

# High School Course Guide 2024-2025

# Table of Contents

YOUR CHOICES:	3
STATE GRADUATION PLANS	4
EARLY GRADUATION	4
CLASS RANK AND STANDING	4
CLASS RANK	5
VALEDICTORIAN AND SALUTATORIAN	5
OTHER OPTIONS FOR ACQUIRING CREDIT	5
ADMISSION TO COLLEGE	6
FINANCIAL AID	7
EARLY ADMISSION PROGRAM	9
NCAA COLLEGE – BOUND STUDENT ATHLETES	9
COLLEGE INFORMATION WEBSITES	9
STUDENT TIMELINE FOR COLLEGE ADMISSION	9
GRADUATION REQUIREMENTS	13
COURSE SELECTION PROCESS	14
SCHEDULE CHANGES	14
GUIDELINES FOR DROPPING ADVANCED, PRE-AP and AP CLASSES	15
ADVANCED ACADEMICS PROGRAM	16
ADVANCED/PRE-AP/AP/DUAL CREDIT COURSE LISTING	17
FOUNDATION CURRICULUM	31
ENGLISH AS A SECOND LANGUAGE (ESL)	31
ENGLISH LANGUAGE ARTS	33
MATHEMATICS	36
SCIENCE	38
SOCIAL STUDIES	40
LANGUAGES OTHER THAN ENGLISH	42
PHYSICAL EDUCATION/ATHLETICS	44
FINE ART	45
ELECTIVES (Locally Required)	55
ELECTIVES	56
CAREER AND TECHNICAL EDUCATION (CTE)	61

PUBLIC SERVICES ENDORSEMENT	61
Cosmetology	61
Emergency Services: Firefighter	62
Exercise Science and Wellness	63
Family and Community Services: Counseling/Community Health Professional	63
Healthcare Therapeutic	64
Law Enforcement	66
Teaching and Training	67
BUSINESS & INDUSTRY ENDORSEMENT	68
Accounting and Financial Services	68
Animal Science	69
Architecture	70
Automotive: Collision and Repair	71
Automotive Technology: Automotive Services	72
Business Management and Administration	74
Construction: Carpentry	75
Construction: Heating, Ventilation and Air Condition Pathway (HVAC)	76
Culinary Arts	77
Digital Communications: Audio Visual Production	78
Graphic Design and Multimedia Arts	79
Information Technology	80
Manufacturing Technology	82
Marketing and Sales	83
Plumbing	83
Welding Technology	84
ENGINEERING	86
Engineering	86
PROJECT BASED RESEARCH (CTE)	87
CAREER & TECHNICAL EDUCATION NON-DISCRIMINATION STATEMENT	87
SPECIAL EDUCATION AND STUDENTS WITH DISABILITIES	88

# **YOUR CHOICES:**

# The 2024-2025 Edition

As a Tyler ISD high school student, you are encouraged to carefully consider the selection of your courses for the 2024-2025 school year. You should choose courses that prepare you for the future by choosing an academically challenging curriculum.

The guidance staff will be your partner to monitor your progress toward graduation during your high school years. However, it is very important that you and your parents take responsibility for ensuring all graduation requirements are completed in a timely fashion. Additionally, a student may not receive a high school diploma until the student has performed satisfactorily on required state assessments. Course planning and registration is important. You should select courses and programs that match your interest, your academic abilities, and your post-secondary goals. Careful consideration should be given to the combination of courses selected and the demand on time for studying, practicing, performing, or competing. Counseling staff are available to advise you and your parents as you plan courses to meet state graduation requirements and your career goals.

Under House Bill 5, students are now under the new Foundations plan with Endorsement or Distinguished Level of Achievement Plan. Freshmen entering high school in 2014 or after are required to complete the graduation plan set forth by House Bill 5. Any questions regarding graduation plans should be directed toward your high school counselor.

Choices you make during high school years will determine the choices available to you for the rest of your life. Additional education or training gained through college, post-secondary education, technology training, military service, and vocational training can open a world of opportunities. You should set goals that extend beyond high school and focus on what you need to do now to have the tools necessary to reach those goals.

The Tyler ISD Program of Studies lists courses and programs that Legacy and Tyler High generally make available to students. It should be noted, however, that not all courses listed are scheduled every year, since it is not economically feasible to schedule classes in which only a few students enroll. Sufficient numbers of student requests for specific courses become a determining factor in the course being offered.

\*\*\*Disclaimer: State and local policy supersedes all statements in this course selection guide.\*\*\*





# STATE GRADUATION PLANS

Students in Tyler ISD are required to plan their high school studies to meet the expectations of the Foundations with Endorsement Plan. The program provides the comprehensive background of coursework required by institutions of higher education and major employers in the business world. However, students are strongly encouraged to contact colleges or universities of their choice regarding specific entrance requirements.

- College readiness. Many colleges and universities require the Foundations with Endorsements for admission. In addition, students ranked in the top 10 percent of their graduating class from an accredited Texas public high school are eligible for automatic admission to most Texas public universities if they have completed the Distinguished Level of Achievement Program (DLA).
- **Recognition.** The Distinguished Achievement Program seal will be affixed to the Academic Achievement Record (AAR), or transcript.
- **Test results.** Research suggests that students who take additional English, math, social studies, and science courses make higher scores on the SAT® or ACT® college entrance exams.

# **EARLY GRADUATION**

A student who completes graduation requirements in fewer than four years shall be ranked in the class with which he or she graduates.

To be eligible to graduate early, a student must complete all course work and exit-level testing required of the ninth grade class in which he or she begins high school. This means the student must earn a diploma under the Foundations Plan with at least one (1) Endorsement.

A student wishing to graduate from high school in fewer than four years must complete and submit a written application to his/her counselor prior to the conclusion of the second semester of high school (generally during registration for the sophomore year). Written parental approval shall be submitted with the application. The student shall receive advisement regarding requirements and schedules. Applications for early graduation will be reviewed by the campus principal for final approval.

Early graduates shall be eligible for honors positions if they are reclassified before the senior year. However, a student who meets the requirements of the Early High School Graduation Scholarship Program under the Education Code 56.203 at the end of summer school shall not be ranked within a graduating class.

## CLASS RANK AND STANDING

Class rank includes most core area courses and courses in Languages Other Than English, as outlined in the High School Grading Handbook [Policy EIC (LOCAL)]. If a student transfers into Tyler ISD with letter grades, these grades will be converted and recorded on the academic achievement record. For further information, please see Tyler ISD local policy code.

# **CLASS RANK**

Rank in class is determined by a cumulative weighted numerical average of semester grades for the designated core area courses and courses in Languages Other Than English mentioned in the previous paragraph. This cumulative weighted average is for local ranking purposes only and is weighted as follows:

- On-level Courses - Numerical average
- Advanced Courses Numerical average plus 5 points
- Pre-AP Courses - Numerical average plus 5 points
- AP Courses - Numerical average plus 10 points
- Dual Credit Courses - Numerical average plus 10 points

Courses with a modified curriculum do not count toward class rank.

Advanced, Pre-AP, AP, and Dual Credit weighted points are not reflected on a student's report card or transcript. **The weighted points are used for local ranking purposes only.** 

# **VALEDICTORIAN AND SALUTATORIAN**

The graduate with the highest cumulative weighted GPA shall be designated as the Valedictorian. The graduate with the second highest cumulative weighted GPA shall be designated as the Salutatorian. To be eligible for Valedictorian or Salutatorian honors, a student must have been initially and continuously enrolled in the assigned school for the four regular semesters (fall and spring) preceding graduation and must have completed the Distinguished Achievement Program for Graduation.

# OTHER OPTIONS FOR ACQUIRING CREDIT

In addition to the campus course offerings during the regular school year, students in Tyler ISD have the options of summer school, credit-by-examination, and correspondence courses for acquiring credit toward graduation requirements. (Note: only two credits may be acquired through correspondence courses). For additional information, please refer to the Tyler ISD Secondary Grading Handbook

# **Postsecondary Readiness**

According to the state accountability system, a graduate is deemed to be "Postsecondary Ready" if he/she graduates on the Foundation High School Plan with Endorsement (FHSP-E) **OR** Foundation High School Plan with Distinguished Level of Achievement (FHSP-DLA) **AND** meets at least one of the following criteria:

- Earn an industry (nationally recognized) certification
- Perform at or above criterion score on one or more AP examinations
- Complete a course for dual credit 3 hours in ELA or Math
- Complete 9 hours or more of dual credit
- Complete 12 hours or more of earned postsecondary credit
- Earn an associate degree
- Achieve TSI benchmark scores on the TSI, SAT, or ACT
- Enlist in the U.S. armed forces

#### **Summer School**

Students who did not receive credit in a course due to a failing grade or excessive absences may repeat courses in the four core curriculum areas of English Language Arts, mathematics, science, and social studies. Courses are offered based on enrollment and availability of teaching staff.

#### **Credit By Examination (CBE)**

Students may take credit by examination to receive credit for high school courses. Students must score eighty (80) or better to receive credit in a course for which they have had no prior instruction. If a student has had prior instruction the course, he/she may take a credit by examination but must make a grade of seventy (70) or above to receive credit. See your counselor for information on the application process. Examination dates, fees and registration information may also be found on the Tyler ISD website under Assessment.

#### **Local Credit Courses**

The District may offer courses for local credit. Such courses shall not be counted toward state graduation requirements but may be counted toward local unit credit in addition to state graduation requirements.

#### **Non-Credit Courses**

Seniors, who have passed all required End-of-Course examinations and are Postsecondary Ready (CCMR complete) may choose to take one block off daily. This time can be used to attend college, to study, or to work. No credit is awarded for senior early release periods. Students may also serve as an office, teacher, counselor, or library aide. No credit is awarded for an aide position.

# **ADMISSION TO COLLEGE**

The student who plans to attend college after high school graduation should begin early to plan a course of study to assure acceptance by the college or university of his/her choice. Students must graduate on the Distinguished Achievement program or the Foundation with Endorsement graduation plan to apply to a 4-year college or university right out of high school. Once the student has made a definite choice of the school he/she plans to attend, it is advisable to keep in contact with the school's admission office; by doing so, the student will know well in advance any entrance requirement changes. Generally, college admission is based on a specific high school curriculum, rank in class, and scores on college entrance exams. Most colleges post their catalogs to their websites.

The following examinations are administered during high school to demonstrate college-readiness and level of preparation for entrance into college:

PSAT-NMSQT – This test, administered in mid-October of each year, is designed to aid juniors in
estimating their ability to do college-level work and to guide them in making their college plans.
National Merit and Commended Student status is determined based on PSAT scores earned during the
junior year administration. PSAT scores are also used by many industries, private foundations, and
universities for scholarship purposes. There are fees associated with this assessment.

- ACT and SAT The Association of Texas College and Universities has approved a statewide system of
  testing prospective college students for the purpose of admission and counseling. Students should
  determine which test is required or preferred by the institutions they are considering attending. These
  tests are administered several times during the year on Saturdays. Each of the tests requires advanced
  registration and payment of a testing fee prior to the actual exam administration (approximately one
  month in advance).
- Advanced Placement (AP) Examinations Students enrolled in AP courses are expected to take the corresponding AP exam. These exams are administered each May in multiple subject areas with variable fees. Because AP courses are introductory college-level courses, the program promotes colleges and university policies that grant college credit and/or advanced standing to students with strong AP examination results (scores of 3, 4, or 5). Each university makes its own policy as to what is an acceptable score. It is advisable to take AP courses to prepare for AP exams. There are fees associated with these assessments.
- Texas Success Initiative Assessment (TSI) The TSI is a measure of college readiness given to high school students. Students who are planning to take dual credit courses during their high school years must take and pass the TSI to be eligible. The following are performance exemptions for the TSI exam:
  - o **ACT** Obtaining a composite score of 23 or higher, with English and math score of 19 or higher.
  - O **SAT** –For students taking the SAT after March 5, 2016, they need a math score of 530, a reading score of 480 and a writing score of 480. No composite score is needed.

#### Minimum scores for TSI testing are:

- Mathematics: 950-990 OR 910-949 and Diagnostics Score of 6 or Higher
- English, Language Arts, & Reading: 945-990 AND an Essay Score of 5-8 OR 910-944, Diagnostics Score of 5 or 6 AND an Essay score of 5-8

TSI scores are valid for five years from the date of testing. It is recommended students download the TSI Study App by going to Accuplacerpractice.collegeboard.org.

# **FINANCIAL AID**

Financial aid can make higher education at a college, university, or technical school more accessible. The basic types of student aid are grants, scholarships, loans, tuition exemptions, and work-study. Sources of financial assistance include the federal and state governments, local banks, or credit unions, civic or church groups, student's and parents' employers or unions, and the college itself. When you request information from colleges, remember to ask for financial aid information, forms, and instructions. Some funds are limited and awarded on a first come, first-serve basis, so apply early in your senior year. Pay attention to all published deadlines. Your best source of information is the financial aid office at the college you wish to attend.

#### Free Application for Federal Student Aid (FAFSA)

Completion of the FAFSA or TASFA is a graduation requirement for all students enrolled in a Texas public school district. Students in Grade 12 must complete and submit a free application for federal student aid (FAFSA) or a Texas application for state financial aid (TASFA) before graduating from high school. All colleges will ask you to file a FAFSA if you are applying for financial aid. You must complete the FAFSA online as soon as possible after October 1st of your senior year. Student and parent income tax returns must be available when completing the FAFSA. Information from this form is used to determine eligibility for federal and state aid. You will need to work closely with the college financial office at the college you plan to attend. To apply for federal financial aid, you must:

- Be a U.S. citizen, permanent resident, or eligible non-citizen.
- Have a valid Social Security number.
- Have a high school diploma or a GED, and
- Be enrolled or accepted as a regular student working toward a degree or certificate in an eligible program.

The Texas Financial Aid Information Center (TFAIC) is a free public service available to all Texas students and families wanting to pursue a higher education. The center serves as a one-stop resource for schools, students, and families who have questions about financial aid eligibility, the application process, state financial aid programs, education-related tax benefits, and more. For help, call 1-888-311-8881.

# **Scholarships**

The freshman year is the time to start preparing for the stiff competition for scholarships that students face in their senior year of high school. Involvement in extra-curricular activities, community activities, clubs, organizations, and volunteer work are of vital importance in the pursuit of scholarships. Preparation includes taking a rigorous foundation of academic courses. This will enable you to score higher on ACT and SAT exams by being better prepared. ACT/SAT exams should be initially taken in the spring of the junior year. ACT/SAT scores, class rank, grade point average (GPA), and involvement are key factors in scholarship competitions. Additional ACT/SAT exams should be taken as needed to boost scores. Students are encouraged to keep a detailed list of activities each year for reference as a senior when applying for college admissions and scholarships.

# **Texas Grant Program (Contingent on funding)**

Students graduating under the Distinguished Achievement Program or the Foundations with Endorsement Plan may be eligible for the Texas Grant. Eligible students must complete the Free Application for Federal Student Aid (FAFSA) in early fall of their senior year to determine financial need. For information about the Texas Grant and other financial aid options, contact the Texas Financial Aid Information Center by calling 1-888-311-8881 (toll free) or visiting <a href="https://www.collegeForAllTexans.com">www.collegeForAllTexans.com</a>.

# **EARLY ADMISSION PROGRAM**

Students may enroll in Tyler Junior College provided the following conditions are met:

- Obtain written approval of both your counselor and parent or guardian.
- Meet enrollment requirements at Tyler Junior College.
- Give written permission to Tyler Junior College to release attendance and grade reports to Tyler ISD.

# NCAA COLLEGE – BOUND STUDENT ATHLETES

If you are planning to enroll in college and participate in Division I or Division II athletics, you must be certified by the NCAA Initial-Eligibility Clearinghouse. Visit <a href="www.eligibilitycenter.org">www.eligibilitycenter.org</a>. Important changes are posted annually.

