Jay Science and Engineering Academy
Course Selection 2018-2019
Northside ISD: Texas Recognized District TEA Gold Star District for
College Readiness

Please be advised that this Course Catalog is contingent on future decisions of the Texas Education Agency, State Board of Education, Texas Legislature and/or Northside Independent School District. If changes occur the online catalog will be updated.

It is the policy of Northside Independent School District not to discriminate on the basis of age, race, religion, color, national origin, sex or handicap in its 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.
Campus Contact Information

Brandeis
(210) 397-8200
13011 Kyle Seale Pkwy, 78249

Brennan
(210) 398-1250
2400 Cottonwood Way, 78253

Business Careers
(210) 397-7070
6500 Ingram Rd., 78238

Chavez Excel Academy
(210) 397-8120
11937 I.H. 10W, 78230

Clark
(210) 397-5150
5150 DeZavala Rd., 78249

Communications Arts
(210) 397-6043
11600 FM 471W, 78253

Construction Careers Academy @ Warren HS
(210) 397-4294
9411 Military Dr. W., 78251

Harlan
(210) 398-2200
14350 Culebra Road, 78253

Health Careers
(210) 397-5400
4646 Hamilton Wolfe, 78229

Holmes
(210) 397-7000
6500 Ingram Road, 78238

Jay
(210) 397-2700
7611 Marbach, 78227

Jay Science & Engineering Academy
(210) 397-2773
7611 Marbach, 78227

Marshall
(210) 397-7100
8000 Lobo Lane, 78240

O’Connor
(210) 397-4800
12221 Leslie Road, 78023

Stevens
(210) 397-6450
600 Ellison N., 78251

Taft
(210) 397-6000
11600 Culebra Road, 78253

Warren
(210) 397-4200
9411 Military Dr. W., 78251
### NISD Graduation Programs

Students beginning the ninth grade in 2014-2015 will take End of Course Tests.

#### NISD Foundation Graduation Program

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
</tr>
<tr>
<td>English I</td>
<td>1 credit</td>
</tr>
<tr>
<td>English II</td>
<td>1 credit</td>
</tr>
<tr>
<td>English III</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced English Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>Algebra I</td>
<td>1 credit</td>
</tr>
<tr>
<td>Geometry</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced Mathematics Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>1 credit</td>
</tr>
<tr>
<td>IPC or Adv. Physical Science Course</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced Science Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td></td>
</tr>
<tr>
<td>World Geography or World History</td>
<td>1 credit</td>
</tr>
<tr>
<td>U.S. History</td>
<td>1 credit</td>
</tr>
<tr>
<td>Economics</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>United States Government</td>
<td>1/2 credit</td>
</tr>
<tr>
<td><strong>Languages Other than English (LOTE)</strong></td>
<td>2 credits</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td></td>
</tr>
<tr>
<td>Health (Local requirement)</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>Communication Applications</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>(Local requirement)</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 credits</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22 credits</td>
</tr>
</tbody>
</table>

#### NISD Foundation Graduation Program with an Endorsement

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
</tr>
<tr>
<td>English I</td>
<td>1 credit</td>
</tr>
<tr>
<td>English II</td>
<td>1 credit</td>
</tr>
<tr>
<td>English III</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced English Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>Algebra I</td>
<td>1 credit</td>
</tr>
<tr>
<td><em>Algebra II or other Adv. Math Course</em></td>
<td>1 credit</td>
</tr>
<tr>
<td>Geometry</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced Mathematics Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>1 credit</td>
</tr>
<tr>
<td>IPC or Adv. Physical Science Course</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced Science Course</td>
<td>1 credit</td>
</tr>
<tr>
<td>Advanced Science Course</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td></td>
</tr>
<tr>
<td>World Geography or World History</td>
<td>1 credit</td>
</tr>
<tr>
<td>U.S. History</td>
<td>1 credit</td>
</tr>
<tr>
<td>Economics</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>United States Government</td>
<td>1/2 credit</td>
</tr>
<tr>
<td><strong>Languages Other than English (LOTE)</strong></td>
<td>2 credits</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1 credit</td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td></td>
</tr>
<tr>
<td>Health (Local requirement)</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>Communication Applications</td>
<td>1/2 credit</td>
</tr>
<tr>
<td>(Local requirement)</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 credits</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26 credits</td>
</tr>
</tbody>
</table>

* Algebra II is required to earn a distinguished level of achievement.

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* Students may substitute certain physical activities for the one required unit of physical education. Such substitutions are based on the physical activity involved in marching band and pep squad during the fall semester only; ROTC, and athletics.
*** Students must be enrolled in appropriate core courses (ELA, Math, Science, & Social Studies) necessary to pass the End of Course Exams.

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EXPLANATION OF ABBREVIATIONS
PR: Prerequisite CR: Credit for Course
SEM: Semesters LC: Local Credit

How to Read Course Descriptions
This course catalog contains information about the courses offered at NISD high schools. Courses are grouped by content area. Each course description contains the following basic information:

- **Course title**
- **Grade level**
- **The course description provides a short explanation of the course content.**
- **This shows the credit that a student will earn by successfully completing this course. "1" indicates a full-year credit (2 semesters).**

Prerequisites are required before a student can sign up for a specific course. "None" indicates a course is available to all students at that grade level.

ACADEMIC INFORMATION AND REQUIREMENTS
Each semester grade consists of 3 six-weeks' grades and a semester exam.

- The semester exam score represents 20% of the semester grade.
- The average of 3 six-weeks grades represents 80% of the semester grade.

The average of the two semester grades will determine the course grade and will become part of the student’s high school Grade Point Average (GPA).

Semester exams are administered the last week of each semester (fall and spring) and are a percent of the student's overall course grade for each semester.

AWARDING OF CREDIT
In order to receive credit in high school courses, the student MUST meet both an academic standard AND the state attendance requirements.

ATTENDANCE INFORMATION AND REQUIREMENTS
The attendance requirement states that your child MUST attend the high school class for a minimum of 90% of the scheduled class time in order to receive credit for the course.

For 2018-19, your student may not be absent (excused or unexcused) for more than 18 days in order to receive credit for their courses.

If your student misses an excess of 18 days during this school year, absences will be considered excessive and will result in denial of credit. Please note that credit will be denied even if the student is receiving a passing grade for the course.

