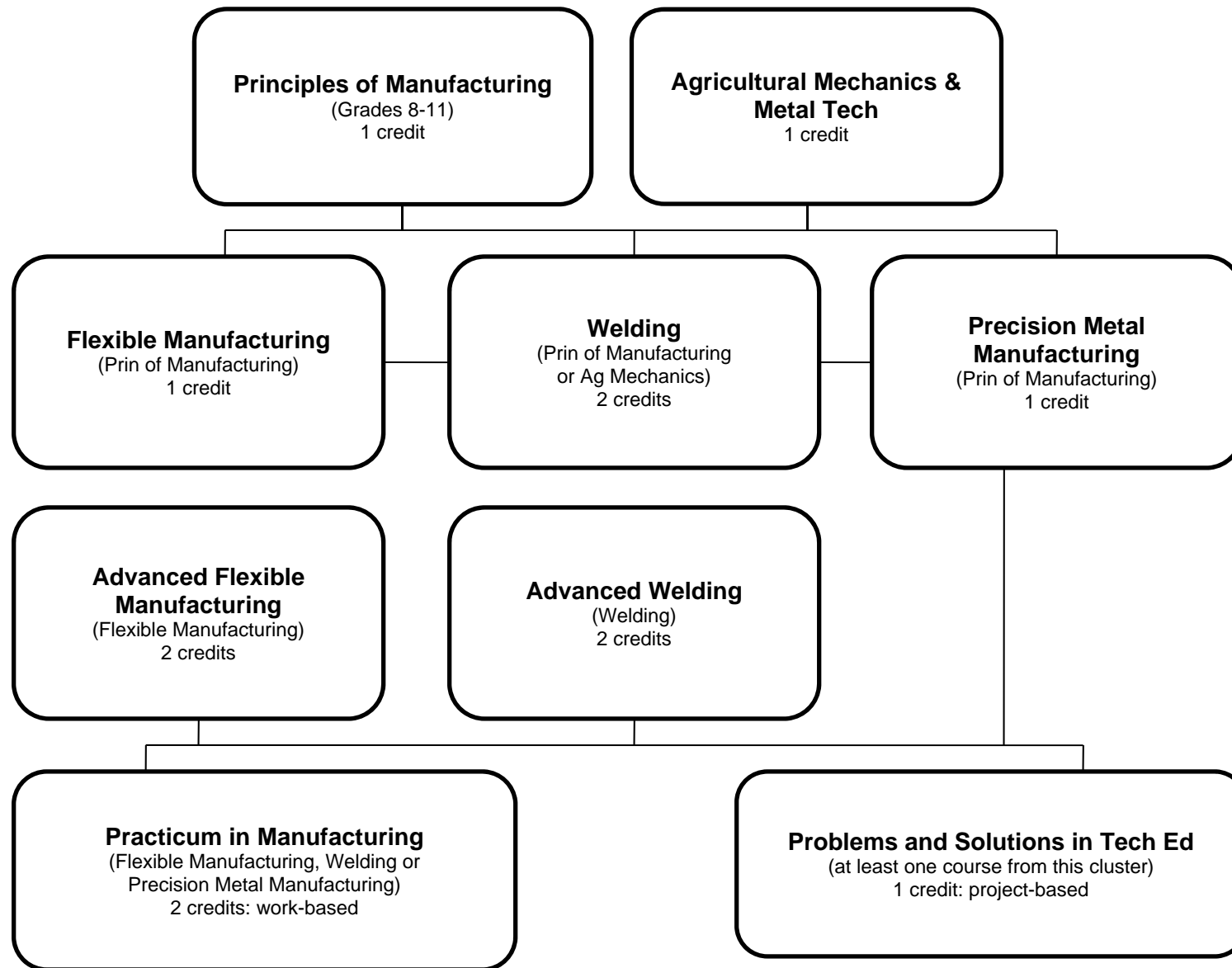
Students will learn the history, legal aspects, and career options for forensic science.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Biology and Chemistry  
This course may satisfy the 4<sup>th</sup> science credit required for graduation.

**See Social Studies section and JROTC for other options.**



# Manufacturing



(Required Prerequisite)

**Principles of Manufacturing 1 credit**

Principles of Manufacturing will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting, relevant activities and problems in a manufacturing setting. Students will design, produce, and assess products, services, and systems. They will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams.

- ◆ Grades 9 – 11
- ◆ Lab supplies or fee may be required.

**Welding 2 credits**

This Career and Technical course is for students interested in welding as a career. Training for employment with entry-level skills in welding trades will be emphasized. Instruction follows an industry-standard curriculum, and students' certifications are listed in a national registry upon successful completion. Oxy-fuel welding and cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding will be covered. Hand and power tools, welding on various types of metals, reading blueprint welding symbols, metal characteristics, and equipment setup are other areas that students master. Safety, leadership, entrepreneurship, and career opportunities are included.