# **COLLEGE INFORMATION WEBSITES**

AP/College Board Information - - https://apstudent.collegeboard.org

Comprehensive website - - www.collegeforalltexans.com

Free Application for Federal Student Aid - - www.fafsa.ed.gov

Get your FSA ID# (Both you and your parents need one) - - www.pin.ed.gov

Generation Texas (inspiration and information on going to college) - - http://gentx.org

Information about colleges and universities in Texas -- www.everychanceeverytexan.org

NCAA Clearinghouse (Intercollegiate Athletic Eligibility) - - www.eligibilitycenter.org

Online application for state colleges and universities in Texas - - www.applytexas.org

Online application for selective colleges and universities - - www.commonapp.org

Register for SAT/send scores to colleges - - www.collegeboard.org

Register for ACT/send scores to colleges - - www.act.org

Students should be aware that websites may sell personal data

Texas College website - - <u>www.texascollege.edu</u>

Texas Higher Education Coordinating Board - - www.thecb.state.tx.us

TJC website - - www.tjc.edu

Tyler ISD website - <a href="https://www.tylerisd.org">www.tylerisd.org</a>

User friendly career/college search website - - nces.ed.gov/collegenavigator

UT Tyler website- - www.uttyler.edu

# STUDENT TIMELINE FOR COLLEGE ADMISSION

#### **FRESHMAN YEAR**

- Get to know your high school counselor
- Participate in school activities and organizations
- Look for opportunities for leadership and community service
- Attend local college fairs
- Start a student profile of activities and honors. Save it and update it annually.
- Take challenging courses (Pre-AP) for college preparation
- Study hard and keep grades high to earn the best possible class rank

#### **SOPHOMORE YEAR**

- Explore college choices on the internet and visit campuses
- Prepare for SAT/ACT and college by taking the most rigorous courses you can handle
- Attend College Night at TJC in November
- Continue school activity involvement and volunteer work
- Update student profile

# JUNIOR YEAR (Fall)

- Take PSAT-NMSQT in October
- Attend College Night at TJC in November
- Visit with College Admission Representatives
- Challenge yourself with rigorous courses

# JUNIOR YEAR (Spring)

- Take SAT or ACT in spring semester (fee waivers are available for students with financial need)
- Take SAT Subject Tests in late spring or June if you are considering a school that requires them
- Narrow college choices to a short list
- Visit websites for admission information and deadlines
- Continue to challenge yourself with Pre-AP and AP courses
- Continue school activity involvement. Update student profile
- Visit college campuses take a tour
- If planning to play college athletics, register with the NCAA Clearing House at the end of your junior year
- Take AP examinations for courses taken

#### **SENIOR YEAR (Fall)**

- Check admissions, housing, and scholarship deadlines for schools still on your list (Many are as early as November)
- File FAFSA (Free Application for Federal Student Aid) (Federal Financial Aid Form) as early as possible after October 1st
- Get organized. Mark your calendar with deadline alerts. Make files for each school and scholarship
- Attend College Night at TJC in November
- Take SAT or ACT again if necessary (to try for higher score) and SAT Subject Tests if needed
- Make sure SAT/ACT/AP scores and transcripts have been forwarded to colleges in which you have interest
- Use the internet for scholarship search, plus college websites for campus scholarships
- Update and fine-tune your student profile. Do not forget to include community service, volunteering, summer enrichment study/travel, and part-time work

#### **SENIOR YEAR (Spring)**

- Attend Financial Aid Nights at area colleges or your high school
- Take TSI if you are attending a Texas public college or university (if not EOC, ACT or SAT exempt)
- Wait for decisions from institutions. Make final decision and notify college of your choice
- Take AP Exams for courses taken through your high school years

#### **College Admission Exams (ACT & SAT)**

All students should take the SAT and/or the ACT in the spring of their junior year or as early as possible in the senior year. For more information, please visit their associated websites: ACT (<a href="www.act.org">www.act.org</a>) and SAT (<a href="www.act.org">www.act.org</a>). SAT Reasoning Test and SAT Subject Tests cannot be taken on the same date.

# **Apply Texas**

The "Apply Texas" Application for state colleges and universities is available online at <a href="https://www.applytexas.org">www.applytexas.org</a>. This is the common application used by all state colleges and universities.

# **Transcripts**

Each student will receive one official high school transcript (free of charge) upon graduation from high school. Students can order additional transcripts from the Registrar's office for \$2.00 each. Please allow 48 hours for processing.

#### **College Scholarships**

The best sources of scholarship information are periodic campus correspondence, campus websites, college websites, and college recommended internet search engines. Check with each college to which you are applying to make sure you receive their scholarship forms and meet their scholarship criteria and deadlines.

College admission and scholarship applications will have strict deadlines that must be observed. Students needing information or recommendations from counselors, teachers, or other school personnel must complete a student information sheet and present it to the recommender <u>at least three weeks</u> prior to the due date of any recommendation. Shorter notices do not allow enough time to prepare the best recommendation.

#### **Dual Credit**

- May high school students receive college credit? Yes. Under Texas law, qualified high school
  students may receive college credit, thereby reducing the time and attendance expense for their
  college education. The one way is through dual enrollment, and another is advanced placement.
- What is the difference between the two?
  - O "Dual Credit" means that a high school student enrolls for a course, which is taught on the ECHS, Tyler High, or LEGACY campus or on a college campus, and may receive both high school and college credit for that one course. Tuition and fees charged by the college are paid by the high school student. Reduced fees are available for students on free and reduced lunch. Classes are taught by college faculty or approved high school faculty.
  - "Advanced placement/college credit" means that a student enrolls in an AP course in high school taught by a properly certified high school teacher, completes the course, and receives college credit only upon both satisfactory completion and acceptable scoring of an advanced placement examination from the College Board AND posting to an official transcript by an accredited college.

- Which students are "qualified" for dual credit for next year? High school students wishing to take a dual credit course must meet admission requirements for a public two-year college, except for high school graduation. Students must be TSI-exempt or must take and meet college standard on the TSI in the subject area for the course in which they plan to enroll. Students must successfully complete their dual credit courses with a grade of "C" or better to be eligible to enroll in subsequent dual credit courses.
- Who Benefits? Dual credit is a win/win situation for both the student and the State. The student is saved the expense of repeating courses in college that may be like those taken in high school. The State benefits by saving operating expenses for students attending college and taking courses similar to high school courses.
- Please be aware that some Dual Credit classes may be delivered in an online format. Check with the
  high school instructor or counselor and ask any questions you might have before you register and pay
  your fees.
- Before enrolling in an AP or Dual Credit course please be aware that public and private colleges and
  universities have policies and procedures in place to determine how they award credit for college
  courses taken while still in high school. It is the responsibility of the student and his/her
  parent/guardian\_to contact the post-secondary institutions directly as to determine their policy for
  awarding credit.

# Profile of a successful Advanced/Pre-AP/AP/Dual Credit Student:

- Has scored the advanced academic level on the required EOC tests
- Highly motivated and professes an interest in the subject selected
- Develops and maintains excellent study skills and habits
- Carefully considers time commitments and balances academic load with family life and outside activities
- Asks questions and participates in class
- Perseveres when faced with challenging material
- Asks for assistance when needed
- Plans and works ahead on long term projects

#### **Career & Technology Education**

Students are encouraged to take a Principles of Career & Technology Education (CTE) course during their 9th grade year to be prepared to take advanced CTE courses at the Tyler ISD Career & Technology Center during their 11th and/or 12th grade years. Some CTE Pathways require students to take CTE courses all four years to reach the highest level of the program and earn advanced certifications.

# **GRADUATION REQUIREMENTS**

To graduate, a student must complete the courses required by the District in addition to those mandated by the state. Tyler Independent School District requires completion of one credit in addition to the number mandated by the state to graduate. District required electives include health, senior seminar, speech, and world geography.

#### FOUNDATION WITH ENDORSEMENT GRADUATION PROGRAM

**Foundation Program** - Basic course credits that all students must complete **Endorsement** - Additional credits required to pursue college and career goals and/ or personal academic interests

English	4
Math (including Algebra II)	3
Science	3
Social Studies	3
Foreign Language	2
Fine Arts	1
Physical Education	1
Electives (Health, Speech, Sr. Seminar & Wgeo)	6

FOUNDATION TOTAL 23 Credits

# **ENDORSEMENT CREDITS (4)**

4th Math 1
4th Science 1

Endorsement Electives 2 (Advanced CTE)

ENDORSEMENT TOTAL 4 Credits

FOUNDATION WITH ENDORSEMENT TOTAL 27 Credits

#### **ENDORSEMENT OPTIONS**

- STEM
- Business & Industry
- Public Service
- Arts & Humanities
- Multi-Disciplinary Studies

Additional endorsements may be earned by completing the Endorsement Credits or special requirements. Endorsement electives may serve as Foundation electives as well.

# **COURSE SELECTION PROCESS**

Students are encouraged to study the graduation plan of their choice and to take courses that will meet the requirements of their graduation plan. Classes with fewer than fifteen (15) students may not be offered. Students should always select alternate choices. The District will make every effort to meet all course requests within the context of scheduling and teacher availability.

High school level courses are designed for students who are working at grade level. These courses are offered to meet the needs of students who plan to attend a university, college, community college, or technical school. In addition, the District offers specialized classes for English Language Learners, Advanced Studies, Career and Technical Education and Special Education.

# **Career Preparation**

Choose courses that interest and challenge you as well as prepare you for the future. Match your interest and academic abilities to enable you to develop a career pathway for the future. Choices you make during high school years will determine the choices available to you later in life. High School provides you opportunities to identify and explore your interests and abilities. The process is not an easy one, but that discovery can allow you to begin to develop your plans for college and a career before many of your peers.

# **SCHEDULE CHANGES**

Fall schedule changes are only allowed for errors and prerequisite requirements. Elective choices made in the spring are final. To solve schedule conflicts, counselors may substitute an alternative for an elective. Because of the potential effect on class size, counselors cannot accommodate teacher change requests, "change of mind" requests, or lunch preferences. Necessary schedule changes (listed below) will only be made during the first 2 weeks of school.

# Valid reasons for a schedule change:

- Student has already earned credit for the class in which he/she is enrolled
- The student has not met a prerequisite for the course
- ARD committee decision
- Work-based learning program students who do not have a job by the deadline
- Student has failed the course under the same teacher, another teacher is available, and there is no negative impact on class size

Course requests for the 2024-2025 school year may not be changed after Friday, February 23, 2024.

# GUIDELINES FOR DROPPING ADVANCED, PRE-AP and AP CLASSES

Dropping from an Advanced, Pre-AP or AP class to an on-level class will not be considered until the end of the first six-week grading period (progress report) and at the end of the first semester. Dropping from a semester long Advanced, Pre-AP or AP class offered in the spring will not be considered until the end of the first six-week grading period (progress report) of that semester. A student wishing to drop to an on-level class must submit the appropriate form to his/her assigned counselor within five school days of receiving the 2<sup>nd</sup> progress report or 1st nine-week report card. Required documentation for requesting a level change include the following:

- Schedule Change Form (available in the counseling office)
- Parent/teacher/student conference held
- Minimum of three (3) tutorials attended
- Principal approval
- All required signatures, including principal approval, must be on the form before presenting it to the counselor for a schedule change.

# **AP (Advanced Placement) EXAMS**

Students enrolled in AP classes are expected to prepare for and take the corresponding AP examination. The College Board AP Exams are given each year during the first two weeks of May and are administered during the school day. Each exam is approximately three hours and covers college-level content in a specific course. Individual tests may vary in format, but generally consist of both timed multiple choice and essay questions. Foreign Language exams include a speaking and listening section. Scores range from 1-5, with most colleges awarding credit for scores of 3 or higher. For more information, visit the AP website at: <a href="https://apstudent.collegeboard.org/home">https://apstudent.collegeboard.org/home</a> Payment for AP Exams are due in the fall.

# TSI (Texas State Initiative) ASSESSMENT

#### Requirements

Texas law requires a TSI Assessment for all non-exempt undergraduate students entering a Texas public institution of higher learning for the purpose of placement. Students must take the TSI Assessment or an approved alternative test prior to enrolling in any college-level course work. The TSI Test is a computer-adaptive test measuring skills in Reading, Writing, and Mathematics. Any student who is attempting to enroll in college-level coursework and who is not exempt from the testing requirements must take the TSI Assessment. Check with your counselors regarding exemption requirements.

# Registration

Early College High School students must take the TSI Assessment before the spring semester of their 9<sup>th</sup> grade year. ECHS students will be registered by their counselor. Students attending Legacy or Tyler High must either take and pass the TSI or earn an exemption prior to beginning a dual credit class.

# ADVANCED ACADEMICS PROGRAM

Pre-AP Program Advanced Track Grades 9-12

Advanced Placement Program Grades 9-12

Tyler ISD/TJC Dual Credit Program Grades 10-12 Information and Guidelines

Advanced Courses (ADV): Advanced courses are developed locally. It is neither a prescribed set of courses nor a prescribed curriculum. It is a group of locally developed methods (skills and concepts taught) to determine student progress towards Advanced Placement standards. It is not a requirement for students to have been identified for the Tyler ISD gifted/talented program to take Advanced courses. Students should, however, have passed EOC or STAAR on the first test administration, be a strong B or C average student, be well disciplined in class, and be motivated toward their own academic success.

**Pre-AP Program (Pre-AP)**: The Pre-AP Program is a program offered to schools by College Board. Pre-AP courses deliver grade-level appropriate instruction through focused course frameworks, instructional resources, classroom assessments for learning, and collaborative educator workshops. They are designed to support all students across varying levels of abilities. They are not honors or advanced courses. The Program components provide educators and their students the space and time for deep engagement with content.

College Board Advanced Placement (AP) Courses: The Advanced Placement (AP) Program is a collaborative effort between secondary schools, colleges, and universities. Advanced Placement courses must be authorized by a College Board audit for students to earn AP credit for AP courses. The AP Program offers students college-level material with rigor and challenge. Students have an opportunity to show mastery of the material by taking an AP exam in the spring. Students are charged a fee for each AP exam they take. Reduced fees are available for students on free and reduced lunch. Colleges and universities may grant credit, provide placement, or both based on varied levels of student performance on an AP exam.

**Dual Credit (Tyler ISD/Tyler JC) Courses**: Dual Credit means that a high school student enrolls for a course, which is taught on the ECHS, Tyler High, or LEGACY campus or on a college campus, and may receive both high school and college credit for that one course. Tuition and fees charged by the college are paid by the high school student. Classes are taught by college faculty or approved high school faculty. High school students wishing to take a dual credit course must meet all admission requirements for Tyler Junior College, except high school graduation. Students must be TSI-exempt or meet college standard on the TSIA in the subject area for the course in which they plan to enroll. Students must complete their dual credit courses with a grade of "C" or better to be eligible to enroll in subsequent dual credit courses.

**Summer Assignments for Pre-AP/AP Courses:** Some Pre-AP and AP classes may require summer reading or summer assignments. Students must complete the summer assignments prior to the first day of classes and be prepared for immediate assessments, discussions, journals, blogs, and/or compositions during the first week of school. Failure to complete summer assignments is not a justification for dropping a course.

Courses listed in italics will count toward class rank for students entering High School per policy EIC (LOCAL)

# ADVANCED/PRE-AP/AP/DUAL CREDIT COURSE LISTING

# **ENGLISH**

- Advanced Academics -

Pre-AP ENGLISH 1

Grade: 9 Credit: 1

Prerequisite: None Test Fee: No

- preparation to enter the 11<sup>th</sup>, 12<sup>th</sup> grade AP or Concurrent English Program (college level courses)
- oral discussion skills, critical thinking skills
- analytic skills-interpreting a variety of world literature (fiction/non-fiction for literary devices, rhetorical purpose, and genre characteristics
- composition skills-documented essays using primary and secondary sources, complex sentence structure, mechanics, vocabulary
- summer reading required

#### Pre-AP ENGLISH 2

**Grade:** 10 **Credit:** 1 **Prerequisite:** English 1 (PAP preferred)

- requisite: English 1 (PAP preferred)

   a higher level of complexity from English 1 Pre-AP in preparation for the 11<sup>th</sup>, 12<sup>th</sup> grade AP and
- Concurrent Program (college level courses), oral discussion skills, critical thinking skills
   analytic skills interpreting a variety of world literature (fiction/non-fiction) for literary devices,
- rhetorical purpose, and genre characteristics
   composition skills documented essays using primary and secondary sources, complex sentence
- composition skills documented essays using primary and secondary sources, complex sentence structure, mechanics, vocabulary
- summer reading required

#### AP ENGLISH LANGUAGE AND COMPOSITION 3

Grade: 11 Credit: 1

Prerequisite: English 1 & 2 (PAP preferred)

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidenced-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

# ENGLISH 3 (2 semesters) & TJC ENGLISH 1301 (3 hours)/TJC ENGLISH 1302 (3 hours) - -DUAL CREDIT

Grade: 11 Credit: 1

Prerequisite: TSI exempt or passed TSI Reading & Writing

Tuition & Book: Yes

- a high level of complexity in critical thinking
- a high level of complexity in analytic skills interpreting a variety of American literature (fiction/non-fiction) for literary devices, rhetorical purpose, and genre characteristics
- oral discussion skills, stylistic maturity in composition skills documented essays using primary and secondary sources, complex sentence structure, mechanics, vocabulary
- individual/small group independent study, reading & projects
- students receive credit for English 1301 and 1302
- summer reading may be required

#### **ENGLISH LANGUAGE AND LITERATURE 4 AP**

Grade: 12 Credit: 1

**Prerequisite:** English 1, 2 & 3 (PAP/AP preferred)

The AP Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

# ENGLISH 4 (2 semesters) & TJC ENGLISH 2332 (3 hours)/TJC ENGLISH 2333 (3 hours) - - DUAL CREDIT

Grade: 12 Credit: 1

Prerequisite: TSI exempt or passed TSI Reading & Writing

Tuition & Book: Yes

- a high level of complexity in critical thinking
- a high level of complexity in analytic skills interpreting a variety of British/World literature (fiction/non-fiction)
- oral discussion skills
- literary devices, rhetorical purpose, genre characteristics, oral discussion skills
- stylistic maturity in composition skills documented essays using primary and secondary sources, complex sentence structure, mechanics, vocabulary
- individual/small group independent study, reading, and writing
- students receive credit for English 2332 and 2333
- summer reading may be required

# **MATHEMATICS & COMPUTER SCIENCE**

# - Advanced Academics -

#### Pre-AP ALGEBRA 1

Grade: 9 Credit: 1

Prerequisite: 8th Grade Math (or equivalent)

Test Fee: No

Students follow the College Board Framework to develop a deep understanding of linear relationships emphasizing patterns of change, multiple representations of functions and equations, modeling real world scenarios with functions, and methods for finding and representing solutions of equations and inequalities as an extension of regular Algebra 1 topics.