Absences will be reviewed periodically to ensure students are in compliance with this expectation. Students will have an opportunity to "retrieve" or "make-up" instructional time missed due to absences, in order to ensure they meet the attendance requirements.

Attendance Recovery will be offered for students who need to make up excessive absences. Students must attend Attendance Recovery for both excused and unexcused absences which exceed the legal maximum.

The Minimum Attendance for Class Credit Law (section 25.092) states, "A student may not be given credit for a class unless the student is in attendance for at least 90% of the days the class is offered." If a student accrues more than eighteen (18) absences in a year-long course, without attending Attendance Recovery or having extenuating circumstances, he or she will receive NO CREDIT for that course.
Advanced Academics Course Options

OnRamps:
OnRamps' innovative dual-enrollment program brings rigorous courses aligned with the high standards and expectations of The University of Texas at Austin. The key benefit of early exposure to postsecondary education is the authentic entry point to college expectations it provides for students and their families. In addition, earning transferable college credit while in high school accelerates degree completion by reducing the costs and impact of student loans and increasing lifetime earning potential. In OnRamps students learn first-hand all that it takes to succeed in college before they get there. https://onramps.utexas.edu/

Advanced Placement:
By taking an AP course and scoring successfully on the related AP Exam, you can save on college expenses: most colleges and universities nationwide offer college credit, advanced placement, or both, for qualifying AP Exam scores. These credits can allow students to save college tuition, study abroad, or secure a second major. AP can transform what once seemed unattainable into something within reach. https://apstudent.collegeboard.org/home

Dual Credit:
Northwest Vista College’s Dual Credit Program allows eligible high school students to earn college credit for certain high school courses in which they are currently enrolled while completing their high school requirements. In order for students to participate in the program, the high schools must be approved to offer dual credit courses. Dual Credit is different from AP credit. https://www.alamo.edu/nvc/dual-credit/

Industry Certifications:
Industry certifications are credentials recognized by business and industry that measure competency in an occupational area. Certifications validate mastery of the knowledge and skills in a particular industry. An assessment, examination or license is administered by an independent party or governing board that has determined the competencies required for successful employment in the industry. http://www.lmci.state.tx.us/
Students, while still in high school may sign up for advanced academic courses which may lead to college credit. Students should meet with their high school counselors or teachers to obtain more information about these courses and support services.

**ADVANCED PLACEMENT**

Students may earn college credit through the College Board AP Examinations which are offered in May of each year. There is a fee for each AP exam. Northside ISD pays a supplement for each AP test taken by students who are sitting in the AP courses. For assistance in paying for the test, talk with your counselor or teacher. AP course offerings may vary by campus. Look for descriptions of these Advanced Placement courses in the Course Catalog:

<table>
<thead>
<tr>
<th>English Language Arts</th>
<th>Social Studies</th>
<th>Mathematics</th>
<th>Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>English Lang. &amp; Comp.</em></td>
<td><em>Human Geography</em></td>
<td><em>Calculus AB</em></td>
<td><em>Art</em></td>
</tr>
<tr>
<td><em>English Lit. &amp; Comp.</em></td>
<td><em>United States History</em></td>
<td><em>Calculus BC</em></td>
<td><em>Music Theory</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science</th>
<th>International Languages</th>
<th>AP Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Biology</em></td>
<td><em>French Language &amp; Culture</em></td>
<td><em>AP Seminar</em></td>
</tr>
<tr>
<td><em>Chemistry</em></td>
<td><em>Latin Language &amp; Culture</em></td>
<td><em>AP Research</em></td>
</tr>
<tr>
<td><em>Environmental Science</em></td>
<td><em>Spanish Language &amp; Culture</em></td>
<td></td>
</tr>
<tr>
<td><em>Physics</em></td>
<td><em>German Language &amp; Culture</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Spanish Literature &amp; Culture</em></td>
<td></td>
</tr>
</tbody>
</table>

**UT ONRAMPS**

OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. All OnRamps courses can be applied to the Texas Common Core and are guaranteed to transfer to any public institution in Texas.

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Science</th>
<th>Social Studies</th>
<th>English Language Arts</th>
<th>Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>OnRamps Precalculus</em></td>
<td><em>OnRamps Physics 1</em></td>
<td><em>OnRamps United States History</em></td>
<td><em>OnRamps Rhetoric and Writing</em></td>
<td></td>
</tr>
<tr>
<td><em>OnRamps Statistics</em></td>
<td><em>OnRamps Physics 2</em></td>
<td></td>
<td></td>
<td><em>Art Appreciation</em></td>
</tr>
<tr>
<td><em>OnRamps College Algebra</em></td>
<td><em>OnRamps Geoscience</em></td>
<td></td>
<td></td>
<td>Computer Science</td>
</tr>
<tr>
<td></td>
<td><em>OnRamps Chemistry</em></td>
<td></td>
<td></td>
<td><em>Fundamentals of Computer Science</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DUAL CREDIT</th>
</tr>
</thead>
</table>

Students may earn both high school and college credits. Students may accrue from three to thirty hours of college credit depending on the courses. Students are enrolled in college early and are required to take the TSI. Dual credit courses taken at the high schools are tuition free.

**NORTHWEST VISTA COLLEGE**

Dual Credit Academic Courses

Students take academic dual credit courses on their high school campus. These courses can vary by individual campuses and may be offered concurrently as Advanced Placement and Dual Credit.

<table>
<thead>
<tr>
<th>English Language Arts</th>
<th>Social Studies</th>
<th>Mathematics</th>
<th>Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>English III</em></td>
<td><em>U.S. History</em></td>
<td><em>Pre-Calculus</em></td>
<td><em>Art Appreciation</em></td>
</tr>
<tr>
<td><em>English IV</em></td>
<td><em>U.S. Government and Politics</em></td>
<td><em>AP Calculus AB or BC</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Macroeconomics</em></td>
<td><em>AP Statistics</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>College Algebra</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>International Languages</td>
<td>Career &amp; Technical Education</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td><em>Biology</em></td>
<td><em>Spanish 3</em></td>
<td><em>Digital Media</em></td>
<td></td>
</tr>
<tr>
<td><em>Environmental Science</em></td>
<td></td>
<td><em>Advanced Audio Video Production</em></td>
<td></td>
</tr>
<tr>
<td><em>Chemistry</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NORTHWEST VISTA COLLEGE**

Dual Credit Career & Technical Education Semester Courses

In the following dual credit courses students attend classes on the college campus. Northside ISD provides college textbooks and bus transportation as needed. Students are required to follow the college campus regulations, including the college calendar.