- ◆ Grades 10 – 12 (Ninth graders may enroll with credit for Principles of Manufacturing in 8<sup>th</sup> grade.)
- ◆ Required prerequisite: Principles of Manufacturing or Agricultural Mechanics and Metal Technologies
- ◆ An application may be required if demand exceeds number of available slots.
- ◆ Lab supplies or fee may be required.

**Advanced Welding 2 credits**

This advanced level Career and Technical course is for students interested in welding as a career. Advanced Welding builds on knowledge and skills developed in the previous welding course. Training for employment with advance-level skills in welding trades will be emphasized. Instruction follows an industry-standard curriculum, and students' certifications are listed in a national registry upon successful completion. Oxy-fuel welding and cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding will be covered. Hand and power tools, welding on various types of metals, reading blueprint welding symbols, metal characteristics, and equipment setup are other areas that students master. Safety, leadership, entrepreneurship, and career opportunities are included.

- ◆ Grades 10 – 12
- ◆ Required prerequisite: Welding
- ◆ Lab supplies or fee may be required.

**Precision Metal Manufacturing 1 credit**

This course provides the knowledge, skills, and technologies required for employment in metal technology systems. Students will have the opportunity in

this project-based course to use various types of manufacturing equipment such as, lathes, vertical mills, drill presses, saws, and other manufacturing equipment to complete assignments and projects. Students will be introduced to computer numerical controlled (CNC) equipment. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills are included.

- ◆ Grades 9 – 12
- ◆ Required prerequisite: Principles of Manufacturing Lab supplies or fee may be required.

**Flexible Manufacturing 1 credit**

Flexible Manufacturing provides the knowledge, skills, and technologies required for employment in metal technology systems. This project-based course will allow the student to apply academic skills to various manufacturing operations such as, sheet metal, welding, machining, forming, Students will use a variety of power tools, hand tools and stationary equipment throughout this course. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills are included.

- ◆ Grades 9 – 12
- ◆ Required prerequisite: Principles of Manufacturing
- ◆ Lab supplies or fee may be required.

**Advanced Flexible Manufacturing 2 credits**

Advanced Flexible Manufacturing builds on knowledge and skills developed in Flexible Manufacturing. Students will develop advanced skills related to the industry of metal technology systems through the use of machines and tools used in industry.

- ◆ Grades 10 – 12
- ◆ Required prerequisite: Flexible Manufacturing
- ◆ Lab supplies or fee may be required.

**Practicum in Manufacturing 2 credits (work-based course)**

This course allows students to apply manufacturing concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training design to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Welding, Precision Metal Manufacturing or Flexible Manufacturing, and age 16 if paid training site
- ◆ Lab supplies or fee may be required.