#### **Pre-AP GEOMETRY WITH STATISTICS**

Grade: 9-10 Credit: 1

Prerequisite: Algebra 1 (PAP preferred)

Test Fee: No

Students follow the College Board Framework to use the mathematical knowledge and skills they have developed previously to problem solve across the domains of algebra, geometry, and statistics as an extension of regular Geometry topics.

#### Pre-AP ALGEBRA 2

**Grade:** 9-11 **Credit:** 1 **Prerequisite:** Algebra I (PAP preferred)

Prerequisite: Algebra I (PAP preferred)

Students follow the College Board Framework to build upon linear, quadratic, and exponential functions as

they work to define logarithmic, polynomial, rational, square root, cube root, and trigonometric functions. Quantitative literacy is developed by weaving data sets, contextual scenarios, and mathematical modeling throughout the course as an extension of regular Algebra 2 topics.

# ADVANCED QUANTITATIVE REASONING = CONTEMPORARY MATH 1315 - DUAL CREDIT Tyler High Only

Grade: 12 Credit: 1

This course focuses on conveying the power of mathematics by showing a variety of problems that can be modeled and solved by quantitative means. This course will give a broad sense of what math is about and how it applies to everyday life. Some topics this course may include are Management Science, Statistics, The Science of Data, Voting and Social Choice, Fairness and Game Theory, The Digital Revolution, On size and Growth, and Your Money and Resources. (McMurry University)

#### AP PRECALCULUS

Grade: 10-12 Credit: 1

**Prerequisite:** Geometry and Algebra 2 (PAP preferred)

AP Precalculus is designed to prepare students for college-level calculus and provide grounding for other math and science courses. During this course, students acquire and apply mathematical tools in real-world modeling situations, develop and hone symbolic manipulation skills, and develop a deep conceptual understanding of functions.

#### PRECALCULUS A (1 semester) = TJC COLLEGE ALGEBRA 1314 (3 hours) - - DUAL CREDIT

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: Algebra 2 & TSI exempt or TSI Math score of 350 Tuition & Book: Yes

This college level course is an in-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series,

probability, and conics may be included.

# INDEPENDENT STUDY MATH A (1 semester) = TJC COLLEGE STATISTICS 1342 (3 hours) - - DUAL CREDIT

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: Algebra 2 & TSI exempt or TSI Math score of 350 Tuition & Book: Yes

This college level course focuses on the collection, analysis, presentation and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

#### PRECALCULUS B (1 semester) = TJC COLLEGE PRE-CALCULUS 2412 (4 hours) - - DUAL CREDIT

**Grade:** 11-12 **Credit:** 0.5 **Prerequisite:** TIC College Algebra 13

Prerequisite: TJC College Algebra 1314 Tuition & Book: Yes

This college level course is an in-depth study of algebra, trigonometry, and other topics for calculus readiness.

#### STATISTICS AP

**Grade:** 11-12 **Credit:** 1 **Prerequisite:** Algebra 2 and Geometry

Test Fee: Yes

Test Fee: Yes

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling, and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

#### CALCULUS AB AP

Grade: 11-12 Credit: 1

**Prerequisite:** Pre-Calculus (ADVANCED preferred)

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

#### CALCULUS BC AP

Grade: 11-12 Credit: 1

Prerequisite: Calculus AB AP Test Fee: Yes

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in Calculus AB to different types of equations and introduces the topic of sequences and series. The course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically,

and verbally, and to make connections amongst these representatives. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

#### AP COMPUTER SCIENCE A

**Grade:** 11-12 Credit: 1 **Prerequisite:** Algebra 2 (PAP preferred)

AP Computer Science A is equivalent to a first semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Test Fee: Yes

# **SCIENCE**

- Advanced Academics -

Pre AP BIOLOGY

Credit: 1 **Grade:** 9

Prerequisite: None Test Fee: No

- independent research on current biological topics
- biology topics including:
  - cellular processes
  - kingdoms of life and ecology
  - anatomy and physiology of living things
  - graphing, thinking, and writing skills
  - experimental design
- prepare for entrance into Biology AP

#### Pre-AP CHEMISTRY

**Grade:** 10-12 Credit: 1

**Prerequisite:** One HS Science and Algebra 1

- Test Fee: No advanced problem-solving skills, and laboratory experiences
- study of composition and changes of matter
- college level preparatory skills

#### AP BIOLOGY

Grade: 11-12 Credit: 1

Prerequisite: Biology and Chemistry (PAP preferred)

Test Fee: Yes

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: cellular processes - energy and communication, genetics, information transfer, ecology, and interactions.

#### AP CHEMISTRY

Grade: 11-12 Credit: 1

**Prerequisite:** Chemistry and Algebra 2 (PAP preferred)

AP Chemistry provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

**Test Fee:** Yes

Test Fee: Yes

#### AP ENVIRONMENTAL SCIENCE

Grade: 11-12 Credit: 1

**Prerequisite:** PAP Math, one year life science and one year physical science (PAP preferred) **Test Fee:** Yes The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

SCIENTIFIC RESEARCH AND DESIGN A DUAL CREDIT-TJC BIOL 1408 Biology for Non-Science Majors I (4 Hours)

**Grade:** 11-12 **Credit:** 0.5

**Prerequisite:** TSI Exempt

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

## **AP PHYSICS 1**

Grade: 11-12 Credit: 1

**Prerequisite:** Algebra1, Geometry and Chemistry (PAP preferred)

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.

#### AP PHYSICS 2

Grade: 11-12 Credit: 1

Prerequisite: Physics 1 AP

Test Fee: Yes

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and

dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.

AP PHYSICS C: MECHANICS
Grade: 11-12 Credit: 1

Prerequisite: Calculus AB

In this course, students will Explore concepts such as kinematics; Newton's laws of motion, work, energy, and power; systems of particles and linear momentum; rotation; oscillations; and gravitation. Students will participate in hands-on laboratory work and in-class activities to investigate phenomena and use calculus to solve problems

SCIENTIFIC RESEARCH AND DESIGN B DUAL CREDIT-TJC BIOL 1409 Biology for Non-Science Majors II (4 Hours)

**Grade:** 11-12 **Credit:** 0.5 **Prerequisite:** TSI Exempt and BIOL 1408

This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology.

#### **SOCIAL STUDIES**

- Advanced Academics -

#### Pre-AP WORLD HISTORY AND GEOGRAPHY

Grade: 9 Credit: 1

Prerequisite: None Test Fee: No

Pre-AP World History and Geography focuses deeply on the concepts and skills that have maximum value for high school, college, careers, and civic life. The course builds students' essential skills and confidence and helps to prepare them for a range of AP history and social science coursework during high school, including AP World History. In this course, students learn that historians and geographers are investigators intent on using the tools of their disciplines to uncover new evidence about the world and its inhabitants.

#### AP WORLD HISTORY

Grade: 10 Credit: 1

Prerequisite: World Geo or World History and Geography PAP

Test Fee: Yes

The AP World History course focuses on developing students' understanding of the world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places

encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

# AP UNITED STATES HISTORY Grade: 11-12 Credit: 1

Prerequisite: World History Test Fee: Yes

AP United States History focuses on the development of historical thinking skills (chronological reasoning, comparing, and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of students' abilities to think conceptually about United States history from approximately 1491 to the present. Seven themes of equal importance - American and National Identity; Migration and Settlement; Politics and Power; Work, Exchange, and Technology; America in the World; Geography and the Environment; and Culture and Society - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of United States history to teach topics of their choice in depth.

US HISTORY (2 semesters) & TJC US HISTORY 1301 (3 hours)/TJC US HISTORY 1302 (3 hours) -- DUAL CREDIT

Grade: 11 Credit: 1

Prerequisite: TSI exempt or passed TSI Reading & Writing

Tuition & Book: Yes

- this course emphasizes a high level of complexity in critical thinking. The focus will be on pre-1865 history with a review of US History since 1865. To develop students' research and analytical and writing skills, an in-depth study of documents and other relevant texts will be completed.
- students receive TJC credit for US History

#### UNITED STATES GOVERNMENT AND POLITICS AP

Grade: 12 Credit: 0.5

Prerequisite: None Test Fee: Yes

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments.

#### GOVERNMENT (1 semester) & TJC GOVERNMENT 2305 (3 hours) - - DUAL CREDIT

Grade: 12 Credit: 0.5

Prerequisite: TSI exempt or passed TSI Reading

Tuition & Book: Yes

This college-level course is a study of the political and governing processes, elements of political theories, and governmental structures, powers, and functions at the national, state, and local levels. Significant focus of the course is on the US Constitution and Amendments. This course moves at a fast pace and uses college-level textbooks and resources. Students will be expected to demonstrate advanced skills in reading, writing, analysis, research, and independent study. Successful completion of this course will provide credit for the high school US Government requirement as well as dual credit through TJC. Students must meet the dual credit enrollment criteria.

#### AP MACROECONOMICS

Grade: 12 Credit: 0.5

Prerequisite: None Test Fee: Yes

AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

# ECONOMICS (1 semester) & TJC ECONOMICS 2301 (3 hours) -- DUAL CREDIT

Grade: 12 Credit: 0.5

Prerequisite: TSI exempt or passed TSI Reading

Tuition & Book: Yes

This college-level course covers the following key concepts: scarcity, opportunity cost production possibilities

curve, factors of production and incomes, circular flow model, and supply and demand

#### AP EUROPEAN HISTORY

Grade: 11-12 Credit: 1

Prerequisite: None Test Fee: Yes

AP European History focuses on developing students' understanding of European history from approximately 1450 to the present. The course has students investigate the content of European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; and individual and society) that students explore throughout the course to make connections among historical developments in different times and places.

#### **AP PSYCHOLOGY** (paired with Advanced Health)

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: None Test Fee: Yes

AP Psychology introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation, and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims, and evidence, and effectively communicate ideas.

# **PSYCHOLOGY DUAL CREDIT-TJC 2301** General Psychology (3 Hours)

**Grade:** 11-12 **Credit:** 0.5

**Prerequisite:** TSI Exempt

General Psychology is a survey of the major psychological topics, theories, and approaches to the scientific

study of behavior and mental processes.

# LANGUAGES OTHER THAN ENGLISH

# - Advanced Academics -

#### AP COMPUTER SCIENCE A

Grade: 11-12 Credit: 1
Prerequisite: Algebra 2 (PAP preferred)

AP Computer Science A is equivalent to a first semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Test Fee: Yes

#### AP COMPUTER SCIENCE PRINCIPLES

Grade: 10-11 Credit: 1

Prerequisite: None Test Fee: Yes

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems-including the internet-work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

#### **CHINESE 1 ADVANCED**

Grade: 9-11 Credit: 1

Prerequisite: None Test Fee: No

Advanced Chinese is designed to prepare students for Chinese II Advanced with the ultimate goal being take the AP Chinese Language and Culture test.

#### **CHINESE 2 ADVANCED**

Grade: 9-12 Credit: 1

**Prerequisite:** Chinese I

Advanced Chinese is designed to prepare students for a Chinese Language and Culture course. This course emphasizes students, listening, speaking, reading, and writing skills and Chinese cultural studies are also included in the curriculum so that students' multicultural awareness is strengthened in the teaching and learning process.

#### **CHINESE 3 ADVANCED**

Grade: 9-12 Credit: 1

**Prerequisite:** Chinese 2

This course emphasizes students, listening, speaking, reading, and writing skills and Chinese cultural studies are also included in the curriculum so that students' multicultural awareness is strengthened in the teaching and learning process.

#### **CHINESE 4 AP**

**Grade:** 9-12 Credit: 1

Prerequisite: Chinese 3

The AP Chinese Language and Culture course in Mandarin Chinese emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Chinese Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese.

#### SPANISH 1 ADVANCED

**Grade:** 9-11 Credit: 1

**Prerequisite:** None Test Fee: No

- an expansion of the on-level language class, designed to provide opportunities for talented language students beyond those available in the regular language classes
- stresses the development of low/intermediate proficiency in oral skills, accurate comprehension of contemporary and cultural reading passages
- expands the use of grammatical constructions and vocabulary and begins the development of expository composition
- culturally related activities and regions are explored
- preparation to enter the AP program

#### SPANISH 2 ADVANCED

**Grade:** 9-12 Credit: 1 **Prerequisite:** Spanish 1 (or equivalent)

Test Fee: No an expansion of the on-level language class, designed to provide opportunities for talented language

- students beyond those available in the regular language classes stresses the development of low/intermediate proficiency in oral skills, accurate comprehension of contemporary and cultural reading passages
- expands the use of grammatical constructions and vocabulary and begins the development of expository composition
- culturally related activities and regions are explored
- preparation to enter the AP program

#### **SPANISH 3 ADVANCED**

**Grade: 9-12** Credit: 1

Prerequisite: Spanish 1 and 2 (or equivalents)

- Test Fee: No
- grammar and vocabulary skills to develop speaking and writing proficiency listening, reading, speaking skills to develop speaking, and reading proficiency
- writing/organizational skills to develop competency in composition development
- preparation to enter the AP program

#### SPANISH LANGUAGE AND CULTURE 4 AP

Grade: 10-12 Credit: 1

**Prerequisite:** Spanish 1, 2, and 3 (or equivalents) **Test Fee:** Yes

AP Spanish Language and Culture emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

#### SPANISH LITERATURE AND CULTURE 5 AP

Grade: 11-12 Credit: 1

**Prerequisite:** Spanish 1, 2, 3 and 4 (or equivalents)

AP Spanish Literature and Culture uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism).

# **ELECTIVES**

# - Advanced Academics -

**AP SEMINAR** 

Grade: 10-12 Credit: 1

Prerequisite: None

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments.

#### AP RESEARCH

Grade: 11-12 Credit: 1

Prerequisite: AP Seminar

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

For more information on the AP Capstone Diploma Program, please visit College Board at <a href="https://apcentral.collegeboard.org/courses/ap-capstone">https://apcentral.collegeboard.org/courses/ap-capstone</a>

#### **ARTS & MUSIC**

- Advanced Academics -

Pre-AP ART 1

Grade: 9-12 Credit: 1

**Prerequisite:** None (middle school art preferred)

Course is designed for the advanced, dedicated artist with a focus on drawing, painting, and other 2-D media and geared towards students who have taken Art 1 and Art 2 in middle school. The majority of the students will take Pre-AP 2 the following year and AP studio portfolio junior or senior year. The class is rigorous and focused, but the students develop their skills at a deeper level and are surrounded by students with similar motivation

Test Fee: No

#### Pre-AP ART 2

Grade: 10-12 Credit: 1

Prerequisite: PAP Art 1 Test Fee: No

Pre-AP Studio Art 2 is designed for students who are seriously interested in the practical experience of art and is geared towards students interested in pursuing an AP portfolio in their junior or senior year. Work is directed towards the AP Portfolio, and the goal of this class is to prepare students for the AP Studio art program, which enables highly motivated students to do college-level work in studio art while still in high school. Pre-AP work does involve more time and commitment than non-PAP art courses and therefore is intended for students seriously committed to studying art. Students make slide portfolios for final grade.

AP STUDIO ART: 2-D DESIGN

Grade: 11-12 Credit: 1

Prerequisite: Art 1 and any Art 2 class

Required: Submission of AP portfolio

AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The portfolios are created to correspond to the most common college foundation courses. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions.

Test Fee: Yes

Test Fee: Yes

#### AP STUDIO ART: DRAWING

Grade: 11-12 Credit: 1
Prerequisite: Art 1 and any Art 2 class

**Required:** Submission of AP portfolio

AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The portfolios are created to correspond to the most common college foundation courses. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions.

#### **AP ART HISTORY**

Grade: 10-12 Credit: 1

Prerequisite: None Test Fee: Yes

AP Art History is equivalent to a two-semester introductory college course that explores the nature of art, art making, and responses to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art.

# **FOUNDATION CURRICULUM**

#### Components

\*\*\*\*\*\*

Based on assessment data, students may be placed in an academic support class to ensure they pass required state assessments for graduation.

\*\*\*\*\*\*

Courses listed in **italics** will count toward class rank for students entering High School beginning with the 2013-2014 school year per policy EIC (LOCAL)

# **ENGLISH AS A SECOND LANGUAGE (ESL)**

All students who enroll in Tyler ISD will complete a home language survey. If the home language survey indicates a language other than English, students are evaluated for language proficiency. Students who are identified as Emergent Bilinguals (EB), receive Content-Based Language Instruction (CBLI) allowing EB students the opportunity to become proficient in English and to apply these competencies within a wide range of social and academic contexts

# **ENGLISH 1 FOR SPEAKERS OF OTHER LANGUAGES (ESOL1)**

Grade: 9-12 Credit: 1

**Prerequisite:** Concurrent enrollment in English Language Development and Acquisition I (ELDA1) Objectives and expectations are identical to those of English I. Emphasis is placed on vocabulary expansion, written and oral communication, reading comprehension and attentive listening. This course is designed to accelerate the non-English speaking student's social and academic English language acquisition. Course content is adapted and scaffolded as appropriate for student language proficiency levels. End of Course (EOC) tested. This course is designed for beginning to intermediate English-speaking students.