* Introduction to Criminal Justice
* Medical Terminology
* Introduction to Pharmacy

**ST. PHILIP’S COLLEGE**

Two Year Dual Credit Academy Programs

Open to Juniors Only—Applications are required in the spring for fall enrollment.

*Alamo Area Aerospace Academy*—Aircraft Mechanics–Three hour courses; students attend classes on the St. Philip's SW Campus.

* Information Technology and Security Academy*—Computer Security–Three hour courses; students attend classes at San Antonio College

* Manufacturing Technology Academy*—Diverse manufacturing–Three hour courses; students attend classes on the St. Philip's SW Campus
NORTHSIDE ISD DUAL CREDIT SAMPLE PATHWAY
Cannot Exceed 7 Courses Total

NISD DUAL CREDIT ALIGNMENT
Cannot Exceed 7 Courses Total
Beginning in 2017-2018

<table>
<thead>
<tr>
<th>GRADE</th>
<th>FALL 2017</th>
<th>SPRING 2018</th>
<th>TOTAL COURSES</th>
</tr>
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<tbody>
<tr>
<td>9th</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>(i.e. Spanish Pre-AP/DC, Pre-Cal Pre-AP/DC, Art I Pre-AP/DC etc...)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Total = 2</td>
</tr>
<tr>
<td>11th</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Total = 2</td>
</tr>
<tr>
<td>12th</td>
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<td>0.5</td>
<td>1</td>
</tr>
<tr>
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<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total = 2</td>
</tr>
<tr>
<td>TOTAL COURSES</td>
<td>3.5</td>
<td>3.5</td>
<td>7</td>
</tr>
</tbody>
</table>
**Advanced Placement**

**AP/PreAP Course Commitment**
Northside ISD recognizes the value of student participation in advanced academic coursework and encourages students to graduate from high school with at least one advanced academic course credit such as Advanced Placement. Participation in advanced academic courses is a foundation of college readiness. Students who participate are more likely to complete a bachelor’s degree in college and typically have higher college GPAs (Hargrove, Godin and Dodd, 2007; Dodd and Keng, 2008). The intent of this commitment is to maximize each student’s potential for success in AP and PreAP Courses.

**Choosing Advanced Academics**
PreAP and AP courses are designed to challenge students beyond grade-level academic courses and prepare them for success in future advanced coursework. Students may require additional encouragement and support from both family and campus to be successful in advanced academics.

Students who opt to participate in AP or PreAP must successfully complete prerequisite coursework and demonstrate mastery on course-related state-mandated performance assessments prior to enrollment in the course.

**Campus Commitment**
The campus commits to advanced academics by communicating the value of advanced coursework, recruiting students with potential for success, encouraging student commitment, and supporting advanced academics instruction.

**Student Commitment**
The student commits to advanced academics by recognizing the long-term benefits of participation and seeking assistance when needed.

As a student enrolled in an AP or PreAP course:
- I understand that advanced academic courses may seem challenging at first and initial grades may not reflect later grades in the course.
- In the event that I encounter difficulties with the course content, I will conference with my teacher about my progress and attend recommended tutorials.
- I understand that course changes will be contingent on space availability, extenuating circumstances, the teacher’s appraisal of my potential for success in the course, and the timing of the request.
- I understand that successful completion of an AP exam can yield college credit.
- I understand that participation in advanced coursework prepares me well for college, increases my chances of finishing a college degree in four years and earning a higher college GPA.

**Parent Commitment**
The parent commits to advanced academics by supporting student learning in the advanced academic course; by supporting teacher efforts to provide rigorous, quality instruction; and by valuing the learning that occurs in the advanced academic course. As a parent of a student enrolled in an AP or PreAP course:
- I will encourage my child to be prepared for class every day.
- I understand that advanced academic courses may seem challenging at first and initial grades may not reflect later grades in the course.
- If my child encounters difficulties with the course content, I will expect my child to conference with the teacher and attend recommended tutorials.
- Prior to initiating a petition for my child to exit the course, I will contact the teacher for his/her input.
- I understand that schedule changes will be contingent on space availability, extenuating circumstances, and the teacher’s appraisal of my child’s potential for success in the course, and the timing of the request.

**Teacher Commitment**
The teacher commits to advanced academics by encouraging student participation and success, planning for student learning, providing rigorous, quality instructions, and offering assistance for struggling students. As a teacher of an AP or PreAP course:
- I will teach the course following the curriculum developed by Northside ISD and as authorized by College Board (AP Courses).
- I will provide instruction that prepares students for the next level advanced academic course.
- I will provide quality instruction at an advanced level and give ample opportunities for students to be successful.
- I will assign work that is meaningful and relevant to the required learning goals.
- I know that students are enrolled in many other courses and that workload for this course must not be unreasonably time consuming.
- I will provide appropriate tutorial opportunities for students who have difficulty with course content.

**PSAT/SAT**
College Board assessments — including PSAT™ 8/9, PSAT™ 10, PSAT/NMSQT®, and the SAT — provide benchmarks and consistent feedback for measuring student progress over time, allowing teachers to accelerate students who are either ahead or behind. In addition to measuring readiness, College Board assessments connect students to opportunities, including scholarships, personalized practice, challenging Advanced Placement® course work, and fee waivers.

The redesigned SAT, PSAT/NMSQT, PSAT 10, and the PSAT 8/9 can be used to expand access to AP classrooms and grow AP programs. Both educators and students can see if students’ test scores indicate that they are likely to succeed in specific AP courses. College Board research shows that students who score a 3 or higher on an AP Exam typically experience greater academic success in college and are more likely to earn a college degree on time than non-AP students.
STAAR / END OF COURSE GUIDANCE FOR NISD
STUDENTS, PARENTS, COUNSELORS AND TEACHERS

STATE OF TEXAS ASSESSMENTS OF ACADEMIC READINESS

✓ Students entering 9th grade in 2011-2012 and beyond must take the End of Course (EOC) tests for the courses in which they are enrolled. This includes middle school students taking Algebra I.

EOCs Subject Areas
1. English I
2. English II
3. Algebra I
4. Biology
5. U.S. History

EOC Student Performance Levels

I. Unsatisfactory Academic Performance
- Performance in this category indicates that students are inadequately prepared for the next grade or course and do not demonstrate a sufficient understanding of the assessed knowledge and skills. Unsatisfactory refers to a score that is below Level II.
- Students who did not achieve a satisfactory score must retake the EOC test.