## **Problems and Solutions in Technology**

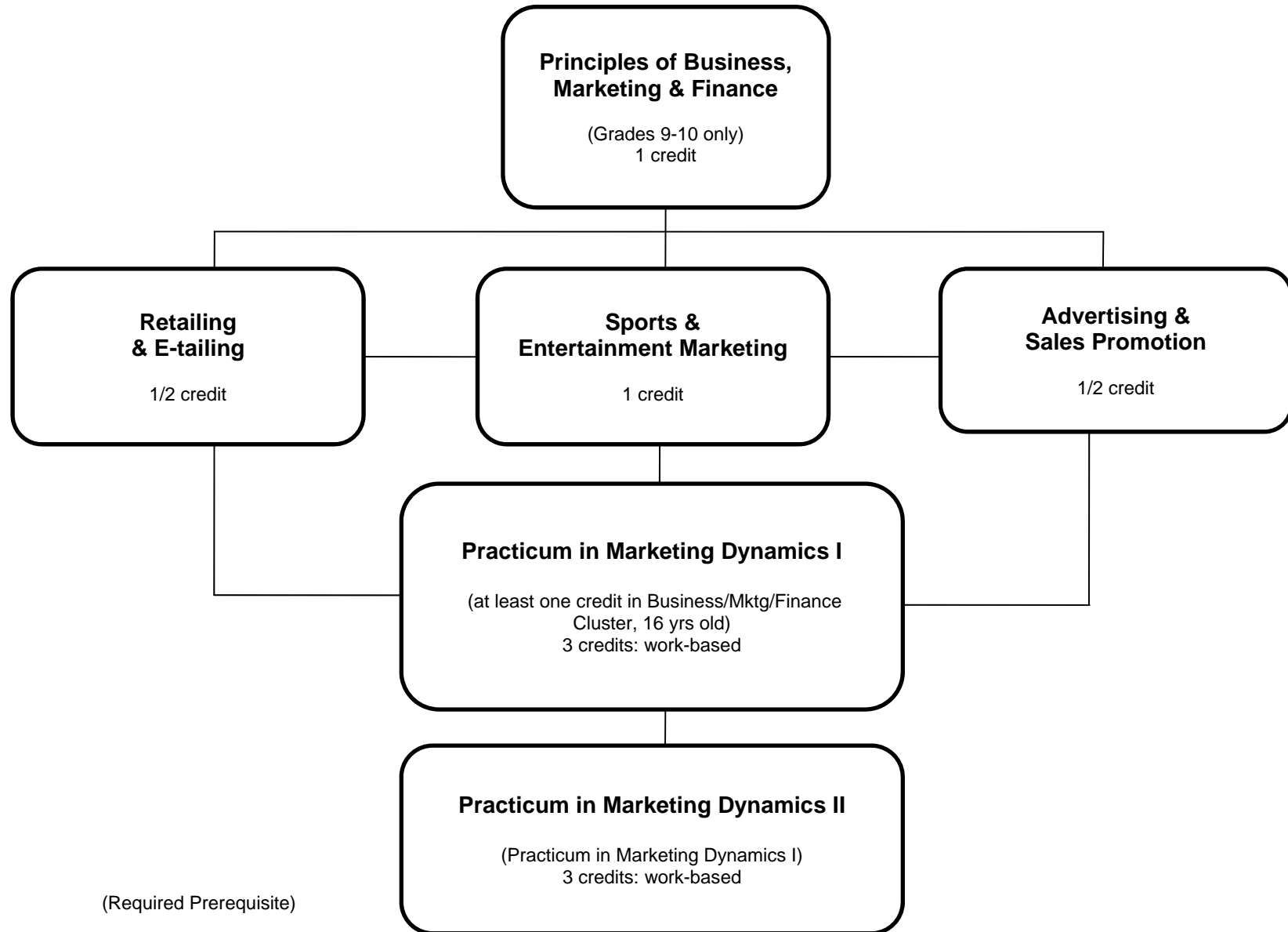
### **Education** **1 credit**

This course is a supervised research study project-based class where students will apply knowledge and skills from previous Technology Education courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in the Architecture and Construction, Manufacturing, or Science, Technology, Engineering and Mathematics cluster
- ◆ Lab supplies or fee may be required.

# Marketing

(Also see Business and Finance Clusters for Closely Related Courses)



### **Principles of Business, Marketing and Finance** **1 credit**

In Principles of Business, Marketing and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.

- ◆ Grades 9 – 10

### **Advertising and Sales Promotion** **1/2 credit**

Advertising and Sales Promotion provides an introduction to the principles and practices of advertising. Students will apply current advertising techniques, including print, broadcast, and digital media. The course provides an overview of how communication tools can be used to reach target audiences and increase consumer knowledge. Students taking this course should consider also taking Retailing and E-tailing.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

### **Retailing and E-tailing** **1/2 credit**

In Retailing and E-tailing, students will develop skills that involve electronic media techniques necessary for a business to compete in a global economy. Students will coordinate online and off-line marketing including providing a web presence, and using decision-making models, case studies, various technologies, and business scenarios. Students taking this course should consider also taking Advertising and Sales Promotion, Virtual Business, and/or Global Business.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance
- ◆ Lab supplies or fee may be required.

### **Sports and Entertainment Marketing** **1 credit**

Sports and Entertainment Marketing allows students to apply marketing principles and processes to the sports and entertainment industry. Students will investigate sponsorships, promotion/public relations, merchandising, advertising, sales, and events through case studies and simulations. Behind the superstars are those who have mastered the craft of developing the true connections with consumers needed to build that passion.

- ◆ Grades 10 – 12
- ◆ Recommended prerequisite: Principles of Business, Marketing, and Finance

### **Practicum in Marketing Dynamics I** **3 credits**

This course allows students to apply marketing concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of marketing functions such as selling, advertising, display, the free enterprise system, inventory control systems, marketing mathematics, and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