#### **ENGLISH II FOR SPEAKERS OF OTHER LANGUAGES (ESOL2)**

Grade: 10-12 Credit: 1

**Prerequisite:** Concurrent enrollment in English Language Development and Acquisition I (ELDA1) Objectives and expectations are identical to those of English II. Emphasis is placed on vocabulary expansion, written and oral communication, reading comprehension and attentive listening. This course is designed to accelerate the non- English speaking student's social and academic English language acquisition. Course content is adapted and scaffolded as appropriate for student language proficiency levels. End of Course (EOC) tested. This ESOL course is designed for beginning to intermediate English-speaking students.

#### **ENGLISH I LANGUAGE DEVELOPMENT AND ACQUISTION (ELDA 1)**

Grade: 9-12 Credit: 1

Prerequisite: Concurrent enrollment in English for Speakers of Other Languages I (ESOL I) or English

language arts course

The course will provide instructional opportunities for recent immigrant students with limited English proficiency. Through comprehensible input, students will accelerate second language acquisition and will be challenged to apply higher order thinking skills in all four language domains. Emphasis is placed on word recognition, vocabulary, comprehension strategies and fluency in order to provide students opportunities to listen, speak, read, and write with confidence. This course must be taken concurrently with a corequisite language arts course. This course is designed for beginning to intermediate English-speaking students with less than 3 years in the US.

#### **ENGLISH II LANGUAGE DEVELOPMENT AND ACQUISTION (ELDA 2)**

Grade: 10-12 Credit: 1

Prerequisite: Concurrent enrollment in English for Speakers of Other Languages II (ESOL II) or English language

arts course

The course will provide instructional opportunities for recent immigrant students with limited English proficiency. Through comprehensible input, students will accelerate second language acquisition and will be challenged to apply higher order thinking skills in all four language domains. Emphasis is placed on word recognition, vocabulary, comprehension strategies and fluency in order to provide students opportunities to listen, speak, read, and write with confidence. This course must be taken concurrently with a corequisite language arts course. This course is designed for beginning to intermediate English-speaking students with less than 3 years in the US.

#### **READING 2 SI**

Grade: 9-12 Credit: 1

**Prerequisite:** LPAC Placement (counselor approval required)

- reading skills for development and refinement
- extensive vocabulary development and word recognition utilizing listening, reading, writing, and speaking practices
- reading comprehension in narrative and expository text
- reading fluency

#### **PRACTICAL WRITING SKILLS**

Grade: 9-12 Credit: 1
Prerequisite: LPAC Placement

- academic support for advanced students of limited English proficiency as recommended by LPAC
- writing for a variety of audiences and purposes
- conventions and mechanics of written English to communicate clearly
- application of rules of usage and grammar
- recursive writing processes for self-initiated and assigned writing
- serves as support course for students taking English 1, English 2, English 3, and English 4

#### **CREATIVE WRITING SI**

Grade: 9-12 Credit: 1
Prerequisite: LPAC Placement

- academic support for advanced students of limited English proficiency as recommended by LPAC
- demonstrating skills in various forms of writing, such as fiction, short stories, poetry, and drama
- effectively applying conventions of usage and mechanics of written English
- developing peer and self-assessments for effective writing
- analyzing and discussing published and unpublished pieces of writing
- serves as support course for students taking English 1, English 2, English 3, and English 4

# **ENGLISH LANGUAGE ARTS**

#### **ENGLISH 1**

Grade: 9 Credit: 1

Prerequisite: None

- writing skills multi paragraph thesis development, grammar, punctuation, spelling, vocabulary
- reading comprehension skills figurative and literal language
- literature (fiction/non-fiction) from a variety of genres and world authors

Pre-AP ENGLISH 1 (for course information please refer to advanced academic listings in previous section)

#### **ENGLISH 2**

Grade: 10 Credit: 1

Prerequisite: English 1

- a wide range of elements of effective writing skills
- reading comprehension skills figurative and literal language, inference, summary
- literature (fiction/non-fiction) from a variety of world authors

Pre-AP ENGLISH 2 (for course information please refer to advanced academic listings in previous section)

# **ENGLISH 3**

Grade: 11 Credit: 1

Prerequisite: English 2

- independent study, reading and writing
- a high level of reading comprehension, critical thinking, analytic skills
- stylistic maturity in writing skills
- American literature from the Puritan Era to the present

**AP ENGLISH 3** (for course information please refer to advanced academic listings in previous section) **ENGLISH 3 DUAL CREDIT** (for course information please refer to advanced academic listings in previous section)

#### **ENGLISH 4**

Grade: 12 Credit: 1

Prerequisite: English 3

independent study, reading and writing

- a high level of reading comprehension, critical thinking, and analytic skills
- stylistic maturity in writing skills
- British/World literature (fiction/non-fiction)

**AP ENGLISH 4** (for course information please refer to advanced academic listings in previous section) **ENGLISH 4 DUAL CREDIT** (for course information please refer to advanced academic listings in previous section)

#### **COLLEGE PREPARATORY ENGLISH LANGUAGE ARTS**

Grade: 12 Credit: 1.0

Prerequisite: English 3 and Counselor approval

This course is provided in partnership with Tyler Junior College and designed to prepare students for success in entry-level college English courses. A student who successfully completes this course may use the credit earned toward satisfying the advanced English language arts curriculum requirement for the foundation high school program.

## **ORAL INTERPRETATION I** (Tyler Legacy Only)

**Grade:** 10-12 **Credit:** 1.0

Students in Oral Interpretation I will select, research, analyze, adapt, interpret, and perform literary texts as a communication art. Students focus on intellectual, emotional, sensory, and aesthetic levels of texts to attempt to capture the entirety of the author's work. Individual or group performances of literature will be presented and evaluated.

# **READING 1**

Grade: 9 Credit: 1.0

Reading 1 offers students reading instruction to successfully navigate academic demands as well as attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied in instructional-level and independent-level texts that cross the content areas. Students participating in this course previously did not meet standard on their RLA STAAR exam.

#### **READING 2**

**Grade:** 10-12 **Credit:** 0.5

Reading 2 offers students reading instruction to successfully navigate academic demands as well as attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied in instructional-level and independent-level texts that cross the content areas. Students participating in this course previously did not meet standard on their English I EOC exam.

#### **READING 3**

**Grade:** 11-12 **Credit:** 0.5

Reading 3 offers students reading instruction to successfully navigate academic demands as well as attain lifelong literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provides students an opportunity to read with competence, confidence, and understanding. Students learn how traditional and electronic texts are organized and how authors choose language for effect. All of these strategies are applied in instructional-level and independent-level texts that cross the content areas. Students participating in this course previously did not meet standard on their English II EOC exam.

# **JOURNALISM**

#### **JOURNALISM 1**

Grades: 9-12 Credit: 1

**Prerequisite:** None

• journalistic reporting, interviewing, and writing

- overviews of desktop publishing, photography, advertising ethics, page layout and design
- specialized writing such as editorial, column, sports, feature, and headline writing

#### YEARBOOK 1, 2, and 3

Grades: 10-12 Credit: 1

Prerequisite: None

- individual skills and teamwork in publishing a yearbook
- taking photos, writing copy, designing layouts
- developing theme, using computer to generate layouts for pages
- selling advertisements and yearbook subscriptions

#### **PHOTOJOURNALISM**

**Grades:** 9-12 **Credit:** 0.5 - 1

**Prerequisite:** None

#### DEBATE

#### **DEBATE 1-3**

Grades: 9-12 Credit: 1

**Note:** Does not meet professional communications credit requirements

- study of fundamentals of debate, topic research and extemporaneous speaking
- tournament practice and procedures
- debate/tournament competition
- extensive training in UIL and NFL competition

## **MATHEMATICS**

ALGEBRA 1

Grade: 9-12 Credit: 1

Prerequisite: Mathematics Grade 8 or its equivalent

Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Pre-AP ALGEBRA 1 (for course information please refer to advanced academic listings in previous section)

#### ALGEBRAIC REASONING

Grade: 9-12 Credit: 1

Prerequisite: Algebra 1

Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools.

#### STRATEGIC LEARNING FOR HIGH SCHOOL MATHEMATICS

Grade: 9-10 Credit: 1

Strategic Learning for High School Mathematics will stimulate students to think about their approach to mathematical learning. These basic understandings will include identifying errors in the teaching and learning process, input errors, physiological concerns, and key cognitive skills. The essential knowledge and skills will foster a deeper understanding of the task of learning mathematical concepts

#### **GEOMETRY**

Grade: 9-12 Credit: 1

Prerequisite: Algebra 1

- basic structure of geometry, geometric figures, concepts, formal proofs, and deductive reasoning
- the use of algebraic skills in problem solving
- properties of parallel lines and planes, angle relationships and polygonal regions
- the coordinate plane and constructions

**Pre-AP GEOMETRY WITH STATISTICS** (for course information please refer to advanced academic listings in previous section)

## ALGEBRA 2

Grade: 10-12 Credit: 1

Prerequisite: Algebra 1

Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and

solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.

Pre-AP ALGEBRA 2 (for course information please refer to advanced academic listings in previous section)

#### **COLLEGE PREPARATORY MATHEMATICS**

Grade: 12 Credit: 1.0

Prerequisite: Algebra 1, Geometry, 3<sup>rd</sup> high school level math and Counselor approval

This course is provided in partnership with Tyler Junior College and designed to prepare students for success in entry-level college mathematics courses. A student who successfully completes this course may use the credit earned toward satisfying the advanced mathematics curriculum requirement for the foundation high school program.

## **FINANCIAL MATHEMATICS**

Prerequisite: Algebra I

Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. This course satisfies a high school mathematics graduation requirement.

## **PRECALCULUS**

Grade: 10-12 Credit: 1

Prerequisite: Algebra1, Geometry and Algebra 2

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems.

#### **STATISTICS**

Grade: 9-12 Credit: 1

Prerequisite: Algebra 1

Students will broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis.

For information on courses below please refer to advanced academic listings in previous section.

AP PRECALCULUS AP CALCULUS AB AP CALCULUS BC AP STATISTICS ADVANCED QUANTITATIVE REASONING = CONTEMPORARY MATH 1315 – DUAL CREDIT Tyler High Only TJC MATH 1314 COLLEGE ALGEBRA DUAL CREDIT = PRECALA DC
TJC MATH 1342 ELEMENARY STATISTICAL METHODS DUAL CREDIT = INSTMT1A DC
TJC MATH 2412 PRE-CALCULUS DUAL CREDIT = PRECALB DC

## **SCIENCE**

## **BIOLOGY**

Grade: 9-11 Credit: 1

Prerequisite: None

- ecological relationships between living things and their environments
- · cells as the structural and functional units of life
- genetic concepts
- a survey of living kingdoms
- laboratory tools and techniques

This course requires an end of course exam

Pre-AP BIOLOGY (for course information please refer to advanced academic listings in previous section)

# AQUATIC SCIENCE (Tyler High Only) Grade: 10-12 Credit: 1

Prerequisite: Biology

In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Students 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.

## INTEGRATED PHYSICS/CHEMISTRY

Grade: 9-10 Credit: 1

Prerequisite: None

Does not count for science credit on DAP program.

Must be taken before Chemistry and Physics if taken on the Recommended Program for science credit

- use of the scientific method and metric system in performing labs
- organization and characteristics of elements within the periodic table
- development of chemical equations which represent four major types of chemical reactions
- principles and relationships among force, mass, weight acceleration, momentum, speed, pressure, area, and energy
- waves, sound, light, electricity, magnetism, and heat

## **CHEMISTRY**

Grade: 10-12 Credit: 1

Prerequisite: Biology, Alg1 and currently enrolled or completed Geometry

If taken for elective credit, may be taken in any sequence

- the study of the composition and changes of matter
- practical lab experiences
- college preparation skills

Pre-AP CHEMISTRY (for course information please refer to advanced academic listings in previous section)

## **PHYSICS**

Grade: 10-12 Credit: 1

Prerequisite: Algebra 1

- waves sound, light, mirrors, lenses, electricity static, current, circuits, nuclear power
- mechanics motion, Newton's Law, thermodynamics fluid mechanics

**AP PHYSICS C: MECHANICS** (for course information please refer to advanced academic listings in previous section)

**AP PHYSICS 1** (for course information please refer to advanced academic listings in previous section) **AP PHYSICS 2** (for course information please refer to advanced academic listings in previous section)

#### **FORENSIC SCIENCE**

Grade: 12 Credit: 1
Prerequisite: Biology and Chemistry

Uses structured and scientific approach to the investigation of crimes of assault, abuse, neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior Students will:

- learn terminology and investigative procedures related to crime scene questioning and interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes
- Collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis
- History, legal aspects, and career options for forensic science

#### **EARTH & SPACE SCIENCE**

Grade: 11-12 Credit: 1

**Prerequisite:** three units of science, one of which may be taken concurrently, and three units of mathematics, one of which may be taken concurrently.

- this course emphasizes the study of space and the history of the universe, as well as its impact on the planet
- Earth in space and time; understanding of the origin, evolution and properties of Earth and planetary systems
- Solid Earth is a study of the geosphere
- Fluid Earth is a study of the hydrosphere, cryosphere, and atmosphere subsystems

#### ANATOMY & PHYSIOLOGY

Grade: 11-12 Credit: 1

Prerequisite: Biology, Chemistry, and Physics or Biology, IPC and either Chemistry or Physics

- relationship between the organ systems of the human body and their functions
- study of disease, laboratory skills
- college level research involving outside reading projects
- preparation for entrance into health fields

**AP BIOLOGY** (for course information please refer to advanced academic listings in previous section) **AP CHEMISTRY** (for course information please refer to advanced academic listings in previous section)

#### **ENVIRONMENTAL SYSTEMS**

Grade: 11-12 Credit: 1

Prerequisite: Biology, Chemistry, and Physics OR Biology, IPC, and either Chemistry or Physics

- 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
- relationship between carrying capacity and changes in populations and ecosystems
- changes in environments

**AP ENVIRONMENTAL SCIENCE** (for course information please refer to advanced academic listings in previous section)

SCIENTIFIC RESEARCH AND DESIGN A DUAL CREDIT-TJC BIOL 1408 Biology for Non-Science Majors I (4 Hours)

**Grade:** 11-12 **Credit:** 0.5 **Prerequisite:** TSI Exempt or equivalent

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

SCIENTIFIC RESEARCH AND DESIGN B DUAL CREDIT-TJC BIOL 1409 Biology for Non-Science Majors II (4 Hours)

**Grade:** 11-12 **Credit:** 0.5 **Prerequisite:** TSI Exempt and BIOL 1408

This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology.

## **SOCIAL STUDIES**

## **WORLD GEOGRAPHY**

Grade: 9-11 Credit: 1

Prerequisite: None

World Geography is the study of major physical and cultural forces that have shaped the world and its people. Geography bridges the social and physical sciences by showing relationships between people and the environment. The course examines the human aspects of our world; people and their shelter, food, clothing, religions, languages, literature, music, art, customs, and traditions. World Geography focuses on the interdependence of physical and human factors in our world to provide a practical framework for addressing local, national, and global questions.

**Pre-AP WORLD HISTORY AND GEOGRAPHY** (for course information please refer to advanced academic listings in previous section)

#### **WORLD HISTORY**

Grade: 10-12 Credit: 1

**Prerequisite:** World Geography (or equivalent)

This course gives students the opportunity to trace the historical development of human cultures. Topics include early civilizations, historical development of western civilization and other regions of the world, geographical influences on world history, events, issues, and developments through the 21<sup>st</sup> century. This course must be used for state World History requirement.

AP WORLD HISTORY (for course information please refer to advanced academic listings in previous section)

## **UNITED STATES HISTORY**

Grade: 11-12 Credit: 1

**Prerequisite:** World History (or equivalent)

During this course, the history of the United States from 1877 to the present time is surveyed. Topics included in this study are the emergence of the United States as a world power, the geographical influences on historical events, the economic development and growth of the United States, social and cultural developments of the United States, and the evolution of the political processes since the Civil War. This course must be used for state US History requirement.

**AP UNITED STATES HISTORY** (for course information please refer to advanced academic listings in previous section)

AP EUROPEAN HISTORY (for course information please refer to advanced academic listings in previous section)

**US HISTORY DUAL CREDIT** (for course information please refer to advanced academic listings in previous section)

## **US GOVERNMENT**

**Grade:** 12 **Credit:** 0.5 **Prerequisite:** 3 Social Studies Credits

This course is designed to provide the student with an understanding of the functions of the United States, Texas, and local governments. Topics include the foundations and development of the United States governmental system; the purposes, political and economic philosophies of the United States Constitution, Bill of Rights, and Declaration of Independence; the structures and functions of governments at the federal, state, and local levels, and responsibilities of American citizenship. This course must be used for state US Government requirement.

AP US GOVERNMENT (for course information please refer to advanced academic listings in previous section)

**US GOVERNMENT DUAL CREDIT** (for course information refer to advanced academic listings in previous section)

#### **ECONOMICS**

Grade: 12 Credit: 0.5 **Prerequisite:** 3 Social Studies Credits

study basic principles and theories of production, consumption, and distribution of goods and services

AP MACROECONOMICS (for course information please refer to advanced academic listings in previous section)

ECONOMICS DUAL CREDIT (for course information please refer to advanced academic listings in previous section)

#### PERSONAL FINANCIAL LITERACY AND ECONOMICS

**Grade:** 11-12 Credit: 0.5

The Personal Financial Literacy and Economics Course emphasizes the economic way of thinking, which serves as a framework for the personal financial decision-making opportunities introduced in the course. Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. In addition, students are introduced to common economic and personal financial planning terms and concepts. As a result of learning objective concepts and integrating subjective information, students gain the ability to lead productive and financially self-sufficient lives.