II. Satisfactory Academic Performance
- Performance in this category indicates that students are sufficiently prepared for the next grade or course and the ability to think critically and apply the assessed knowledge and skills in familiar contexts.

III. Advanced Academic Performance
- Performance in this category indicates that students are well-prepared for the next grade or course and the ability to think critically and apply the assessed knowledge and skills in varied contexts, both familiar and unfamiliar.

EOC Courses Taken in Middle School
✓ Middle school students are required to take the EOC for the high school course in which they are enrolled (Algebra I).

EOC Re-takes
✓ Retake tests will be administered three times a year:
  - End of fall semester
  - End of spring semester
  - Summer
✓ The student must retake an EOC test that does not meet Level II Satisfactory Score.

Student Transfers
✓ Student transfers include students who have transferred to NISD from:
  - Home schools
  - Out-of-district schools
  - Out-of-state schools
  - Out-of-country schools
✓ Student transfers must take EOC tests for the courses in which they are enrolled for each core subject area.

Assessment for All Students
✓ STAAR for all!
✓ Serves the needs of students in Special Education
✓ Serves the needs of English language learners

Resources:
✓ Texas Education Agency
  http://www.tea.state.tx.us/student.assessment/
  http://www.tea.state.tx.us/student.assessment/staar/
  http://www.tea.state.tx.us/student.assessment/special-ed/staarm/
  http://www.tea.state.tx.us/student.assessment/special-ed/staaralt/
✓ Education Service Center Region 20
✓ Northside ISD STAAR website
  http://nisd.net/testing-evaluation/about-staar
✓ Campus website
A student must complete the Foundation High School Program (22 credits), one additional math credit, one additional science credit, and two additional elective credits while completing the specific requirements of his/her selected endorsement. Distinguished Level of Achievement graduates must meet the Foundation Program and earn 4 Math credits including Algebra II, 4 Science credits, and at least 1 Endorsement.

### STEM
Science, Technology, Engineering, & Math

Students may earn a STEM endorsement by selecting and completing the requirements from among these 4 options.

Note: Algebra II, Chemistry, and Physics are required for the STEM endorsement regardless of the option the student selects.

**Option 1: Computer Science**
Students take 4 computer science courses.
- Principles of Computer Science AP
- Computer Science 1 Pre-AP
- Computer Science 2 AP/DC
- Computer Science 3 H/DC

**Option 2: CTE**
Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster that lead to a final course in the STEM cluster. At least one (1) of the courses must be an advanced CTE course (3rd year or higher course in a sequence).

**Option 3: Math**
Students take Algebra I, Geometry, and Algebra II AND two (2) of the following courses for which Algebra II is a prerequisite.
- AQR
- Pre-Calculus
- AP Calculus AB or BC
- AP Statistics
- AP Computer Science A
- Math ISM College Algebra
- College Prep Math (ISM Advanced Algebra 3)

**Option 4: Science**
Students take Biology, Chemistry, and Physics, AND two (2) of the following courses. New courses may be added.
- AP Biology
- AP Capstone (Year 1-AP Seminar) BRANDEIS ONLY
- AP Capstone (Year 2-AP Research) BRANDEIS ONLY
- AP Chemistry
- AP Environmental Science
- AP Physics 1
- AP Physics 2
- AP Physics C (Mechanics, Electricity and Magnetism)
- Advanced Animal Science
- Advanced Plant & Soil Science
- Advanced Biotechnology
- Anatomy & Physiology
- Aquatic Science
- Astronomy
- Earth & Space Science
- Engineering Design & Problem Solving
- Environmental Systems
- Food Science
- Forensic Science
- Medical Microbiology/Pathophysiology (paired semester courses)
- Scientific Research & Design

**Option 5: Combination**
In addition to Algebra II, Chemistry, and Physics, a student may take a coherent sequence of three (3) additional credits from no more than two (2) options above. (STEM Options 1-4)

### Business & Industry
Students may earn a Business & Industry endorsement by selecting and completing the requirements from among these 2 options.

**Option 1: CTE**
Students earn four (4) credits in a coherent sequence by taking at least two (2) courses in the same cluster. At least one (1) of the courses must be an advanced CTE course. (3rd year or higher course in the sequence).

Clusters include:
- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Technology, and Communication
- Business Management and Administration
- Finance
- Hospitality and Tourism
- Information Technology
- Marketing
- Transportation, Distribution, and Logistics

**Option 2: English**
Students take four (4) English elective credits that include three levels in one of the following areas
- Advanced Journalism: Newspaper, Yearbook or Broadcast
- Debate or Public Speaking

### Public Services
Students may earn a Public Services endorsement by selecting and completing the requirements from among these 2 options.

**Option 1: CTE**
Students earn four (4) credits in a coherent sequence by taking at least two (2) courses in the same cluster. At least one (1) of the courses must be an advanced CTE course. (3rd year or higher course in the sequence).

- Education and Training
- Health Science
- Human Services
- Law, Public Safety, Corrections, and Security

**Option 2: JROTC**
Student takes four (4) JROTC courses for 4 credits.

### Arts & Humanities
Students may earn an Arts & Humanities endorsement by selecting and completing the requirements from among these 4 options.

**Option 1: Social Studies**
Students take five (5) social studies credits.

**Option 2: LOTE (Language other than English)**
Students take four (4) levels of the same LOTE for 4 credits.
- OR
  Students take two (2) levels of one LOTE and two (2) levels of a different LOTE for 4 credits.

**Option 3: Fine Arts**
Students take four (4) courses in the same fine arts area for 4 credits
- OR
  Students take two (2) courses in one fine arts area and two (2) courses in a different fine arts area for 4 total credits.

**Option 4: English**
Students take four (4) elective credits selected from the following courses.
- English IV
- Independent Study (ISM) in English
- Literary Genres
- Creative Writing
- Research and Technical Writing
- Humanities
- AP English Literature & Comp
- Communication Applications

### Multidisciplinary Studies
Students may earn a Multidisciplinary Studies endorsement by selecting and completing the requirements from among these 3 options.