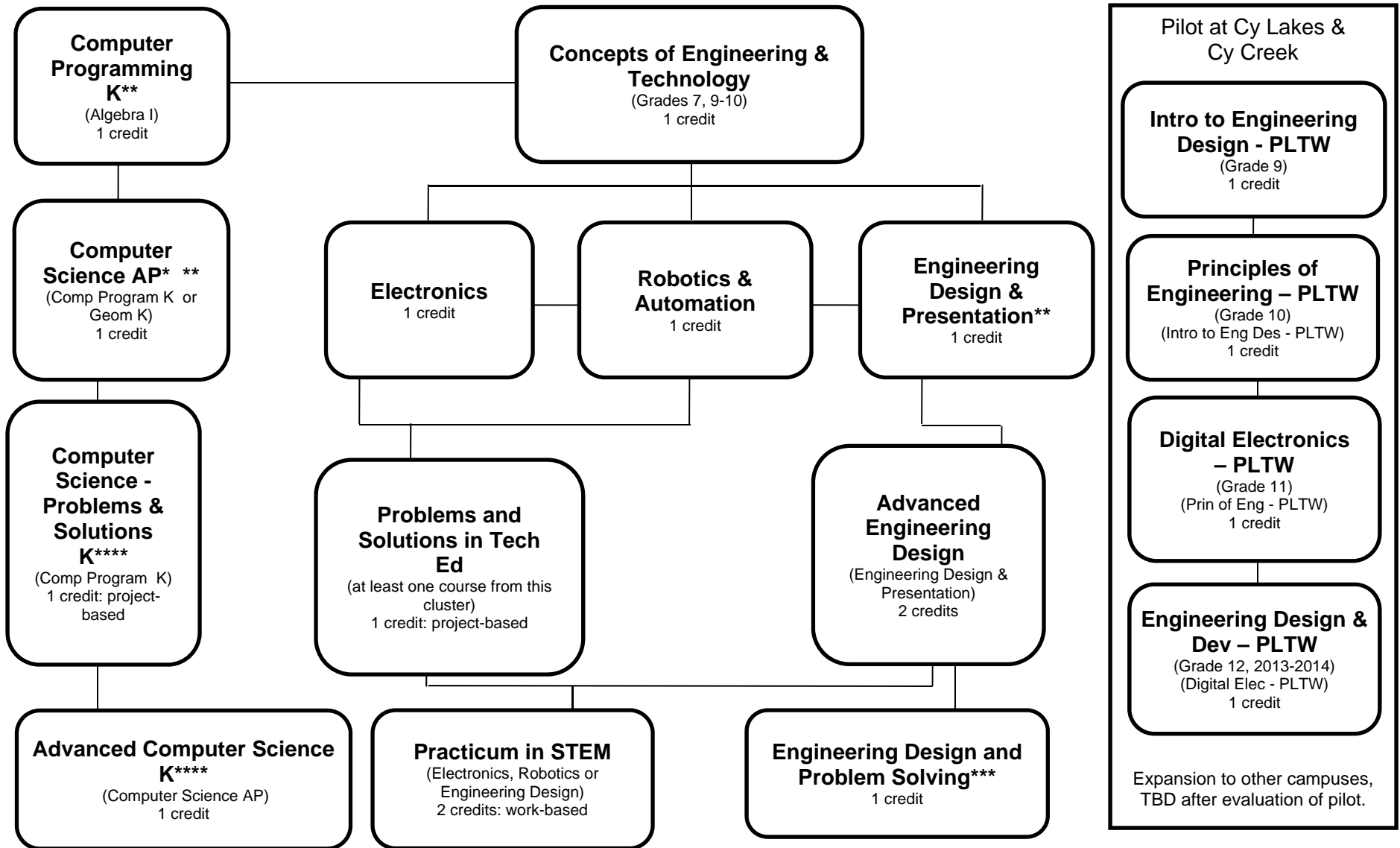
- ◆ Grades 11 – 12
- ◆ Required prerequisite: At least one course in Marketing cluster or related area and age 16 with reliable transportation
- ◆ Assessment for verification of industry-recognized training is available for a fee.

### **Practicum in Marketing Dynamics II** **3 credits**

This second-year work-based course allows students to build upon the basic marketing concepts and principles mastered in the first course. In the classroom portion of the course, students will integrate skills from academic subjects, information technology, interpersonal communication, and supervisory/ management training to make responsible decisions. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grade 12
- ◆ Required prerequisite: Practicum in Marketing Dynamics and age 16 with reliable transportation
- ◆ Assessment for verification of industry-recognized training is available for a fee.

# Science, Technology, Engineering and Mathematics



(Required Prerequisite)

\* Course approved for 4<sup>th</sup> Math credit if taken after completion of Algebra II

\*\*Course approved for Technology Applications Credit

\*\*\*Course approved for 4<sup>th</sup> Science credit

\*\*\*\*K-level not available for class of 2018 and beyond

**Concepts of Engineering and Technology****1 credit**

Concepts of Engineering and Technology provides an overview of the following fields -- science, technology, engineering, and mathematics -- and how they are related. Students will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams. Upon completing this course, students will be able to make informed decisions regarding future career and technology courses.