## LANGUAGES OTHER THAN ENGLISH

#### AP COMPUTER SCIENCE A

Grade: 11-12 Credit: 1 **Prerequisite:** Algebra 2 (PAP preferred)

AP Computer Science A is equivalent to a first semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Test Fee: Yes

Test Fee: Yes

#### AP COMPUTER SCIENCE PRINCIPLES

**Grade:** 10-12 Credit: 1 **Prerequisite:** Algebra 1 (PAP preferred)

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of

computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts.

SPANISH 1

**Grade:** 9-12 Credit: 1

**Prerequisite:** None

 understanding, speaking, reading, and writing Spanish study of Spanish cultures, music, dance, and literature

• grammar study & conversational Spanish

## SPANISH FOR SPANISH SPEAKERS 1 &2 (Spanish for Native Speakers)

Grade: 9-12 Credit: 2

**Prerequisite:** Native Spanish Speaker (counselor approval required)

This course is for learners who have Spanish language background. Students will further develop and improve their proficiency in listening, speaking, reading, and writing. Emphasis is placed on students' communicative competence in both formal and informal situations. Spanish for Spanish Speakers is an accelerated course that allows students to receive credit for Spanish 1 in the fall semester and Spanish 2 in the spring semester.

#### SPANISH 2

**Grade:** 9-12 **Credit:** 1 **Prerequisite:** Spanish 1 or equivalent

• grammar study & conversational Spanish

SPANISH 3 ADVANCED (for course information refer to advanced academic listings in previous section)

**AP SPANISH 4 LANGUAGE AND COMPOSITION** (for course information refer to advanced academic listings in previous section)

**AP SPANISH 5 LITERATURE AND CULTURE** (for course information refer to advanced academic listings in previous section)

#### AMERICAN SIGN LANGUAGE 1

Grade: 9-12 Credit: 1

**Prerequisite:** None

A beginning level of Sign Language open for students who take the course as a foreign language. The course emphasizes visual and spatial modalities by using American Sign Language in everyday communication. Develop construct grammatical structure, facial expressions, everyday conversational, and experience in building expressive and receptive skills. Basic knowledge of Deaf Culture and Deaf History are included.

## AMERICAN SIGN LANGUAGE 2

Grade: 10-12 Credit: 1

Prerequisite: ASL 1

Intermediate level of Sign Language featuring new skills to describe items to develop receptive and expressive skills with increased accuracy and fluency. Provide opportunity for interaction within the Deaf Community.

## **CHINESE 1**

**Grade:** 9-12 **Credit:** 1 each

Prerequisite: None

This course is an Introduction to Mandarin Chinese beginning with the sound system of Mandarin Chinese and moves on to basic skills in listening, speaking, reading, and writing, and an introduction to Chinese culture.

CHINESE 1 ADVANCED (for course information refer to advanced academic listings in previous section)

#### CHINESE 2

**Grade:** 9-12 **Credit:** 1 each

Prerequisite: Chinese 1

Students will study basic practical vocabulary, grammar, culture, and pronunciation. Students will listen, speak, read, write, and learn to express themselves, communicate and convey information with others in Mandarin Chinese on topics closely related to their own experiences and daily life.

#### **CHINESE 2 ADVANCED**

**Grade:** 9-12 **Credit:** 1 each

Prerequisite: Chinese 1

Pre-AP Chinese is designed to prepare students for a Chinese III Pre-AP Chinese Language and Culture course. This course emphasizes students, listening, speaking, reading, and writing skills. Chinese cultural studies are also included in the curriculum so that students' multicultural awareness is strengthened in the teaching and learning process.

## **CHINESE 3 ADVANCED**

Grade: 9-12 Credit: 1

Prerequisite: Chinese 2

This course emphasizes students, listening, speaking, reading, and writing skills. Chinese cultural studies are also included in the curriculum so that students' multicultural awareness is strengthened in the teaching and learning process.

## **AP CHINESE 4**

Grade: 9-12 Credit: 1

Prerequisite: Chinese 3

The AP Chinese Language and Culture course in Mandarin Chinese emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Chinese Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese.

## PHYSICAL EDUCATION/ATHLETICS

## **ATHLETICS**

Grade: 9-12 Credit: 1

Prerequisite: Previous participation or coach approvalprinciples of physical fitness and conditioning

participation in the athletics program

### LIFETIME FITNESS AND WELLNESS PURSUITS

Grade: 9-12 Credit: 1

Prerequisite: None

• emphasis on personal fitness and conditioning

• choices for a healthy lifestyle

## LIFETIME RECREATION AND OUTDOOR PURSUITS

**Grade:** 9-12 **Credit:** 1 **Prerequisite:** None

emphasis on outdoor sports and activitiesincludes wilderness training and team building

#### **PE DANCE**

**Grade:** 9-12 **Credit:** 1 **Prerequisite:** None

• emphasizes physical fitness through elements of dance training

## **SKILL BASED LIFETIME ACTIVITIES**

**Grade:** 9-12 **Credit:** 1 **Prerequisite:** None

principles of physical fitness and conditioning

• emphasis on aerobic exercise

## **FINE ART**

## ART 1

Grade: 9-12 Credit: 1

**Prerequisite:** None This course emphasizes:

- analytical presentation of design elements and principles
- overview of art history
- development of critical thinking skills
- development of drawing, painting, and sculptural skills
- decision making

## **ART 1, ART AND MEDIA COMMUNICATIONS I**

Grade: 9-12 Credit: 1

**Pre-AP ART 1** (for course information refer to advanced academic listings in previous section) **Pre-AP ART 2** (for course information refer to advanced academic listings in previous section)

# **ART 2 CERAMICS** (Tyler High Only) **Grade:** 10-12 **Credit:** 1

Prerequisite: Art 1

This course introduces the students to working with clay to create a variety of three-dimensional artwork, both utilitarian and sculptural. A fee of \$25 is required for firing and glazing.

This course emphasizes:

- various techniques for creating pieces
- process of working with clay from working wet, drying, decorating/glazing, finishing, and firing
- care of lab & equipment and the history of clay forms in art

#### **ART 2 PAINTING**

Grade: 10-12 Credit: 1

**Prerequisite:** Art 1 This course emphasizes:

- painting in various media; watercolor, acrylic, and tempera, with an emphasis on acrylic painting
- study of color and color theory
- study of various application techniques
- study of historical and contemporary painting as relates to the various projects
- extension of technical skills

## **ART 3 PAINTING**

Grade: 11-12 Credit: 1
Prerequisite: Art 1 & Art 2 Painting

This course emphasizes

- extending and refining technical skills
- the use of a variety of painting styles and media and tools including air brushes
- art elements and principles are used in in-depth design problems
- abstract, non-objective, and realistic approaches in painting
- historical/cultural heritage related to painting

## **ART 4 PAINTING**

Grade: 12 Credit: 1
Prerequisite: Art 1-3 Painting

This course emphasizes:

- individualized study; exploration of more technical processes
- exploration of career opportunities
- creative thinking is challenged
- compilation of a portfolio for presentation
- keeping a journal/sketchbook
- preparation of research project in art history
- personal exhibit before graduation

#### **ART 2 DRAWING**

Grade: 10-12 Credit: 1

**Prerequisite:** Art 1 This course emphasizes:

- further study of art elements and principles through drawing.
- study of various media such as pen and ink, scratchboard, colored pencils, pencils, pastels, and oil pastels
- development of individual styles using various techniques and tools
- study of art history in conjunction with drawing

#### **ART 3 DRAWING**

Grade: 11-12 Credit: 1

Prerequisite: Art 1 Drawing & Art 2 Drawing

This course emphasizes:

- extending and refining technical skills
- using a variety of drawing styles and media; use of tools, art elements and principles that are used in in-depth design problems
- experience in abstract, non-objective, and realistic approaches in drawing
- the investigation of historical/cultural heritage related to drawing
- sketchbooks to stimulate thinking

AP ART DRAWING (for course information refer to advanced academic listings in previous section)

**AP ART 2- D DESIGN PORTFOLIO** (for course information refer to advanced academic listings in previous section)

AP ART HISTORY (for course information refer to advanced academic listings in previous section)

## **BAND**

#### **CONCERT BAND 1-4**

Grade: 9-12 Credit: 1

Prerequisite: Audition required; taken in sequence

This course emphasizes:

- development of individual & ensemble skills
- intermediate instrumental skills
- fall activities include football games, pep rallies, marching contest, parades
- spring activities include concerts, concert & sight-reading contest, spring trip
- discipline, spirit, and teamwork
- same as other bands perception, etc.

#### **SYMPHONIC BAND 1-4**

Grade: 9-12 Credit: 1

Prerequisite: Audition required; taken in sequence

This course emphasizes:

- musical perception, creative expression/performance, historical/cultural heritage, response to and evaluation of musical performances
- development of individual and ensemble skills
- advanced instrumental skills
- fall activities include football games, pep rallies, marching contest, parades
- spring activities include concerts, concert and sight-reading contest, spring trip
- discipline, spirit, and teamwork

#### WIND ENSEMBLE 1-4

Grade: 9-12 Credit: 1

Prerequisite: Audition required; taken in sequence

This course emphasizes:

- musical perception, creative expression/performance, historical/cultural heritage, response to & evaluation of musical performances
- development of individual and ensemble skills and advanced instrumental skills
- fall activities include football games, pep rallies, marching contest, parades
- spring activities include concerts, concert and sight-reading contest, spring trip

## **JAZZ BAND 1-4**

Grade: 9-12 Credit: 1

Prerequisite: Audition required; taken in sequence

This course emphasizes:

- development of individual skills and group musical skills
- participation in many group functions, concerts, and contests

#### **PERCUSSION BATTERY 1-4**

Grade: 9-12 Credit: 1

**Prerequisite:** Audition This course emphasizes:

- development of fundamentals and technique as pertains to all percussion instruments
- participation in many group functions, concerts, and contests
- participation in UIL percussion ensembles; participation in marching drum line

## **COLOR GUARD (FLAGS)**

Grade: 9-12 Credit: .1

**Prerequisite:** Audition This course emphasizes:

- development of flag, dance, and marching skills
- performance of routines incorporating flags, dance, costumes, and various props
- performs at football, basketball games, pep rallies, marching contests, and parades
- may satisfy the PE graduation requirement

## **CHOIR**

## **VOCAL ENSEMBLE – BOYS**

Credit: 1 **Grade:** 9-12

Prerequisite: None This course emphasizes:

- development of individual and group skills
- participation in many group functions

## **VOCAL ENSEMBLE – GIRLS**

Credit: 1 **Grade:** 9-12

Prerequisite: None This course emphasizes:

- development of individual and group skills
- participation in many group functions

#### **CONCERT CHOIR 1-4**

**Grade:** 9-12 Credit: 1

Prerequisite: Audition This course emphasizes:

- development of individual music reading skills
- TMEA/UIL competitions
- applications of basic music theory; participation in many group activities and performances

## **CHORALE 1-4**

**Grade:** 9-12 Credit: 1

Prerequisite: Audition This course emphasizes:

- development of individual music reading skills
- TMEA/UIL competitions
- applications of basic music theory; participation in many group activities

## **VOCAL ENSEMBLE - GOOD VIBRATIONS** (Tyler Legacy Only)

**Grade:** 10-12 Credit: 1

Prerequisite: Audition

- development of individual and group skills
- participation in many group functions

## **APPLIED MUSIC 1 - GUITAR 1** (Tyler High Only -\$30.00 Rental Fee)

**Grade:** 9-12 Credit: 1 Prerequisite: None

APPLIED MUSIC 2 - GUITAR 2 (Tyler High Only -\$30.00 Rental Fee)

Grade: 10-12 Credit: 1 Prerequisite: AppMus1 - Guitar 1

## **DANCE**

Dance courses may be counted for P.E., Fine Arts, or state elective credit.

**DANCE 1** 

Grade: 9-12 Credit: 1

Prerequisite: None

Dance 1 will incorporate all styles of dance: Jazz, Ballet, Modern, Folk, Tap, Choreography, and Production. Each unit will cover basics of technique, dance history, and pertinent relations to today's society. Instruction will also be given in general fitness, health, flexibility, strength, and cardiovascular endurance. The end of the year will culminate with a performance in the department's dance concert/spring show. Note: This is not an extra-curricular group.

DANCE 2

Grade: 10-12 Credit: 1

Prerequisite: Dance 1

Dance 2 will continue to build a strong base in all dance styles: Jazz, Ballet, Modern, Folk, Tap, Choreography, and Production. A more in-depth study in the basics of the year will culminate with a performance in the department's dance concert/spring show. Note: this is not an extra-curricular group.

**DANCE 3** 

Grade: 11-12 Credit: 1

Prerequisite: Dance 2

Dance 3 is an advanced study of all dance styles including Jazz, Ballet, Modern, Tap, Choreography, and Production. Building advanced technical skill, knowledge of dance history as well as relations to society and others will be the focal points of class. Students will engage in personal character building through journaling. Students will also have the opportunity to choreograph their own works for performance. The end of the year will culminate with performances of group work and possibly student choreography in the department's dance concert/spring show. Note: this is not an extra-curricular group.

#### **DANCE 4**

Grade: 10-12 Credit: 1

**Prerequisite:** Previous participation in the Dance Program

Dance 4 is an advanced study of all dance styles including Jazz, Ballet, Modern, Tap, Choreography, and Production. Building advanced technical skill, knowledge of dance history, as well as relations to society and others will be the focal points of class. Students will engage in personal character building through journaling. Students will also have the opportunity to choreograph their own works for performance.

PE DANCE 1

Grade: 9-12 Credit: 1

Prerequisite: None

This course emphasizes physical fitness through elements of dance training. Note: this is not an extracurricular group, however this class WILL count as a prerequisite for Drill Team auditions. There are no uniforms or performance opportunities other than having an option to perform in the Spring Show.

## **SOUTHERN BELLES** (Tyler Legacy Only)

Grade: 10-12 Credit: 1

Prerequisite: Audition

The Southern Belle Drill team will be composed of Seniors, Juniors, and Sophomores. The purpose of the Southern Belles is to support and perform at school and community activities and functions; to develop motor skills through dance; to foster good fellowship; to encourage scholarship; and to represent Tyler at dance competitions around the state. The Southern Belles will follow the rules and guidelines set by the Southern Belle Constitution.

## **BRIGADETTE DRILL TEAM** (Tyler High Only)

**Grade:** 10-12 **Credit:** 1 **Prerequisite:** by audition only.

Student must be currently enrolled in a Tyler High Dance class or Pep Squad class at the time of auditions. This is an extra-curricular organization that requires a fee and extra time spent outside the regular school day. The Brigadette Drill Team is composed of Sophomores, Juniors, and Seniors. The purpose is to support and perform at school and community activities/functions; to develop motor skills through dance; to foster good fellowship; to encourage scholarship; and to represent the school. The Brigadettes will follow the rules and guidelines set by the Brigadette Constitution.

# **DRILL PREP 1-3** (Tyler Legacy Only) **Grade:** 9-11 **Credit:** 1

The Southern Belle Drill prep classes will be composed of Freshman, Sophomores and Juniors. The purpose of the drill prep program is to prepare for becoming a Southern Belle member; to perfect kick and dance technique; to perform/participate at designated school and community activities; to perform in the Southern Belle Showcase; to foster good fellowship; and to encourage scholarship. Students must have director approval to enter the drill prep program. The drill prep program will follow the rules and guidelines set by the Southern Belle Constitution.

## **BLUE BRIGADE PEP SQUAD** (Tyler High Only)

Grade: 9-12 Credit: 1

The Blue Brigade Pep Squad can be composed of Freshman, Sophomores, Juniors, and Seniors. This class is designed for students that may have an interest in pursuing Drill Team and enjoy being in a spirit group to support Tyler High athletics and the community. It is an in-depth study of Drill Team, dance and high kick fundamentals and will concentrate on preparing students for Drill Team auditions in the spring. The Pep Squad will follow the rules and guidelines set by the Brigadette/Blue Brigade Constitution. Participation will be mandatory once enrolled in the class.