**Option 1: Four by Four (4 X 4)**
Students take four (4) courses in each of the four core content areas.
- Four (4) English credits including English IV
- Four (4) math credits
- Four (4) science credits including biology and chemistry and/or physics
- Four (4) social studies credits

**Option 2: AP and Dual**
Students take four (4) credits in Advanced Placement or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts.

**Option 3: Combination**
Students take four advanced courses that prepare them to enter the workforce or postsecondary education without remediation from within one endorsement area or among endorsement areas not in a coherent sequence.
Business Management

- Business Management & Administration
- Finance

Principles of Business, Marketing, & Finance (9-10) #8206
Course focuses on 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.
SEM: 2 CR: 1

Business Law (10-12) #8208
Students analyze the social responsibility of business and industry relating the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, business organizations, concept of agency and employment, and real property. Students address business applications of legal issues to make appropriate business decisions.
SEM: 2 CR: 1

Money Matters (10-12) #8307
Students investigate global economics with an emphasis on the free enterprise system. Students analyze financial options based on current and projected economic factors and set long-term financial goals, achievable through investment, tax planning, asset allocation, risk management, retirement planning, and estate planning.
SEM: 2 CR: 1

Accounting I (11-12) #8310
Students utilize knowledge to engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information based on various accounting industry standards. Students formulate and interpret financial information for use in management decision making.
SEM: 2 CR: 1

Business Management (11-12) #8227
Students analyze the primary functions of management and leadership incorporating social responsibility of business and industry. Students develop a foundation in various aspects of business to become competent managers, employees, and entrepreneurs. Students integrate the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate management decisions.
SEM: 2 CR: 1

Accounting II (12) #8312
Provides further development of accounting principles with extensive use of technology; incorporates complete accounting cycle in relation to formation and dissolution of partnerships, characteristics of corporate organization and ownership; provides experience in initiating and maintaining an accounting system and in analyzing, interpreting and synthesizing managerial problems using accounting information. Designed for students interested in continuing at the post-secondary level or entering the workforce. PR: Accounting I
SEM: 2 Math CR: 1

Practicum in Business Management (12) #8229
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.
SEM: 2 CR: 2
Art, A/V Technology, & Communications

• Animation

Principles of Information Technology (9-10) #8500
Students use emerging technologies, demonstrate ethical use of the Internet and explain issues concerning Internet security protocols. Students identify computer hardware components and demonstrate an understanding of file extensions. Students produce and format various documents with both text and graphics, input formulas and utilize preprogrammed functions in documents and tables. Students apply design and web publishing techniques.
SEM: 2 CR: 1

Digital Media (10-12) #8520
Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve problems.
SEM: 2 CR: 1

Animation I (11-12) #8151
Careers in animation span all aspects of motion graphics. 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 an understanding of the history and techniques of the animation industry.
SEM: 2 CR: 1

Animation II (11-12) #8152
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 create two- and three-dimensional animations.
PR: Animation I
SEM: 2 CR: 1
Business & Industry Endorsement

Architecture & Construction
Arts, A/V Technology & Communication

- Fashion Design

Principles of Human Services (9-10) #8450
Students assess the relationship between health and wellness and personal and professional achievement. Students evaluate the effects of crises, stress, and domestic violence on individuals and the family and recognize appropriate responses and management strategies. Students identify the basic needs of children as well as caregiver guidelines that promote safe and healthy child development. Students create meals according to dietary guidelines. Students create written and electronic records of client services for cosmetology, fashion design, and interior design.

SEM: 2 CR: 1

Fashion Design I (10-12) #8160
This laboratory course focuses on careers in the fashion and textile/apparel industries. Students will be exposed to the apparel production process from design concept to finished product. Course content includes apparel construction, care, and maintenance.

SEM: 2 CR: 1

Fashion Design II (11-12) #8161
This advanced laboratory course focuses on careers in the fashion and textile/apparel industries. Students will be expected to develop an advanced understanding of fashion, with an emphasis on design and production.

SEM: 2 CR: 2

Fashion Design II Lab (11-12)
Students will develop technical 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 fashion industry with an emphasis on design and construction.

SEM: 2 CR: 2

PR: Fashion Design I

Practicum in Fashion Design (12) #8162
Students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab based classroom experiences or career preparation opportunities.

PR: Fashion Design II & Fashion Design II Lab

SEM: 2 CR: 2

See Counselor for course availability
Hospitality & Tourism

•Culinary Arts

Principles of Human Services (9-10) #8450
Students assess the relationship between health and wellness and personal and professional achievement. Students evaluate the effects of stress, violence, and domestic violence on individuals and the family and recognize appropriate responses and management strategies. Students identify the basic needs of children as well as caregiver guidelines that promote safe and healthy child development. Students create written and electronic records for home-based and school-based laboratory training or through work-based arrangements.

SEM: 2 CR: 1

Introduction to Culinary Arts (10-11) #8422
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.

SEM: 2 CR: 1

Culinary Arts (11-12) #8420
Teaches the fundamentals and principles of the art of cooking, the science of baking, and management and production skills and techniques. Students can pursue appropriate industry certifications. This course may be offered as a laboratory-based or internship course.

SEM: 2 CR: 2

Practicum in Culinary Arts (12) #8421
Students learn employability skills, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Instruction may be delivered through school-based laboratory training or through work-based arrangements.

PR: Culinary Arts

SEM: 2 CR: 2

Food Science (11-12) #8430
A study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Students conduct laboratory and field investigations using scientific methods.

PR: 3 units of Science including Chemistry & Biology

SEM: 2 Science CR: 1

Career Preparation Family & Consumer Science (FCS) (11-12) #8002
Students spend one hour in class each day and a minimum of 15 hours on the job each week. Some of the areas of employment include: clothing and home furnishings, child care, food service, hotel and hospitality services.

SEM: 2 CR: 3
Architecture And Construction

- Architecture
- Construction Technology

Principles of Architecture (9-10) #8098
Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. 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.

Sem: 2 CR: 1

Principles of Construction (9-10) #8099
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.

Sem: 2 CR: 1

Architectural Design I (10-12) #8104
Architectural Design I M (10-12) #8105
A focus on design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

PR: Algebra I & English I

Sem: 2 CR: 1

Architectural Design II (11-12) #8106
Students acquire the advanced knowledge of design, design history, design techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes. Students gain knowledge and skills specific to those needed to prepare for a postsecondary degree or entry into an architecture or construction related field.