- ◆ Grades 9 – 10
- ◆ Lab supplies or fee may be required.

**Engineering Design and Presentation****1 credit**

Students will use multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes relating to the engineering design fields. Students will use a variety of computer hardware and software applications to complete assignments and projects.

- ◆ Grades 9 – 12
- ◆ Lab supplies or fee may be required.

**Advanced Engineering Design and Presentation****2 credits**

Students will work on a variety of projects that will help them develop design skills including those related to team building, problem solving, time management, project design and development. Students will be encouraged to enter competitive events that lead to the completion of industry certifications, internships, and career opportunities.

- ◆ Grades 10 – 12
- ◆ Required prerequisite: Engineering Design
- ◆ Lab supplies or fee may be required.

**Electronics****1 credit**

Students will learn basic electrical wiring, magnetism/motor operation, electronic circuits, electrical/electronic measurement, soldering, cable construction, and electronic implementation. Students will build electronic kits such as video games, micro bug, FM radio, and/or sound generators. Students will complete assignments in a project-based environment.

- ◆ Grades 9 – 12
- ◆ Lab supplies or fee may be required.

**Robotics and Automation****1 credit**

Students will work independently and in group settings to develop plans for working robotic devices to be used in industrial settings to improve efficiency, product movement, or other task. Principles of engineering will be followed to develop skills and understanding of knowledge needed to attain certifications, internships, and career opportunities. Completed projects will be inspected, tested, and demonstrated through potentially competitive events.

- ◆ Grades 9 – 12
- ◆ Lab supplies or fee may be required.

**Practicum in Science, Technology, Engineering and Mathematics****(work-based course)****2 credits**

This course allows students to apply science, technology, engineering, and mathematics concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Engineering Design or Electronics and age 16 if paid training site
- ◆ Lab supplies or fee may be required.

**Problems and Solutions in Technology Education****1 credit**

This course is a supervised research study project-based class where students will apply knowledge and skills from previous Technology Education courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- ◆ Grades 11-12
- ◆ Required prerequisite: At least one credit in the Architecture and Construction, Manufacturing, or Science, Technology, Engineering and Mathematics cluster
- ◆ Lab supplies or fee may be required.

**Computer Programming K****1 credit**

Computer Programming is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science AP.

- ◆ Grades 9 – 12
- ◆ Required prerequisite: Algebra I
- ◆ Lab supplies or fee may be required.

**Computer Science AP 1 credit**

Computer Science AP is a programming course designed to cover the Advance Placement (AP) Computer Science AP Exam topics. The curriculum will build upon the topics addressed in Computer Programming K. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and the AP Case Study.

- ◆ Grades 10 – 12 (9<sup>th</sup> graders may enroll if concurrent with Algebra II)
- ◆ Required prerequisite: Computer Programming K recommended or Geometry K
- ◆ This course may satisfy the 4<sup>th</sup> math credit required for graduation if taken after completing Algebra II.
- ◆ Lab supplies or fee may be required.

critical-thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.

- ◆ Grade 12
- ◆ Algebra II, Chemistry, and Physics
- ◆ K-level only
- ◆ This course may satisfy the 4<sup>th</sup> science credit required for graduation.

**Advanced Computer Science K 1 credit**

Advanced Computer Science K is a continuation of Computer Science AP and builds upon such topics as object-oriented programming, inheritance, and classes. Students go on to address advanced topics such as stacks, queues, advance recursion, linked lists, binary trees, and advanced sorting, and searching topics in preparation for and alignment with college-level computer science.

- ◆ Grades 11 and 12 (Tenth graders may enroll after taking Computer Science AP.)
- ◆ Required prerequisite: Computer Science AP
- ◆ Lab supplies or fee may be required.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, this course will no longer be offered for K-level credit.

**Computer Science –Problems and Solutions K 1 credit**

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous computer science courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional languages and/or technologies that will be studied and utilized, along with an overview of the culminating project.