#### **ORCHESTRA**

ORCHESTRA 1 (Tyler High Only)
Grade: 9 Credit: 1

Prerequisite: Middle school or private lesson instruction in string instruments

- Freshman, non-varsity
- Orchestra 1 is required to letter in fine arts.
- all concerts/clinics/workshops are required attendance
- 1<sup>st</sup> and 3<sup>rd</sup> position for violin, viola, and cello are necessary skills to obtain and maintain membership.
- Classical, Pop, and ethnic styles are studied and performed by this group
- student members are required to participate in the following events: All-region orchestra auditions, UIL solo and ensemble, and UIL concert and sight-reading contest

## **ORCHESTRA 2-4** (Tyler High Only)

Grade: 10-12 Credit: 1

**Prerequisite:** 9<sup>th</sup> grade orchestra (or equivalent private instruction)

- Sophomore, Junior, and Senior combined Varsity group
- Orchestra 2 is required to letter in fine arts.
- 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> positions are necessary skills to obtain success in this organization
- Classical, Pop, Ethnic, Folk, and Jazz styles are studied and performed by this group
- members of this group must be willing to travel
- members of this group must maintain high academic standards and be able to pass all classes with above average grades
- student members are required to participate in the following events: All-Region Orchestra contest, All-State audition process, UIL solo and ensemble, UIL state solo and ensemble contest, UIL concert and sight-reading contest, all scheduled concerts, and trips

## **CONCERT ORCHESTRA** (Tyler Legacy Only)

Grade: 9-12 Credit: 1

**Prerequisite:** Middle school string classes or private lessons

This course emphasizes:

- development of musical perception, creative expression/performance
- development of individual skills at the intermediate level
- required activities include fall and spring concerts
- routine practicing outside of class time

## PHILHARMONIC ORCHESTRA (Tyler Legacy Only)

Grade: 9-12 Credit: 1

**Prerequisite:** Audition This course emphasizes:

- continued development of musical perception, creative expression/performance
- intermediate ensemble performance
- individual skills development at the intermediate to advanced level
- required activities include fall and spring concerts and additional performances as scheduled
- routine practicing outside of class time

## **CHAMBER ORCHESTRA** (Tyler Legacy Only)

Grade: 9-12 Credit: 1

Prerequisite: Audition

- advanced musical perception, creative expression/performance, historical/cultural heritage, response to and evaluation of musical performances
- development of individual & ensemble skills at advanced level
- advanced instrumental skills and extensive knowledge of advanced positions is required
- required activities include TMEA region auditions, UIL events; concert and sight-reading contest, solo performance, spring and fall concerts and additional performances as scheduled
- routine practicing outside of class time/private lessons
- varsity performances

## **SYMPHONY ORCHESTRA** (Tyler Legacy Only)

Grade: 9-12 Credit: 1

**Prerequisite:** Audition This course emphasizes:

- higher level of musical perception, creative expression/performance, historical/cultural heritage, response to and evaluation of musical performances
- development of individual skills at the intermediate and advanced levels
- participation in many group functions
- required activities may include TMEA and UIL competition, fall and spring concerts and additional performances as scheduled
- routine practicing outside of class time
- non-varsity performances

## **MUSIC & MEDIA**

# MUSIC/MEDIA COMMUNICATIONS Grade: 10-12 Credit: 1

Prerequisite: None

Music and Media Communications is a project-based music curriculum for high school students that develops the link between traditional music education and digital media. Music and Media Communications is a Texas Education Agency (TEA) – approved innovative course that may serve as elective credit toward high school graduation and is designed to prepare students for post-secondary study in creative disciplines and for work in creative industries using technology as a primary tool.

## **THEATER**

#### **THEATER ARTS 1**

Grade: 9-12 Credit: 1

**Prerequisite:** None This course emphasizes:

- live stage performance appreciation and audience etiquette
- basic theories of acting
- basic theories of play production
- individual and ensemble (group) performances required

- theatrical vocabulary, elements, conventions, and basic concepts
- experiences that develop a broad knowledge base and technical skills
- historical/cultural backgrounds of various works and genres
- strategies for evaluating theater experiences

## **THEATER ARTS 1 APPRECIATION**

Grade: 9-12 Credit: 1

**Prerequisite:** None This course emphasizes:

- theater from an audience point of view
- theater history, plays and playwrights
- an overview of the acting process and the technical process
- the art of dramaturgy (critique of the theater)
- a brief study in film history and where film is currently

#### **THEATER ARTS 2-4**

Grade: 10-12 Credit: 1

**Prerequisite:** Taken in sequence; audition or teacher recommendation.

This course emphasizes:

- in-depth acting techniques and character development
- basic directing techniques and practical applications
- theater history and period acting styles
- production work in technical theater and production
- individual and ensemble performances required

## **THEATER PRODUCTION 1-3**

Grade: 10-12 Credit: 1

Prerequisite: Theater 1 and teacher approval through audition

These courses are designed for the advanced theater student who is involved in all the major productions in the department. Production participation (including after school production work) is required.

These courses emphasize:

- workshop atmosphere that will include production meetings, work on the shows, and plans for other co-curricular theater activities
- leadership training and individual development
- stage management
- technical theater projects
- acting styles
- character analysis and development

### **TECHNICAL THEATER 1**

Grade: 10-12 Credit: 1

**Prerequisite:** Theater 1 This course emphasizes:

- appreciation and understanding of the role of technical theater
- theater production concepts and skills
- exploration of theatrical scenery, properties, lights, and sound

- study of career opportunities
- production crew work and live theater attendance required

#### **TECHNICAL THEATER 2-3**

Grade: 11-12 Credit: 1
Prerequisite: Technical Theater 1

This course emphasizes:

- advanced study and practice in stagecraft
- crew leadership responsibilities
- study of career opportunities
- design projects
- production work required

#### **MUSICAL THEATER 1-4**

Grade: 9-12 Credit: 1

The Musical Theater course is a study of both Musical History as well as performance. The following aspects will be addressed:

- Musical Theater History and the emergence of the modern musical
- choreography and light dance
- movement
- the role of the singing actor, including characterization and performance
- interpretation of songs by an actor
- performance opportunities

This course is especially appropriate for students planning to pursue musical theater on the University or professional level.

## **ELECTIVES (Locally Required)**

**HEALTH (0.5 Credit Required)** 

**ADVANCED HEALTH** (Tyler Legacy Only) **Grade:** 9-12 **Credit:** 0.5

Prerequisite: Health

- emphasis on physical, mental, emotional, and social components of health
- applied knowledge of subject through lab investigation, discussion, and research

#### **HEALTH**

**Grade:** 9-12 **Credit:** 0.5

Prerequisite: None

- family health, social health, and the life cycle
- proper nutrition and eating disorders
- tobacco, alcohol, illegal drugs and recovering from addiction and co-dependency
- sexually transmitted diseases and disorders
- safety and emergency care

## **SENIOR SEMINAR (1.0 Credit Required)**

**SENIOR SEMINAR** 

Grade: 12 Credit: 1.0

**Prerequisite:** None

Senior Seminar advances intellectual curiosity, conscientiousness, dependability, emotional stability, and perseverance through tasks that foster deeper levels of thinking and reasoning in the four core content areas. This class focuses on developing the habits and skills that are expected in college study and the workforce. Students will develop personal, interpersonal, and cognitive skills that are essential to productivity in both the collegiate and business worlds.

## SPEECH (.5 credit required)

## **COMMUNICATION APPLICATIONS**

**Grade:** 9-12 **Credit:** 0.5

**Prerequisite:** None

- application of communication skills in everyday situations
- development of speech making techniques and oral presentations in a variety of situations
- development of appropriate interpersonal communication strategies in professional and social contexts

## **PROFESSIONAL COMMUNICATION**

**Grade:** 9-12 **Credit:** 0.5

Prerequisite: None

- application of communication skills in everyday situations
- development of speech making techniques and oral presentations in a variety of situations
- development of appropriate interpersonal communication strategies in professional and social contexts

## **ELECTIVES**

## **AVID**

## **AVID 1 (ADVANCEMENT VIA INDIVIDUAL DETERMINATION)**

Grade: 9 Credit: 1

**Prerequisite:** Committee Approval based on national and local criteria Requirement: Enrollment in one or more advanced level classes

This course includes writing to learn, test-taking skills, rigorous and relevant curriculum, Socratic method, extracurricular activities such as cultural and career events and college field trips. Eligible students in AVID 1 may receive .5 credit for Professional Communications. Grades for Professional Communications will be based upon the semester two average in AVID and recorded on the transcript. The AVID1 elective course will serve as a review of the AVID philosophy and strategies such as note-taking skills, subject specific, collaborative tutorial groups, and the organizational tool. Students will work on academic and personal goals, communication, adjusting to the high school setting, increasing awareness of their personal contributions to their learning, as well as their involvement in their school and community. There is an emphasis on analytical writing, focusing

on personal goals and thesis writing. Students will prepare for and participate in college entrance and placement exams while refining study skills, test-taking, note-taking, and research techniques.

#### AVID 2

Grade: 10 Credit: 1

Prerequisite: Committee approval based on national and local criteria

Requirement: Enrollment in one of more advanced level classes

This course includes writing to learn, test-taking skills, rigorous and relevant curriculum, Socratic Method, extracurricular activities such as cultural and career events and college field trips. Eligible students in AVID 2 may receive .5 credit for Professional Communications. Grades for Professional Communications will be based upon the semester two average in AVID and recorded on the transcript. During the AVID 2 elective courses, students will refine the AVID strategies to meet their independent needs and learning styles. Students will continue to refine and adjust their academic learning plans and goals, increasing awareness of their actions and behaviors. As students increase the rigorous course load and school/community involvement, they will refine their time management and study skills accordingly. Students will expand their writing portfolio and analyze various documents to participate in collaborative discussions and develop leadership skills in those settings. Students will expand their vocabulary use, continuing to prepare for college entrance exams and preparation. Students will narrow down their college and careers of interest, based on personal interests and goals.

## AVID 3

Grade: 11 Credit: 1

**Prerequisite:** Committee Approval based on national and local criteria Requirement: Enrollment in one or more advanced level classes

This course includes writing to learn, test-taking skills, rigorous and relevant curriculum, Socratic Method, extracurricular activities such as cultural and career events and college field trips. Eligible students in AVID 3 may receive .5 credit for Professional Communications. Grades for Professional Communications will be based upon the semester two average in AVID and recorded on the transcript. The AVID 3 elective course focuses on writing and critical thinking expected of first and second-year college students. In addition to the academic focus, there are college-bound activities, methodologies and tasks that should be undertaken during the junior year to support students as they apply to four-year universities and support and/or confirm their postsecondary plans.

## **AVID 4**

Grade: 12 Credit: 1

**Prerequisite:** Committee Approval based on national and local criteria Requirement: Successful completion of graduation requirements

The AVID4 elective course focuses on writing and critical thinking (an extension of AVID 3 activities). The course emphasizes rhetorical reading, analytical writing, collaborative discussion strategies, tutorial inquiry, study groups, preparation for college entrance and placement exams, college study skills and test-taking strategies, note taking and research. In addition to the academic focus, there are college-bound activities, methodologies and tasks that should be achieved during the senior year that support students as they apply to four-year universities and confirm their postsecondary plans. All AVID seniors are required to apply to a minimum of 6 colleges/universities (can be a combination of both four-year and two-year).

**ETHNIC STUDIES: AFRICAN AMERICAN STUDIES** 

Grade: 9-12 Credit: 1

Prerequisite: None

In Ethnic Studies: African American Studies, students learn about the history and cultural contributions of African Americans. This course is designed to assist students in understanding issues and events from multiple perspectives. This course develops an understanding of the historical roots of African American culture, especially as it pertains to social, economic, and political interactions within the broader context of United States history. It requires an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of past achievements provides citizens of the 21st century with a broader context within which to address the many issues facing the United States.

**ETHNIC STUDIES: MEXICAN AMERICAN STUDIES** 

Grade: 9-12 Credit: 1

**Prerequisite:** None

In Ethnic Studies: Mexican American Studies, students learn about the history and cultural contributions of Mexican Americans. Students explore history and culture from an interdisciplinary perspective. The course emphasizes events in the 20th and 21st centuries, but students will also engage with events prior to the 20th century.

# PERSONAL FINANCIAL LITERACY Grade: 10-12 Credit: 0.5

Prerequisite: None

Personal Financial Literacy will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility.

#### **PSYCHOLOGY**

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: None

This one-semester introductory course offers students the opportunity to study the multifaceted field of psychology. Students will be provided opportunities to explore various careers related to psychology as well as to study scientific theories related to human growth, development, and behavior.

## PSYCHOLOGY DUAL CREDIT = TJC 2301 General Psychology (3 Hours)

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: TSI Exempt

General Psychology is a survey of the major psychological topics, theories, and approaches to the scientific study of behavior and mental processes.

AP PSYCHOLOGY (for course information please refer to advanced academic listings in previous section)

ROTC1

Grade: 9-12 Credit: 1

Prerequisite: None

Topics taught include Drill and Ceremony (marching), Foundations of Army JROTC and Getting Involved, Leadership Theory and Application, Foundations for Success, First Aid and Drug Awareness, Service-Learning Project, Cadet Challenge and Physical Training. A physical education credit can be earned for this course.

ROTC2

Grade: 10-12 Credit: 1

Prerequisite: ROTC1

Topics taught include Drill and Ceremony (marching), Achieving a Healthy Lifestyle, Geography, Map Skills, Environmental Awareness, Citizenship in American History and Government, Service-Learning Project, Cadet Challenge and Physical Training.

ROTC3

Grade: 11-12 Credit: 1

**Prerequisite:** ROTC2

Topics taught include Drill and Ceremony (marching), Citizenship in Action, Leadership Planning and Strategies, Presentation Skills, Managing Conflict, Career Planning, NEFE High School Financial Planning Program, Service-Learning Project, Cadet Challenge and Physical Training.

ROTC4

Grade: 12 Credit: 1

**Prerequisite:** ROTC3

Topics taught include Drill and Ceremony (marching), Service to the Nation, Leadership Principles, Leadership Strategies, Teaching Skills, Environmental Awareness, Service-Learning Project, Cadet Challenge and Physical Training.

#### SOCIOLOGY

**Grade:** 11-12 **Credit:** 0.5

Prerequisite: None

This one-semester course is the scientific study of human groups. A high interest course, it is designed for the student who enjoys discussion of current social issues. Topics of study include an introduction to criminology, a comprehensive study of the family, social institutions, and cultural variations. This course not only prepares those interested in the field for college level studies, but is designed to help students better understand themselves, others, and the world in which we live.

SPECIAL TOPICS IN SOCIAL STUDIES: HEBREW SCRIPTURES

**Grade:** 9-12 **Credit:** 0.5

Prerequisite: None

The purpose of this course is to teach students knowledge of biblical content, characters, poetry, and narratives that are prerequisites to understanding contemporary society and culture, including literature, art, music, mores, oratory, and public policy. Hebrew Scriptures will familiarize students with its influence on law, history, government, literature, art, music, customs, morals, values, and culture.

## SPECIAL TOPICS IN SOCIAL STUDIES: NEW TESTAMENT

**Grade:** 9-12 **Credit:** 0.5

Prerequisite: None

The purpose of a course under this section is to teach students knowledge of biblical content, characters, poetry, and narratives that are prerequisites to understanding contemporary society and culture, including literature, art, music, mores, oratory, and public policy. This course will show the influence of the New Testament on law, history, government, literature, art, music, customs, morals, values, and culture.

## **STUDENT LEADERSHIP**

**Grade:** 10-12 **Credit:** 1.0

Prerequisite: None

This course provides an opportunity to study, practice, and develop group and individual leadership and organizational skills. These skills include the structure of leadership, organization and managerial skills, citizenship, goal setting, group processes, and communication.

## **CAREER AND TECHNICAL EDUCATION (CTE)**

CTE programs are designed to prepare our students for high-wage, high-skill, and high-demand careers after they graduate from high school. We want students to pursue their interests and discover the opportunities they may not have known about prior to taking their CTE courses. Our programs enable students to have one of three options: become certified or licensed in a particular skill, gain entry-level employment, and/or continue their education in post-secondary institutions. CTE courses fall under 3 Endorsements recognized by the State of Texas that satisfy requirements for graduation under the Foundations Program. Within each Endorsement are several Career Cluster pathways, which are similar to occupations and students take a coherent sequence of courses that prepare him/ her for the specific field. For more information about CTE in Tyler ISD or the Career & Technology Center, visit our website at www.ctc.tylerisd.org

Some advanced CTE courses require course expenses, as noted below. When taking dual-credit classes on a TJC campus, students are responsible for college-required textbooks, tools to be used during the class and kept after its completion, uniforms, and transportation to/ from any TJC class. The Tyler ISD CTE department pays for each student's tuition and associated fees as funds are available.

## **PUBLIC SERVICES ENDORSEMENT**

## Cosmetology

### PRINCIPLES OF COSMETOLOGY DESIGN AND COLOR THEORY

**Grade** 9 only **Credit:** 1

In Principles of Cosmetology Design and Color Theory, Students coordinate integration of academic, career and technical knowledge and skills in this laboratory instructional sequence course. Students will develop knowledge and technical skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology.

## INTRODUCTION TO COSMETOLOGY

Grade 10 only Credit: 1

Course Expense: \$25.00 to be paid before entering class for temporary student license.

In Introduction to Cosmetology, students explore careers in the cosmetology industry. To prepare for success, students must have academic and technical knowledge and skills relative to the industry. Students may begin to earn hours toward state licensing requirements.

## **COSMETOLOGY I**

Grade: 11 only Credit: 2

**Prerequisite(s):** Introduction to Cosmetology

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, haircare, nail care and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination.

## **COSMETOLOGY II**

Grade: 12 only Credit: 2
Prerequisite(s): Cosmetology I
Certification Opportunity: Yes

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, haircare, nail care and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

## **Emergency Services: Firefighter**

## PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

**Grade:** 9 only **Credit:** 1

Prerequisite: None

Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, security, corrections, and fire and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

#### **COUNSELING AND MENTAL HEALTH**

Grade: 10-11 Credit: 1

**Prerequisite:** None

In Counseling and Mental Health, students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

## **FIREFIGHTER I**

Grade: 11 Credit: 2

Prerequisite: Counseling and Mental Health

Firefighter I introduces students to firefighter safety and development. Students will analyze Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protective equipment, and the principles of fire safety.