PR: Architectural Design I & Geometry

Sem: 2 CR: 2

Electrical Technology I (10-12) #8135
Electrical Technology I M (10-12) #8115
A course in safety, electrical theory, tools, codes, installation of electrical equipment, and the reading of electrical drawings, schematics, and specifications.

Sem: 2 CR: 1

Construction Technology I (10-12) #8111
Construction Technology I M (10-12) #8107
Students introduced to safety, tool usage, building materials, codes and framing. Students will develop an understanding of the various educational requirements and career opportunities in construction management, architecture, or engineering.

Sem: 2 CR: 2

Construction Technology II (11-12) #8112
In addition to skills learned in Construction Technology, students acquire exterior and interior finish out skills. Students gain advanced knowledge and skills specific to those needed to enter the work force as carpenters, building maintenance technicians, or supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering.

PR: Construction Technology I

Sem: 2 CR: 2

Practicum in Architectural Design (12) #8127
A course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. Instruction may be delivered through laboratory training, independent study, or career preparation arrangements.

PR: Architectural Design II

Sem: 2 CR: 2
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

- Automotive
- Collision
- Alamo Academies

Principles of Transportation Systems (9-10) #8759
Students will understand the interaction between various vehicle systems, the logistics used to move goods and services to consumers, and the components of transportation infrastructure. Students will understand technologies used to provide products and services in a timely manner and be able to meet the expectations of industry employers.
SEM: 2 CR: 1

Automotive Basics (9-10) #8766
This course 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.
SEM: 2 CR: 1

Automotive Technology I (10-12) #8752
Students will gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.
SEM: 2 CR: 2

Automotive Technology II (12) #8753
A continued study in the repair, maintenance, and diagnosis of vehicle systems. Students acquire advanced knowledge in the theory of operation of automotive vehicle systems and associated repair practices.
PR: Automotive Technology I SEM: 2 CR: 2

Basic Collision Repair and Refinishing (10-12) #8765
This course includes knowledge of the processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concepts and theory of systems related to automotive collision repair and refinishing.
SEM: 2 CR: 1

Collision Repair (11-12) #8754
This course focuses on the application of advanced technical skills and practices related to collision repair and refinishing. Provides training for entry level employment in the collision repair and refinishing industry.
SEM: 2 CR: 2

Paint and Refinishing (12) #8756
This course includes knowledge of the processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concepts and theory of systems related to automotive paint and refinishing.
SEM: 2 CR: 2

Introduction to Aircraft Technology Dual #8740
(11-12) (College credit course-St. Philip’s Southwest Campus)
Alamo Area Aviation Academy provides job specific training for employment in the highly technical career field of aircraft mechanic. First year instruction includes aircraft electrical, and electronic systems, service and repair of hydraulic systems, airframes, and rigging. Leads toward FAA certification.
PR: Application and acceptance into AAAA SEM: 2 CR: 3

Diesel Equipment Technology I Dual #8742
(11-12) (College credit course-St. Philip’s Southwest Campus)
An Alamo Area Heavy Equipment Academy course introducing the basic principles of diesel engines and systems. Includes fundamentals of hydraulics including components and related systems. This is an introduction to the basic principles of electrical systems for diesel powered equipment with emphasis on starters, alternators, batteries, and regulators.
PR: Application and acceptance into HEA SEM: 2 CR: 2

Practicum in Transportation Systems Dual #8743
Extended Practicum in Transportation Systems Dual (AAAA Yr. 2) (12)
(College credit course-St. Philip’s Southwest Campus)
An Alamo Area Aviation Academy course designed to apply the theory of operation, repair, and maintenance of aircraft airframe, power plant, and avionics systems. Aircraft services include knowledge of the function, diagnosis, and service of the electrical, electronic, and hydraulic, pneumatic, airframe, mechanical, and power plant components of aircraft as governed by federal aviation regulations. Students in their second year of the Alamo Area Aviation Academy will select a specific track in either aircraft infrastructures or turbine technology. The students continue progress toward FAA Certification.
PR: AAAA Year 1 SEM: 2 CR: 3

Practicum in Transportation Systems Dual #8743
Extended Practicum in Transportation Systems Dual (HEA Yr. 2) (12)
(College credit course-St. Philip’s Southwest Campus)
An Alamo Area Heavy Equipment Academy course designed to apply advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach.
PR: HEA Year 1 SEM: 2 CR: 3
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS
MANUFACTURING

• Alamo Area Academies

Metal Fabrication and Machining I Dual (11-12) #8608
(Atma Yr. 1) (College credit course-St. Philip’s Southwest Campus)
Advanced Technology & Manufacturing Academy students work with a variety of manufacturing materials such as metals, plastics, ceramics, and wood. Provides the knowledge, skills, and technologies required for employment in a globally competitive manufacturing environment. Students earn college credit for the manufacturing technology courses taught by the community college.
PR: Application and acceptance into ATMA SEM: 2 CR: 2

Practicum in Manufacturing Dual (12) #8607
Extended Practicum in Manufacturing Dual (12) (ATMA Yr. 2) (College credit course-St. Philip’s Southwest Campus)
Advanced Technology & Manufacturing Academy students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems in manufacturing. Knowledge and skills in the proper application of manufacturing engineering, the design of technology, efficient manufacturing technology, and the assessment of the effects of production technology prepare students for success. Students earn college credit for the manufacturing technology courses taught by the community college.
PR: ATMA Year 1 SEM: 2 CR: 3

Career & Technical Education Student Certifications

- Automotive Service Excellence (ASE)
- Pharmacy Technician
- ServSafe
- Basic Life Support (BLS)
- Sterile Processing & Distribution Technician
- Computer Maintenance
- Texas Beef Quality Assurance
- Cardiopulmonary Resuscitation/Automated external defibrillator (CPR/AED)
- National Center for Construction Education and Research (NCCER)
- Occupational Safety and Health Administration (OSHA)
- Cisco Certified Network Associate (CCNA)
- Cosmetology
- CompTIA A+
- Bloodborne Pathogens
- Certified Nursing Assistant
- Microsoft Office Specialist (MOS)
- Registered Dental Assistant (RDA)
- Adobe Certified Associate (ACA)
Public Services Endorsement

**Education & Training**

- **Human Services**

**Principles of Human Services (9-10) #8450**
Students assess the relationship between health and wellness and personal and professional achievement. Students evaluate the effects of crises, stress, and domestic violence on individuals and the family and recognize appropriate responses and management strategies. Students identify the basic needs of children as well as caregiver guidelines that promote safe and healthy child development. Students create written and electronic records of client services for cosmetology, fashion design, and interior design.