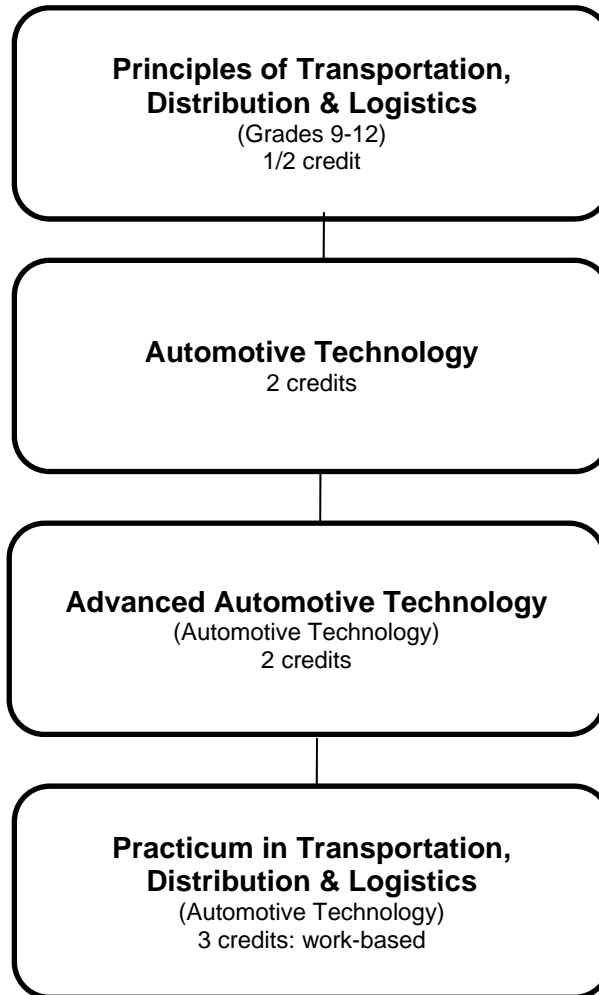
- ◆ Grades 11-12
- ◆ Required prerequisite: Computer Programming K
- ◆ Lab supplies or fee may be required.
- ◆ For ninth graders entering high school in 2014 (Class of 2018) and beyond, this course will no longer be offered for K-level credit.

**Engineering Design and Problem Solving K 1/2-1 credit**

Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well defined toward more open ended, with real-world application. Students apply



# Transportation, Distribution, and Logistics



(Required Prerequisite)

### **Principles of Transportation, Distribution, and Logistics** **1/2 credit**

This introduction course will allow students to gain knowledge and skills in the transportation, distribution, and logistics industries. Students will also gain knowledge in basic maintenance and repair of vehicles. This course is a good option for students who do not have room in their schedule to take the 2 hour Automotive Technology course.

- ◆ Grades 9 – 12
- ◆ Lab supplies or fee may be required.

### **Automotive Technology** **2 credits**

In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This course provides specific training for entry-level employment in the automotive technician career field. Areas covered include use of repair manuals and service and repair of basic components of an automobile such as fuel systems, engines, emission control, power trains, chassis, electrical systems, brakes, and heating and air conditioning. Entrepreneurship, safety, leadership, and career opportunities are included.

- ◆ Grades 10 – 12, priority to 11<sup>th</sup> graders
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

### **Advanced Automotive Technology** **2 credits**

In Advanced Automotive Technology, students gain advance knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This course provides specific training for employment in the automotive technician career field. Areas covered include use of repair manuals and service and repair of basic components of an automobile such as fuel systems, engines, emission control, power trains, chassis, electrical systems, brakes, and heating and air conditioning. Entrepreneurship, safety, leadership, and career opportunities are included.

- ◆ Grades 11 – 12
- ◆ Required prerequisite: Automotive Technology
- ◆ Lab supplies or fee may be required.
- ◆ This course DOES NOT include a work-based component. (See Practicum for work-based course.)
- ◆ Assessment for verification of industry-recognized training is available for a fee.

### **Practicum in Transportation, Distribution, and Logistics** **3 credits**

This course allows students to apply transportation, distribution, and logistics concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after

enrollment in the course.

- ◆ Grade 12
- ◆ Required prerequisite: Automotive Technology and age 16 if paid training site
- ◆ An application may be required if demand exceeds number of available slots.
- ◆ Lab supplies or fee may be required.
- ◆ Assessment for verification of industry-recognized training is available for a fee.

## **CAREER AND TECHNICAL EDUCATION FOR STUDENTS IN SPECIAL EDUCATION**

### **Career and Technical Education for Students in Special Education (CTED)**

#### **Business Information Management I**

**Grades 9 – 12**

**2 credits**

This career education course for students with disabilities is taught in a two-hour block daily. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

- ◆ Recommendation by the IEP committee required
- ◆ Recommended Prerequisite: Touch System Data Entry

### **Career and Technical Education for Students in Special Education (CTED)**

#### **Digital Interactive Media**

**Grades 10-12**

**2 credits**

This career education course for students with disabilities is taught in a two-hour block daily. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society. Through the study of digital and interactive media and its application in information technology, students will design and create multimedia projects that address customer needs. Although multiple technologies will be explored, the emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.

- ◆ Grades 10-12
- ◆ Recommendation by the IEP committee required
- ◆ Recommended Prerequisite: CTED BIM I
- ◆ Lab supplies or fee may be required.