#### **FIREFIGHTER II**

Grade: 12 Credit: 2

Prerequisite: Firefighter I

Firefighter II is the second course in a series for students studying firefighter safety and development. Students will understand Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protective equipment, and the principles of fire safety. Students will demonstrate proper use of fire extinguishers, ground ladders, fire hoses, and water supply apparatus systems.

## **Exercise Science and Wellness**

### PRINCIPLE OF EXERCISE AND WELLNESS

Grade: 9 Credit: 1

**Prerequisite:** None

The Principles of Exercise Science and Wellness course is designed to provide for the development of knowledge and skills in fields that assist patients with maintaining physical, mental, and emotional health.

#### **KINESIOLOGY I**

Grade: 10 Credit: 1

**Prerequisite:** None

This course is designed to introduce students to the basic concepts of kinesiology. Students will gain an understanding of body mechanics, physiological functions of muscles and movements, the history of kinesiology, and the psychological impact of sports and athletic performance.

## KINESIOLOGY II Corequisite: ANATOMY AND PHYSIOLOGY

Prerequisite: Kinesiology I

Grade: 11 Credit: 1

The Kinesiology II course is designed to provide students an advanced level of knowledge, skills, and understanding of body composition and the effect on health, nutritional needs of physically active individuals, qualitative biomechanics, application of therapeutic modalities, appropriate rehabilitation services, and aerobic training intensity programs.

## PRACTICUM IN HEALTH SCIENCE – EXERCISE SCIENCE

Grade: 12 Credit: 2 Prerequisite: Kinesiology II

The Practicum in Kinesiology provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner. Students will prepare for an entrepreneurial career in their area of interest in their career cluster.

## Family and Community Services: Counseling/Community Health Professional

# PRINCIPLE OF HUMAN SERVICES Grade: 9 Credit: 1

Prerequisite: None

Principles of Human Services is a course that will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

#### **CHILD DEVELOPMENT**

Grade: 10 Credit: 1

**Prerequisite:** None

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills.

Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

## **COUNSELING AND MENTAL HEALTH Corequisite: FAMILY AND COMMUNITY SERVICES**

**Grade:** 11 **Credit:** 2 **Prerequisite:** Child Development

In Counseling and Mental Health, students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities. Family and Community Services is a laboratory-based course designed to involve students in realistic and meaningful community-based activities through direct service or service-learning experiences. Students are provided opportunities to interact with and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

## **PRACTICUM IN HUMAN SERVICES**

Grade: 12 Credit: 2

Prerequisite: Counseling and Mental Health

Practicum in Human Services provides background knowledge and occupation-specific training that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community-services careers. Content for Practicum in Human Services is designed to meet the occupational preparation needs and interests of students and should be based upon the knowledge and skills selected from two or more courses in a coherent sequence in the human services cluster.

## **Healthcare Therapeutic**

## PRINCIPLES OF HEALTH SCIENCE

**Grade:** 9 only **Credit:** 1 – <u>Course does NOT count for required graduation credit for Health</u> **Course Description:** The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry

## **MEDICAL TERMINOLOGY**

Grade: 10 Credit: 1

Prerequisite: None

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

## **HEALTH SCIENCE THEORY Corequisite: ANATOMY AND PHYSIOLOGY**

Grade: 11 Credit: 2

Prerequisite: Biology and one other science (Chemistry, IPC, or Physics)

College Credit Opportunity: Possible Technical Dual Credit with Tyler Junior College

## Course Expenses: Yes.

This is a clinical rotation class. Hospitals, clinics, and pharmacies require participating students to have drug testing and fingerprinting prior to beginning rotations. \$10 (\$5 Medicaid) toward cost of immunizations, TB test, flu shot and \$20 toward cost of drug test and background check, if applicable. The CTE Department will cover some of these expenses if funds are available.

The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development. Health Science Clinical Course Description: focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development. The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

#### **MEDICAL MICROBIOLOGY**

Grade: 12 Credit: 1

**Prerequisite:** Biology, Chemistry & Anatomy & Physiology with EKG Cert or CCMR Complete The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement.

#### PRACTICUM IN HEALTH SCIENCE

Grade: 12 Credit: 2

Prerequisite: Health Science Theory, Biology, Anatomy & Physiology and (Chemistry, IPC, or Physics)

**Practicum Specializations:** 

- Emergency Medical Technician (TSI complete prior to enrolling)
- Medical Assistant
- Patient Care Technician
- Pharmacy Technician

## **Possible TJC Technical Dual Credit**

**Certification Opportunity:** Yes

Course Expenses: Yes. Drug Testing, fingerprinting, TB test, Flu Shot, and background check.

The above practicums are designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The practicum courses will provide direct hands-on experience in the specific certification being pursued.

## **Law Enforcement**

## PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Grade: 9 Credit: 1

Prerequisite: None

Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, security, corrections, and fire and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

#### LAW ENFORCEMENT I

Grade: 10-12 Credit: 1

Prerequisite: None

**Dual Credit Opportunity:** Eligible for Technical Dual Credit with Tyler Junior College Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

## LAW ENFORCEMENT II Corequisite: CORRECTIONAL SERVICES

Grade: 11 Credit: 2

Recommended Prerequisite: Law Enforcement 1

Law Enforcement 2 provides the knowledge and skills necessary to prepare for a career in law enforcement. This course includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony.

In Correctional Services, students prepare for certification required for employment as a municipal, county, state, or federal correctional officer. Students will learn the role and responsibilities of a county or municipal correctional officer; discuss relevant rules, regulations, and laws of municipal, county, state, or federal facilities; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the municipal, county, state, or federal correctional setting. Students will analyze rehabilitation and alternatives to institutionalization for inmates.

## **FORENSIC SCIENCE**

**Grade:** 12 **Credit:** 1 (satisfies 4<sup>th</sup> Science requirement)

**Prerequisite:** Biology and Chemistry

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. 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 fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

#### PRACTICUM IN LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Grade: 12 Credits: 2

**Prerequisite:** Coherent sequence of Law I, Law II, Criminal Investigation, Court System Practice
The practicum course is a paid or unpaid capstone experience for students participating in a coherent
sequence of career and technical education courses in the Law, Public Safety, Corrections, and Security Career
Cluster.

## **Teaching and Training**

# PRINCIPLES OF HUMAN SERVICES Grade: 9 Credit: 1

Principles of Human Services is a course that will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

#### **CHILD DEVELOPMENT**

Grade: 10 Credit: 1

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

## **INSTRUCTIONAL PRACTICES IN EDUCATION & TRAINING**

Grade: 11 Credit: 2

**Recommended Prerequisite(s):** Human Growth and Development

Instructional Practices in Education and Training 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-, middle school-, and high school aged 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.

#### PRACTICUM IN TEACHING AND TRAINING

**Grade:** 11 – 12 **Credit:** 2 **Prerequisite:** Instructional Practices

Practicum in Teaching and Training is 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 the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school aged students. Students learn to plan and direct individualized instruction and group

activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

## **BUSINESS & INDUSTRY ENDORSEMENT**

## **Accounting and Financial Services**

## PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE

**Grade:** 9 ¬12 **Credit:** 1

Prerequisite: None

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. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

## **ACCOUNTING I**

**Grade:** 10 – 12 **Credit:** 1

Prerequisite: None

College Credit Opportunity: Possible Technical Dual Credit with Tyler Junior College

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 in management decision making.

**ACCOUNTING II Corequisite: FINANCIAL ANALYSIS** 

Grade: 11 Credit: 2 Prerequisite: Accounting I

College Credit Opportunity: Possible Technical Dual credit with Tyler Junior College

Students continue the investigation of 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 various managerial and cost accounting activities. Students formulate and interpret financial information for use in management decision making. In Financial Analysis, students will apply knowledge and technical skills in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students will develop analytical skills by actively evaluating financial results of multiple businesses, interpreting results for stakeholders, and presenting strategic recommendations for performance improvement.

#### PRACTICUM IN BUSINESS MANAGEMENT

Grade: 12 Credit: 2

Prerequisite: Accounting II

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of

locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the 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 business decisions.

## **Animal Science**

## PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES

Grade: 9 Credit: 1

Prerequisite: None

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce experience, apply, and transfer their knowledge and skills in a variety of settings.

## **EQUINE SCIENCE Corequisite: SMALL ANIMAL MANAGEMENT**

Prerequisite: None

Grade: 10 Credit: 1.0

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings.

#### LIVESTOCK PRODUCTION Corequisite: ADVANCED ANIMAL SCIENCE

Grade: 11 Credit: 2

Prerequisite: Biology and Chemistry or IPC; Algebra I and Geometry; Small Animal Management and Equine

Science

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Advanced Animal Science examines 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. To prepare for careers in the field of animal science, students must attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

#### **VETERINARY MEDICAL APPLICATIONS WITH LAB**

Grade: 12 Credit: 2

Prerequisite: Advanced Animal Science

**Certification Opportunity:** Yes

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

## Architecture

# PRINCIPLES OF ARCHITECTURE Grade: 9 Credit: 1

Prerequisite: None

Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, education, and career information to set and achieve realistic career and educational goals. Job specific training can be provided through training modules that identify career goals in trade and industry areas. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings.

#### ARCHITECTURAL DESIGN I

Grade: 10 Credit: 1
Prerequisite: Algebra I and English I

College Credit Opportunity: Technical Dual Credit with Tyler Junior College

In Architectural Design I, students will gain knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.

### **ARCHITECTURAL DESIGN II**

Grade: 11 Credit: 2

Prerequisite: Architectural Design I and Geometry

In Architectural Design II, students will gain advanced knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.

#### PRACTICUM IN ARCHITECTURAL DESIGN

**Grade:** 12 **Credit:** 2 **Prerequisite:** Architectural Design II

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

## **Automotive: Collision and Repair**

## PRINCIPLES OF TRANSPORTATION SYSTEMS

Grade: 9 Credit: 1

Prerequisite: None

In Principles of Transportation Systems, students will gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the transportation industry. Students should apply knowledge and skills in the application, design, and production of technology as it relates to the transportation industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

## **AUTOMOTIVE BASICS**

Grade: 10 Credit: 1

Prerequisite: None

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge

and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

#### **PAINT AND REFINISHING**

Grade: 12 Credit: 2

**Recommended Prerequisite:** Automotive Basics

**Certification Opportunity:** Yes **Course Expenses:** Yes, Collision Shirt

Paint and Refinishing includes knowledge of processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concept and theory of systems related to automotive paint

and refinishing.

#### PRACTICUM IN TRANSPORTATION SYSTEMS

Grade: 12 Credit:
Prerequisite: Level 3 course
Certification Opportunity: Yes

Practicum in Transportation Systems is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience such as internships, mentorships, independent study, or laboratories. The Practicum can be either school lab based or worked based.

### **Automotive Technology: Automotive Services**

#### PRINCIPLES OF TRANSPORTATION SYSTEMS

Grade: 9 Credit: 1

Prerequisite: None

In Principles of Transportation Systems, students will gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the transportation industry. Students should apply knowledge and skills in the application, design, and production of technology as it relates to the transportation industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

#### **AUTOMOTIVE BASICS**

Grade: 10 Credit: 1

**Prerequisite:** None

Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

**AUTOMOTIVE TECHNOLOGY I: Maintenance and Light Repair** 

Grade: 11 Credit: 2
Prerequisite: Automotive Basics
Certification Opportunity: Yes

In Automotive Technology I: Maintenance and Light Repair, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

#### **AUTOMOTIVE TECHNOLOGY II: Automotive Service**

Grade: 12 Credit: 2
Prerequisite: Automotive Technology I

**Certification Opportunity:** Yes

Automotive Technology II: Automotive Service includes applicable safety and environmental rules and regulations. In this course, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

#### **AUTO TECH I TC (TJC)**

**Grade:** 11¬-12 **Credit:** 3 **Prerequisite:** Automotive Basics

Automotive Technology I: Maintenance and Light Repair includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. This course includes applicable safety and environmental rules and regulations. In Automotive Technology I students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification and proper tool to use.

**Prerequisite(s)**: Algebra I; Geometry; Bennett Mechanical test; Meet TJC Dual credit standard (meet TSI standards in Math, Reading and Writing)

**Course Expenses**: Yes – student must purchase required college textbooks and any tools & supplies required of the TJC curriculum. The CTE Department will cover tuition if funds are available.

**Attendance:** Any accumulation of tardiness and/or absenteeism that results in a total of more than 10% non-attendance will result in automatic dismissal from the course.

**Course Completion:** The student must successfully complete the fall courses to enroll in the courses during the spring semester. Failure to do so will result in removal from the course.

College Credit Opportunity: Dual Credit with Tyler Junior College

**Certification Opportunity: Yes** 

**Transportation Required**: Yes – student is responsible for transporting themselves to and from the TJC West Campus to participate in the course. Course typically meets from 4:30 pm to 6:00 pm Monday¬-Thursday. **DAEP (Discipline Alternative Education Program)**: Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

#### **AUTO TECH II TC (TJC)**

Grade: 12 Credit: 3 Prerequisite: AUTO TECH I (TJC)

Advanced Automotive Technology includes knowledge of the major automotive systems and the principles of diagnosing and servicing these systems. Service includes applicable safety and environmental rules and regulations. In this course, students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.

**Course Expenses**: Yes – student must purchase required college textbooks and any tools & supplies required of the TJC curriculum. The CTE Department will cover tuition if funds are available.

**Attendance:** Any accumulation of tardiness and/or absenteeism that results in a total of more than 10% non-attendance will result in automatic dismissal from the course.

**Course Completion:** The student must successfully complete the fall courses to enroll in the courses during the spring semester. Failure to do so will result in removal from the course.

College Credit Opportunity: Dual Credit with Tyler Junior College

**Certification Opportunity: Yes** 

**Transportation Required**: Yes – student is responsible for transporting themselves to and from the TJC West Campus to participate in the course. Course typically meets from 4:30 pm to 6:00 pm Monday¬-Thursday. **DAEP (Discipline Alternative Education Program)**: Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

### **Business Management and Administration**

#### PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE

Grade: 9 Credit: 1

Prerequisite: None

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. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

#### **BUSINESS INFORMATION MANAGEMENT I**

Grade: 10 Credit: 1

**Prerequisite:** None

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.

**BUSINESS INFORMATION MANAGEMENT II Corequisite: BUSINESS MANAGEMENT** 

Prerequisite: Business Information Management I

College Credit Opportunity: Possible Technical Dual Credit with Tyler Junior College

Students recognize, evaluate, and prepare for a rapidly evolving global business environment that requires flexibility and adaptability. Students analyze the primary functions of management and leadership, which are planning, organizing, staffing, directing, or leading, and controlling. Topics will incorporate social responsibility of business and industry. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent managers, employees, and entrepreneurs. 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.

#### PRACTICUM IN BUSINESS MANAGEMENT

Grade: 12 Credit: 1
Prerequisite: Business Management

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the 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 business decisions.

## **Construction: Carpentry**

## PRINCIPLES OF CONSTRUCTION Grade: 9 - 12 Credit: 1.0

Prerequisite: None

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

## CONSTRUCTION TECHNOLOGY I Grade: 10 Credit: 1

**Prerequisite**: None

**Certification Opportunity:** Yes

In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. For safety and liability considerations limiting classes to 15 students per class.

#### **CONSTRUCTION TECHNOLOGY II**

Grade: 11 Credit: 2

Prerequisite: Construction Technology I

Certification Opportunity: Yes

In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. For safety and liability considerations, limiting course enrollment to 15 students is recommended.

#### PRACTICUM IN CONSTRUCTION TECHNOLOGY

Grade: 12 Credit: 2
Prerequisite: Construction Technology II

**Certification Opportunity:** Yes

In Practicum in Construction Technology, students will be challenged with the application of knowledge and skills gained in previous construction-related coursework. In many cases students will be allowed to work at a job (paid or unpaid) outside of school or be involved in local projects the school has approved for this class.

## **Construction: Heating, Ventilation and Air Condition Pathway (HVAC)**

## PRINCIPLES OF CONSTRUCTION Grade: 9 Credit: 1.0

Prerequisite: None

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

# CONSTRUCTION TECHNOLOGY I Grade: 10 Credit: 1

**Certification Opportunity:** Yes

Prerequisite: None

In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. For safety and liability considerations limiting classes to 15 students per class.

#### **CONSTRUCTION TECHNOLOGY II**

Grade: 11 Credit: 2
Prerequisite: Construction Technology I

**Certification Opportunity:** Yes

In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in

construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. For safety and liability considerations, limiting course enrollment to 15 students is recommended.

## PRACTICUM IN CONSTRUCTION TECHNOLOGY: HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION TECHNOLOGY (HVACREF1 & HVACREF2) TJC

Grade: 11-12 Credit: 3

Prerequisite(s): Algebra I; Geometry; Construction Technology II; pass Bennett Mechanical test; Meet TJC Dual

credit standard (meet TSI standards in Math, Reading and Writing)

College Credit Opportunity: Tyler Junior College Associate's Degree program

**Certification Opportunity**: Yes

**Course Expenses**: Yes – student must purchase required college textbooks and any tools & supplies required of the TJC curriculum. The CTE Department will cover tuition if funds are available.