**SEM: 2 CR: 1**

**Child Development (10-12) #8462**
This course addresses child growth and development from prenatal through school-age children. Students use skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

**SEM: 2 CR: 1**

**Child Guidance (11-12) #8461**
This course addresses child growth and guidance. Students are equipped to develop positive relationships with children and effective caregiver skills in order to promote the well-being and healthy development of children and pursue careers related to the care, guidance, and education of children.

**SEM: 2 CR: 2**

**Introduction to Cosmetology (11) #8469**
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.

**SEM: 2 CR: 2**

**Practicum in Education and Training (12) #8253**
The second year of an internship providing advanced knowledge of child and adolescent development as well as effective teaching and training practices. Students work with elementary and middle school-aged students. Students plan and direct instruction and activities, develop and prepare instructional materials, assist with record keeping, and complete other responsibilities of educational professionals and personnel.

**SEM: 2 CR: 2**

**Practicum in Human Services (12) #8458**
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.

**SEM: 2 CR: 2**

**Principles of Cosmetology Design & Color Theory (12) #8472**
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. Students will attain academic skills and knowledge as well as technical knowledge and skills related to cosmetology design and color theory. Students will develop knowledge and skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the TDLR requirements for licensure upon passing the state examination.

**SEM: 2 CR: 1**
**HEALTH SCIENCE**

**Principles of Health Science (10-12) #8352**
This course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students will identify employment opportunities, technology, and safety requirements of each system.

**SEM: 2 CR: 1**

**Medical Terminology (9) #8358**
**Medical Terminology Dual (11-12) #8359**
*(College credit course-Northwest Vista College)*
This course introduces students to the structure of medical terms, medical abbreviations and acronyms. Students will achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

**SEM: 1 CR: 1**

**Health Science Theory (11-12) #8356**
Course designed to develop health care specific knowledge and skills related to a variety of health careers. Students will have hands-on experiences by methods such as clinical rotation and career preparation learning.

**PR: Principles of Health Science & Biology**
**SEM: 2 CR: 1**

**Health Science Theory/Clinical (11-12) #8357**
This 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.

**PR: Principles of Health Science & Biology**
**SEM: 2 CR: 2**

**Anatomy and Physiology (11-12) #8380**
**Anatomy and Physiology H (11-12) #8379**
Students study the structure and function of the human body and the interaction of body systems for maintaining homeostasis. Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.

**PR: Biology & 2nd Science**
**SEM: 2 Science CR: 1**

**Medical Microbiology (11-12) #8361**
Students explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

**PR: Biology & Chemistry**
**SEM: 2 Science CR: 1**

**Practicum in Health Science (12) #8370**
A course designed to give students practical application of previously studied knowledge and skills for certification or licensure in an allied health career. Students develop advanced clinical skills necessary for employment in the health care industry or continued education in health careers.

**PR: Principles of Health Science, Health Science Theory, & Biology**
**SEM: 2 CR: 2**

**Pharmacology (12) #8350**
**Pharmacology Dual (11-12) #8351**
*(College credit course-Northwest Vista College)*
Students will study the classifications of drugs, drug actions, uses, and adverse reactions. In addition, they will study drugs in relation to treatment, care and restoration of health.

**PR: Biology & Chemistry**
**SEM: 2 CR: 1**
Science, Technology, Engineering & Mathematics

STEM Endorsement

**Engineering**
Jay Science and Engineering Students

- Principles of Applied Engineering 1 credit
- Engineering Design & Presentation I 1 credit
  Prerequisites: Algebra I
- Engineering Design and Presentation II 2 credits
  Prerequisites: Algebra I and Geometry
- Engineering Design and Problem Solving 1 credit
  Prerequisites: Algebra I and Geometry

**Robotics**
Jay Science and Engineering Students

- Principles of Applied Engineering 1 credit
- Robotics I 1 credit
- Robotics II 1 credit
  Prerequisites: Robotics I
- Scientific Research and Design 1 credit
  Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics:

**Biotechnology**
Jay Science and Engineering Students

- Principles of Applied Engineering 1 credit
- Principles of Biosciences 1 credit
- Biotechnology I 1 credit
  Prerequisites: Biology and Chemistry
- Biotechnology II 1 credit
  Prerequisites: Biotechnology I and Chemistry

**Computer Science**
Jay Science and Engineering Students

- Principles of Computer Science AP 1 credit
- Computer Science 1 Pre-AP 1 credit
- Computer Science 2 AP/DC 1 credit
- Computer Science 3 H/DC 1 credit

Technology Applications Sequence
See p. 21 for course descriptions

See Counselor for course availability
SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

- Engineering

Principles of Applied Engineering M (9-10) #8703
This course provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Working on design teams, students will use multiple computer hardware and software applications to conduct research, design and create projects, and present ideas related to biotechnology, electronics, robotics, and automation. Students will use appropriate tools and techniques to demonstrate safe work habits.

SEM: 2 CR: 1

Engineering Design and Presentation I M (10-12) #8708
Students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer advanced academic skills to component designs in a project-based environment. Students will build prototypes or use simulation software to test their designs. Students will use appropriate tools and techniques to demonstrate safe work habits.

PR: Algebra I

SEM: 2 CR: 1

Robotics I M (11-12) #8733
Through implementation of the design process, students will transfer advanced academic skills to component designs in a project-based environment. Students will build prototypes or use simulation software to test their designs. Additionally, students explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.

SEM: 2 CR: 1

Robotics II M (12) #8734
Students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to present ideas related to biotechnology, electronics, robotics, and automation. Students will use appropriate tools and techniques to demonstrate safe work habits.

PR: Robotics II

SEM: 2 CR: 1

Engineering Design and Presentation II (11-12) #8702
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, 3D prototypes, and drawings. 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.

PR: Algebra I and Geometry

SEM: 2 CR: 2

Engineering Design and Problem Solving M (11-12) #8709
This course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world, while engineering seeks to shape this world to meet human needs and wants. Engineering design takes into consideration limiting factors or “design under constraint.” Various engineering disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution. The design process and problem solving are inherent to all engineering disciplines.