- ◆ Potential assessment for verification of industry-recognized training available for a fee

## Career and Technical Education for Students in Special Education (CTED)

### Career Preparation

**Grades 11 – 12**

**2 credits**

This career course for students with disabilities will be taught in a two-hour block daily. It will provide students with on-campus activities that will develop employability skills leading to supported employment or internship in the community. On-campus training will be provided with in-class activities relating to students' actual occupations. On-the-job training will be provided by the business community. The students will be under the supervision of the instructor or instructional assistant while undergoing on-the-job training that fits in with a student's ability and interest.

- ◆ Recommendation by the IEP committee required

## Career and Technical Education for Students in Special Education (CTED)

### Horticulture

**Grades 10 – 12**

**2 credits**

This career education course for students with disabilities is taught in a two-hour block daily. It is a course designed to prepare students to produce greenhouse/nursery plants. Students learn how to grow, care for, identify, and plant various types of plants for indoor and outdoor applications. The course includes career opportunities, leadership activities, and work experience related to commercial nursery plant production.

- ◆ Recommendation by the IEP committee required

## Career and Technical Education for Students in Special Education (CTED)

### Plant and Soil Science

**Grades 11 – 12**

**2 credits**

This career education course for students with disabilities is taught in a two-hour block daily. It is a continuation of CTED Horticulture. In this course, students will design, conduct, and report on research related to real-world problems/scenarios involving plant and soil science. The course includes career opportunities, leadership activities, and work experience related to commercial nursery plant production.

- ◆ CTED Horticulture
- ◆ Prerequisite: Recommendation by the IEP committee required

## Career and Technical Education for Students in Special Education (CTED)

### Lifetime Nutrition and Wellness

**Grades 10 – 12**

**2 credits**

This career education course for students with disabilities is taught in a two-hour block daily. This course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers in nutrition. Topics include the role of nutrients in the body, principles of digestion and metabolism, nutritionally balanced diets, safety and sanitation, and food management principles. NOTE: While there will be some labs, this course does not involve the same level of cooking as Culinary Arts.

- ◆ Recommendation by the IEP committee required

## VOCATIONAL TRAINING COURSES FOR STUDENTS IN SPECIAL EDUCATION

### **Business Media Production Systems**

**2 - 4 credits**

Business Media Production Systems is a two-hour block course for students with disabilities that provides training in following safety procedures, operating equipment, maintaining orders, taking and filling orders. This course includes career opportunities and work experience related to printing, silk screening, embossing, and laminating.

- ◆ Recommendation by the IEP committee required

### **Commercial Foods**

**2 credits**

This vocational course for students with disabilities provides instruction in the use of maintenance equipment, production of foods, job opportunities, and tasks involved in restaurant-type facilities. This course encompasses on-site training at the Carlton Center and community-based instruction opportunities.

- ◆ Recommendation by the IEP committee required

### **Vocational Adjustment Class (VAC)**

**1 - 10 credits**

The VAC class, or supervised employment, is a work/study program designed to transition students with disabilities into the world of work. Vocational training and job experience are combined with academic courses that lead to development of employment potential. VAC students must enroll in courses that prepare them for state required assessments. Once the testing requirements are satisfied, the student may enroll in VAC full-time as the IEP committee deems appropriate. The decision is based upon the student's age and individual needs; however, the student should be at least sixteen years old. Occupational Training is recommended as a pre-requisite, concurrent enrollment, or as determined by an IEP committee.

- ◆ Prerequisite: Occupational Training or concurrent enrollment
- ◆ Recommendation by the IEP committee required

### **Occupational Training**

**1 - 2 credits**

Occupational Training is a course to help special education students use knowledge, educational, and career information to set and achieve career goals. The course emphasizes the job application process, the interview, the employer, social skills, and practical consumer life skills. This course is intended to be a prerequisite for VAC or the student should be enrolled concurrently.

- ◆ Recommendation by the IEP committee required

## LEADERSHIP

### **Teen Leadership**

**1/2 credit**

Teen Leadership is an activity-oriented course that emphasizes leadership, personal responsibility, and business skills. Students will learn appropriate and effective techniques necessary to enhance self-concept and build healthy relationships. Students will also learn about emotional intelligence through self-awareness, self-control, self-motivation, and social skills. Teen Leadership provides students with a forum for public speaking communication, and personal image. Students will acquire an understanding of principle-based decision-making and the effects of peer pressure. Problem-solving skills and goal-setting will be used to prepare students to be more productive and effective family members and citizens.

- ◆ Grades 9-12

### **Student Leadership**

**1/2 credit**

This course provides an opportunity to study, practice, and develop group and individual leadership and organization skills. These skills include, but are not limited to leadership roles, interpersonal relations, civic responsibility, decision making, problem solving and communication.