**Attendance**: Any accumulation of tardiness and/or absenteeism that results in more than 10% non-attendance will result in automatic dismissal from the course.

**TJC Course**: Fall Semester – HART 1400, HART 1401, HART 1407 (8-week courses); Spring Semester – HART 1403, HART 1441, HART 1445 (8-week courses)

**Course Completion**: The student must successfully complete the fall courses to enroll in the courses during the spring semester. Failure to do so will result in removal from the course.

**Transportation Required**: Yes – student is responsible for transporting themselves to and from the TJC West Campus to participate in the course. Course typically meets from 4:30 pm to 6:00 pm Monday Thursday. **DAEP (Discipline Alternative Education Program)**: Discretionary DAEP assignment may result in removal from

this course. Mandatory DAEP assignment will result in removal from this course.

**Course Description:** In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology, students gain knowledge and skills specific to those needed to enter the industry as technicians in the HVAC and refrigeration industry or building maintenance technician or supervisor or prepare for a postsecondary degree. Students acquire knowledge and skills in safety, principles of HVAC theory, tools, codes, and installation of HVAC and refrigeration equipment.

## **Culinary Arts**

#### **INTRODUCTION TO CULINARY ARTS**

Grade 9 Credit: 1

Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry-level course for students interested in pursuing a career in the foodservice industry. This course is offered as a classroom and laboratory-based course.

#### **CULINARY ARTS**

Grade: 10 Credit: 2

Prerequisite: None

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certification. This course is offered as a laboratory based course.

#### **ADVANCED CULINARY ARTS**

Grade: 11 Credit: 2

Prerequisite: Level 2 Course

Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment.

#### **PRACTICUM IN CULINARY ARTS**

Grade: 12 Credit: 2
Prerequisite: Level 3 Course
Course Fees: Possible Smock

Practicum in Culinary Arts 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; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.

## **Digital Communications: Audio Visual Production**

#### PRINCIPLES OF ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS

Grade: 9 Credit: 1

Prerequisite: None

Careers in audio and video technology and video production span all aspects of the audio/video communications industry. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology and Communications career cluster, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills and educational requirements for those opportunities.

## AUDIO/VIDEO PRODUCTION I

Grade: 10 Credit: 1

**Prerequisite:** None

A/V Production I focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

#### **AUDIO/VIDEO PRODUCTION II WITH LAB**

Grade: 11-12 Credit: 2
Perquisite: Audio/Video Production I

Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post- production products. Through diverse forms of storytelling and production, students will exercise and develop creativity, intellectual curiosity, and critical-thinking, problem-solving, and collaborative skills. This course may be implemented in an audio format or a format

with both audio and video. Requiring a lab requisite for the course affords necessary time devoted specifically to the production and post-production process.

## PRACTICUM IN AUDIO/VIDEO PRODUCTION

**Grade: 12 Credit:** 2 **Perquisite:** Audio/Video Production II

The Practicum in Audio/Video Production builds upon the concepts taught in Audio/Video Production II with Lab. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video products in a professional environment.

## **Graphic Design and Multimedia Arts**

#### PRINCIPLES OF ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS

Grade: 9 Credit: 1

Prerequisite: None

Careers in audio and video technology and video production span all aspects of the audio/video communications industry. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology and Communications career cluster, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills and educational requirements for those opportunities.

### **GRAPHIC DESIGN & ILLUSTRATION I**

Grade: 10 Credit: 1

Prerequisite: None

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

#### **GRAPHIC DESIGN AND ILLUSTRATION II WITH LAB**

Grade: 11 Credit: 2

Prerequisite: Graphic Design and Illustration I

**Certification Opportunity:** Yes

Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

#### PRACTICUM IN GRAPHIC DESIGN AND ILLUSTRATION

Grade: 12 Credit: 2

Prerequisite: Graphic Design and Illustration II with Lab

Careers in graphic design and illustration span all aspects of the advertising and visual communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

#### 3-D MODELING AND ANIMATION Corequisite: DIGITAL ART AND ANIMATION

Grade: 12 Credit: 2

Prerequisite(s): Graphic Design and Illustration II with Lab

**Certification Opportunity: Yes** 

3-D Modeling and Animation consists of computer images created in a virtual three-dimensional (3-D) environment. 3-D Modeling and Animation has applications in many careers, including criminal justice, crime scene, and legal applications; construction and architecture; engineering and design; and the movie and game industries. Students in this course will produce various 3-D models of real-world objects. *This course satisfies the high school fine arts graduation requirement*.

Digital Art and Animation consists of computer images and animations created with digital imaging software. Digital Art and Animation has applications in many careers, including graphic design, advertising, web design, animation, corporate communications, illustration, character development, script writing, storyboarding, directing, producing, inking, project management, editing, and the magazine, television, film, and game industries. Students in this course will produce various real-world projects and animations. *This course satisfies the high school fine arts graduation requirement.* 

## **Information Technology**

#### PRINCIPLES OF INFORMATION TECHNOLOGY

Grade: 9 Credit: 1 Prerequisite: None

Students develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

#### AP COMPUTER SCIENCE PRINCIPLES

Grade: 10-11 Credit: 1

**Prerequisite:** None **Test Fee:** Yes

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems-including the internet-work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. This course also counts toward LOTE graduation requirements.

#### AP COMPUTER SCIENCE A

**Grade:** 11-12 **Credit:** 1 **Prerequisite:** Algebra 2 (PAP preferred)

AP Computer Science A is equivalent to a first semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. This course also counts toward LOTE graduation requirements.

Test Fee: Yes

#### **NETWORKING WITH LAB**

Grade: 11 Credit: 2

**Recommended Prerequisite:** AP Computer Science Principles

**Certification Opportunity: Yes** 

In Networking, students will develop knowledge of the concepts and skills related to data networking technologies and practices to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

#### PRACTICUM IN INFORMATION TECHNOLOGY

Grade: 12 Credit: 2

**Prerequisite:** Networking with Lab

In the Practicum in Information Technology, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an industry mentor, as an unpaid or paid internship, as part of a capstone project, or as career preparation.

## **Manufacturing Technology**

#### PRINCIPLES OF MANUFACTURING

**Grade:** 9-12 **Credit:** 1 **Prerequisite:** None

In Principles of Manufacturing, students are introduced to knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers.

## DIVERSIFIED MANUFACTURING I Grade: 10 Credit: 1

Prerequisite: None

In Diversified Manufacturing I, students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. The study of manufacturing systems allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting. Diversified Manufacturing I allows students the opportunity to understand the process of mass production by using a wide variety of materials and manufacturing techniques. Knowledge about career opportunities, requirements, and expectations and the development of skills prepare students for workplace success.

#### PRECISION METAL MANUFACTURING I

Grade: 11 Credit: 2

Prerequisite: Diversified Manufacturing I

Precision Metal Manufacturing I will provide the knowledge, skills, and technologies required for employment in precision machining. While the course is designed to provide necessary skills in machining, it also provides a real-world foundation for any engineering discipline. This course may address a variety of materials such as plastics, ceramics, and wood in addition to metal. Students will develop knowledge of the concepts and skills related to precision metal manufacturing to apply them to personal and career development. This course supports integration of academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for success.

#### PRACTICUM IN MANUFACTURING

Grade: 12 Credit: 2

Prerequisite: Precision Metal Manufacturing I

The Practicum in Manufacturing course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

## **Marketing and Sales**

#### PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE

Grade: 9 Credit: 1 Prerequisite: None

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. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

#### **MARKETING**

Grade: 10 Credit: 1 Prerequisite: None

Marketing explores the seven core functions of marketing including marketing planning, marketing-information management, pricing, product/service management, channel management, and selling. Students will demonstrate knowledge in hands-on projects which may include conducting research, creating a promotional plan, pitching a sales presentation, and introducing an idea for a new product/service.

#### **ADVANCED MARKETING**

Grade: 11 Credit: 2 Prerequisite: Level 2 Course

In Advanced Marketing, students will gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to solve problems related to marketing. This course covers technology, communication, and customer service skills.

#### PRACTICUM IN MARKETING

**Grade:** 12 **Credit:** 2 **Prerequisite:** Advanced Marketing

Students will gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students will integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions.

## **Plumbing**

#### PRINCIPLES OF CONSTRUCTION

**Grade:** 9 - 12 **Credit:** 1.0

Prerequisite: None

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

#### **PLUMBING TECHNOLOGY I**

Grade: 10 Credit: 1.0

**Prerequisite**: None

In Plumbing Technology I, students will gain knowledge and skills needed to enter the industry as a plumbing apprentice, building maintenance technician, or supervisor or prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in industry workplace basics and employer/customer expectations, including how to use a plumbing code book; how to identify and use power and hand tools; how to be safe on the jobsite and when using hand and power tools; how to apply basic plumbing mathematics and plumbing drawing; and how to identify, fit, and use plastic, copper, cast iron, carbon steel, and corrugated stainless steel pipe. In addition, students will be introduced to gas, drainage, and water supply systems and continue their knowledge of workplace basics and green technologies.

#### **PLUMBING TECHNOLOGY II**

Grade: 11-12 Credit: 2.0 Prerequisite: Plumbing Technology I

In Plumbing Technology II, students will gain the advanced knowledge and skills needed to enter the industry as a plumber, building maintenance technician, or supervisor or prepare for a postsecondary degree in mechanical engineering. Students will acquire knowledge and skills in plumbing codes, industry workplace basics, and employer/customer expectations, including tool and jobsite safety, advanced plumbing mathematics, commercial drawings, basic electricity, hanger installation, supports and structural penetrations, roof drains, fixture installation, valves and faucets, and oxy-fuel safety. Students will also learn about setup, cutting, brazing and welding water system sizing; gas, drain, waste and vent installation and testing; and water heater installation.

#### PRACTICUM IN PLUMBING

Grade: 12 Credit: 2
Prerequisite: Plumbing Technology II

Practicum in Plumbing is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom.

## **Welding Technology**

## PRINCIPLES OF MANUFACTURING Grade: 9 Credit: 1

Prerequisite: None

In Principles of Manufacturing, students are introduced to knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers.

#### **WELDING I**

**Grade:** 10 **Credit:** 1 **Prerequisite:** Introduction to Welding

**Certification Opportunity: Yes** 

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

#### WELDING II

Grade: 11 Credit: 1

Prerequisite: Welding I

Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as related to personal and career development. Students will integrate academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

#### **PRACTICUM IN WELDING**

Grade: 12 Credit: 2

Prerequisite: Welding I

The Practicum in Manufacturing course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

#### **ADVANCED WELDING (TJC)**

Grade: 12 Credit: 3

**Prerequisite**: Welding Technology, Algebra I; Geometry; Bennett Mechanical test; Algebra I; Meet TJC Dual credit standard (meet TSI standards in Math, Reading and Writing)

**Course Expenses**: Yes – student must purchase required college textbooks and any tools & supplies required of the TJC curriculum. The CTE Department will cover tuition if funds are available.

**Attendance:** Any accumulation of tardiness and/or absenteeism that results in more than 10% non-attendance will result in automatic dismissal from the course.

**Course Completion:** The student must successfully complete the fall courses to enroll in the courses during the spring semester. Failure to do so will result in removal from the course.

College Credit Opportunity: Dual Credit with Tyler Junior College

**Certification Opportunity:** Yes

TJC Course: Fall Semester – WLDG 1313 (8-week course); Spring Semester – WLDG 1453 (8-week course)

Transportation Required: Yes – student is responsible for transporting themselves to and from the TJC West

Campus to participate in the course. Course typically meets from 4:30 pm to 6:00 pm Monday¬-Thursday.

DAEP (Discipline Alternative Education Program): Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

**Course Description:** Advanced Welding builds on knowledge and skills developed in Welding. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course

integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

#### **ENGINEERING**

## **Engineering**

#### PRINCIPLES OF APPLIED ENGINEERING

**Grade:** 9 **Credit:** 1

Prerequisite: None

Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will understand the various fields of engineering and will be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

#### **ENGINEERING DESIGN AND PRESENTATION I**

Grade: 10 Credit: 1

Prerequisite: None

Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

#### **ENGINEERING DESIGN AND PRESENTATION II**

Grade: 11 Credit: 2
Prerequisite: Engineering and Design I

Engineering Design and Presentation II is a continuation of knowledge and skills learned in Engineering Design and Presentation I. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Emphasis will be placed on using skills from ideation through prototyping.

#### PRACTICUM IN ENGINEERING

Grade 12 Credit: 2

Prerequisite: Algebra1, Geometry and Engineering Design and Presentation II

The Engineering Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as physical science, social science, engineering, including laboratory

and testing services, and research and development services. Practicum in STEM is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

## PROJECT BASED RESEARCH (CTE)

#### **PROJECT BASED RESEARCH**

Grade 12 Credit: 1

Project-Based Research: Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct indepth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

### CAREER & TECHNICAL EDUCATION NON-DISCRIMINATION STATEMENT

Tyler ISD offers Career and Technical Education in TEA approved programs of study. Admission to the programs is open to all Tyler ISD students.

It is the policy of Tyler ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended. It is the policy of Tyler ISD not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.

Tyler ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and career and technical education programs.

For information about your rights or grievance procedures, contact the Title IX Coordinator and/or the Section 504 Coordinator:

Title IX Coordinator: Ronald Jones Ronald.Jones@tylerisd.org 903.262.1144

Section 504 Coordinator: Sindy Oldham Sindy.Oldham@tylerisd.org 903.262.1959

### SPECIAL EDUCATION AND STUDENTS WITH DISABILITIES

Special Education services are available on both high school-campuses in Tyler ISD. While many services are provided in the general education classroom setting, we do provide a continuum of services including classes taught by special educators focused on attainment of grade level skills for graduation and/or functional academic skills needed to ensure successful integration into the community and the world of work.

Services are provided until the student graduates or no longer meets the age requirements as referenced in the Texas Education Code 29.001 and 29.003.

A student receiving special education services who is younger than 22 years of age on September 1 of a scholastic year may be eligible for services through the end of that scholastic year or until graduation.

Graduation constitutes a release from services and is a change in placement. A student receiving special education services may graduate and be awarded a regular high school diploma if the student meets all the requirements for graduation. Graduation requirements differ based on the year the student entered 9<sup>th</sup> grade.

Students with disabilities may participate in a graduation ceremony after completing four years of high school (TEC § 28.025 (f))

#### **Special Education**

Special education and related services are specifically designed instructional services developed to support students with disabilities within the general curriculum. The intent of the support services is to enable all students with disabilities to make progress in the general curriculum, to participate in extracurricular and nonacademic activities, and to be educated and participate with non-disabled peers in the public school system.

Tyler ISD is committed to meeting the needs of students who have cognitive, physical, emotional, or learning differences. Each campus utilizes a Student Support Team that meets to discuss and recommend intervention strategies through general education programming. Students who are referred for special education support and services must participate in an evaluation process with formal notice and consent of parents. If evaluation information shows eligibility for special education support and services, an Admission, Review and Dismissal (ARD) Committee develops an appropriate educational program for each student.

#### An ARD Committee includes:

- · The student and his/her parent.
- District representative.
- Evaluation representative.
- At least one of the student's general education teachers.
- A special education teacher (The child's disability may require a teacher certified in a specific area, such as Visual or Auditory impairment).
- · Related services provider, if required.
- Language Proficiency Assessment Committee representative, if required.
- · Career and Technical Education Representative, if CTE is being considered for the student.

- The program developed by the ARD Committee is referred to as an Individualized Education Program (IEP). The
- · IEP is implemented in the least restrictive environment appropriate for the student.
- The student and parents have legal rights under the Individuals with Disabilities Education Act (IDEA) that are outlined in the Procedural Safeguards. Parents also receive information from Texas Education Agency in the booklet, "A Guide to the Admission, Review and Dismissal Process." Information about these rights is provided and explained to parents and/or adult students at least one time per year, and: when a student is initially referred for evaluation, when requested by parent, and at the initial filing of a due process hearing.

#### Students with Disabilities-Section 504

The Rehabilitation Act of 1973, reauthorized in 2008, commonly referred to as "Section 504," is a non-discrimination statute enacted by the United States Congress. The purpose of the Act is to prohibit discrimination and to ensure that students with disabilities have educational opportunities and benefits equal to those provided to other students. An eligible student under Section 504 is a student who has a physical or mental impairment that substantially limits them in a major life activity such as learning, self-care, walking, seeing, hearing, speaking, reading, concentrating, breathing, working, and performing manual tasks. See the school counselor or campus 504 Coordinator for more information about services for qualifying students.

#### **Students with Dyslexia and Related Disorders**

Students with dyslexia have difficulty with reading, writing and/or spelling. Each campus has a teacher (the dyslexia Designee) knowledgeable about dyslexia and Dyslexia intervention. This person is trained to reevaluate, instruct, and monitor eligible students. Schools serve students with dyslexia or related disorders in a variety of ways determined by a campus 504 committee. Services may include specialized instruction, classroom accommodations, and assistive technology. See the school counselor or campus 504 Coordinator for more information about services for qualifying students.