Students enrolled in this course apply these skills by working with peers, school administration and the community. This course is a hands-on, lab-oriented approach to leadership by involving students in participatory leadership through project planning and implementation. It is customized to meet the needs of a student council officer or members in club/organization leadership roles.

- ◆ Grades 11-12
- ◆ Must be student leaders

### **Peer Assistance Leadership (PAL) I-II**

**1 - 2 credits**

The Peer Assistance and Leadership Program (PAL) is a peer helping program in which selected high school students in grades 11 and 12 are trained to work as peer helpers with students on their own campus, or at feeder middle and elementary schools. The PAL program is a carefully designed course to train a student to become a helper. Students have a chance to learn more about themselves while helping others have a more positive and productive school experience, to clarify their values, to strengthen their caring about others, and to make a difference in someone else's life. PAL students have demonstrated the potential to be good listeners, and are trustworthy, empathetic, caring, and responsible. Students selected for PAL must complete an application, submit recommendations, and schedule an interview with the PAL sponsor.

- ◆ Grades 11-12

**Air Force Junior ROTC**                      **1 - 4 credits**

Air Force Junior Reserve Officer Training Corps (AFJROTC) is a voluntary program for motivated students. The mission of AFJROTC is to develop citizens of character dedicated to serving their nation and community. The objectives of AFJROTC are to educate and train high school cadets in citizenship; promote community service; instill responsibility, character, and self-discipline; and provide instruction in air and space fundamentals. The program is divided into three courses of instruction, Aerospace Science, Leadership Education, and Health and Wellness. **Aerospace Science (AS)** acquaints students with the elements of aerospace and the aerospace environment. It introduces them to the principles of aircraft flight and navigation, the history of aviation, development of air power, contemporary aviation, human requirements of flight, cultural and global awareness, the space environment, space programs, space technology, rocketry, propulsion, the aerospace industry, astronomy, and survival. **Leadership Education (LE)** develops leadership skills and acquaints students with the practical application of life skills. It emphasizes discipline, responsibility, leadership, followership, citizenship, customs and courtesies, cadet corps activities, study habits, time management, communication skills, career opportunities, life skills, financial literacy, management skills, and drill and ceremonies. The **Wellness Program** objective is to motivate cadets to lead healthy, active lifestyles beyond program requirements and into their adult lives. The exercise programs are focused upon individual base line improvements with the goal of achieving a national standard as calculated by age and gender.

◆ Grades 9-12



Students in JROTC may participate in drill competitions or performances requiring up to 8 hours of after school practice weekly.

## **Public Notification of Nondiscrimination in Career and Technical Education**

Cypress-Fairbanks ISD offers career and technical education programs in trade and industry, agri-science, business computer information systems career preparation, health science technology, technology education, and family and consumer sciences.

Admission to these programs is based on student interest, age and grade requirements specified by the Texas Education Agency.

It is the policy of Cypress-Fairbanks ISD not to discriminate on the basis of race, color, national origin, sex, or handicap in its career and technology programs, service, activities, and employment as required by Title VI of the Civil Rights Act of 1964, as amended, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973, as amended. Cypress-Fairbanks ISD will take steps to ensure that lack of English language skills will not be a barrier to admission to and participation in all educational and career and technology programs.

For information about your rights or grievance procedures contact Dan McIllduff at 281.897.6416 or Deborah Stewart at 281.897.4030.

## **Comunicado público sobre la no discriminación en la educación profesional y técnica**

El Distrito Escolar Independiente Cypress-Fairbanks ofrece programas de educación profesional y técnica para negocios e industrias, ciencias agrarias, preparación profesional en sistemas de informática y computación comercial, tecnología para la salud y ciencias familiares y de consumo.

La admisión a estos programas se basa en el interés del alumno, su edad y su grado, según lo establece la Agencia de la Educación de Texas.

La política del distrito es de no discriminar por motivos de raza, color, origen de procedencia, sexo o impedimento, en sus programas profesionales y de educación tecnológica, servicios o actividades y en sus procedimientos de empleo, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, según enmienda; el Título IX de las Enmiendas en la Educación, de 1972 y la Sección 504 de la Ley de Rehabilitación de 1973 según enmienda. El Distrito Escolar Independiente Cypress-Fairbanks tomará las medidas necesarias para asegurar que la falta de habilidad en el uso del idioma inglés no sea un obstáculo para la admisión y participación en todos los programas educativos y en los programas de educación profesional y tecnológica.

Para más información acerca de sus derechos o de los procedimientos para presentar quejas, comuníquese con Dan McIllduff llamando al 281-897-6416 o con Deborah Stewart llamando al 281-897-4030.

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**Notes Page**

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