PR: Algebra I & Geometry

SEM: 2 CR: 1 Science credit

Scientific Research and Design M (12) #8723
The course has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. This course applies the standard skills mastered in Biotechnology I and includes assay design. PR: Biotechnology I and Chemistry

SEM: 2 CR: 1 Science credit

Principles of Biosciences (10) #8719
Provides an overview of biotechnology, bioengineering, and related fields. Topics include genetics, cell structure, proteins, nucleic acids, and the impact of immunological events in biotechnology. Students will further study the increasingly important agricultural, environmental, economic, and political roles of bioenergy and biological remediation; the roles of nanoscience and nanotechnology in biotechnology medical research; and future trends in biological science and biotechnology.

SEM: 2 CR: 1

Biotechnology I (11) #8719
Students will apply advanced academic knowledge and skills to the emerging fields of biotechnology such as agricultural, medical, regulatory, and forensics. Students will have the opportunity to use sophisticated laboratory equipment, perform statistical analysis, and practice quality-control techniques. Students will conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biotechnology I will study a variety of topics that include structures and functions of cells, nucleic acids, proteins, and genetics.

PR: Biology and Chemistry

SEM: 2 CR: 1 Science credit

Biotechnology II (12) #8720
This course has the components of any rigorous scientific or bioengineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. This course applies the standard skills mastered in Biotechnology I and includes assay design. PR: Biotechnology I and Chemistry

SEM: 2 CR: 1 Science credit

See Counselor for course availability
English Language Arts  
Journalism • Speech • Reading  
Core Courses

English I (9) #1100  
In English I, students will engage in activities that build on their prior knowledge and skills in order to strengthen their reading, writing, and oral language skills. Students will read and write on a daily basis.

SEM: 2 CR: 1

English I Pre-AP (9) #1120  
English I Pre-AP is meant to provide a foundational course for students who intend to enroll in Advanced Placement English III and IV. The course offers a study of multiple genres and periods of literature, accompanies a variety of writing opportunities, vocabulary study, and higher level thinking skills and strategies from College Board. Instruction includes an introduction to key terms, skills, and strategies associated with rhetorical and literary analysis.

SEM: 2 CR: 1

English II (10) #1200  
English II M (10) #1212  
English II Pre-AP continues the foundational preparation for the upper level AP courses. Through a study of classic and contemporary literature, students have multiple opportunities to develop and demonstrate their understanding of rhetorical and literary devices through close reading and analysis.

PR: English I  
SEM: 2 CR: 1

English III (11) #1300  
English III M (11) #1311  
English III consists of advanced language usage, written compositions, preparation for college entrance examinations through vocabulary development and test-taking techniques, a survey of American literature from 1607 to the present time, and advanced research skills applicable to a documented paper on an appropriate topic.

PR: English II  
SEM: 2 CR: 1

English IV (12) #1400  
English IV M (12) #1411  
English IV includes extensive composition and language practice, a study of the origins and growth of the English language through a survey of British literature, and the reading of other works by world masters from all periods.

PR: English III or English III AP  
SEM: 2 CR: 1

English IV College Prep (12) #1421  
This college preparatory course is designed for senior students who have passed English II EOC, but have not yet met ELA college-ready criteria. Upon successful completion of this course, the student will receive a TSI waiver and may enter an entry-level college credit-bearing English course at partnering institutions without remediation. English IV College Prep includes extensive composition and language practice, with a focus on expository and persuasive writing, as well as inquiry and research.

PR: English III and Passing score on English II STAAR EOC  
SEM: 2 CR: 1

Speech credit may be awarded for other elective courses based on teacher certification. See counselor for campus options.

Advanced Placement Courses

English III Advanced Placement (11) #1330  
English III Advanced Placement M (11) #1334  
This course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer’s purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing.

PR: English II Pre-AP or English II  
SEM: CR: 1

English III Advanced Placement/Dual Credit (11) #1333  
English III Advanced Placement/Dual Credit M(11) #1336  
This course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer’s purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing.

PR: English II Pre-AP or English II and acceptance to Northwest Vista College  
SEM: 2 CR: 1

English IV Advanced Placement (12) #1430  
English IV Advanced Placement M (12) #1431  
This course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work’s structure, style and themes, as well as smaller-scale elements such as the use of figurative language, imagery, symbolism and tone.

PR: English II Pre-AP or English III AP or English III  
SEM: 2 CR: 1

English IV Dual Credit Honors (12) #1456  
This college-level course includes extensive composition and language practice, as well as a survey of World literature. Students are dual-enrolled at Northwest Vista College and will receive English 1301 and 1302 college credit upon successful completion of coursework.

PR: Eng III or English III AP and acceptance to Northwest Vista College  
SEM: 2 CR: 1

UT OnRamps Rhetoric and Writing (11) #1310 or (12) #1440  
This college-level dual enrollment course from UT Austin brings the college experience to high school using coursework designed by UT Austin faculty and delivered by campus teachers. Students will explore the ethics of argumentation as they analyze and compose arguments about American identity and identity formation. Students meeting university criteria will receive the UT credit equivalent to English 1301 and 1302.

PR: English I and II for juniors, English I, II and III for seniors

English Electives

Creative Writing (10-12) #1810  
Creative Writing M (10-12) #1811  
In this rigorous composition course, students will write poetry, fiction, non-fiction, and drama. They will demonstrate an understanding of the recursive nature of the writing process. Through reading, studying, and analyzing various literary forms and literary criticism, students will develop their versatility as writers.

PR: English I  
SEM: 1 CR: 1/2

Humanities I (11-12) #1857  
Humanities II (11-12) #1859  
This interdisciplinary course asks students to read widely in order to understand how various authors craft compositions for various aesthetic purposes. It includes the study of major historical and cultural movements and their relationship to literature and the other fine arts. All students are expected to participate in discussions and presentations that lead to an understanding, appreciation, and enjoyment of critical, creative achievements throughout history.

PR: English I and I  
SEM: 2 CR: 1

Literary Magazines Production I (10-12) #1770  
Literary Magazines Production M I (10-12) #1771  
Literary Magazines Production II (11-12) #1776  
Literary Magazines Production III (12) #1777  
Working within time constraints and budget limitations, students will develop skills in producing and publishing a creative writing anthology. Students will enhance their writing and editing skills. Students will participate in the selection and preparation of the literary magazine and will probably work in leadership positions.

PR: English I and II  
SEM: 1-2 CR: ½-1

Research and Technical Writing (11-12) #1830  
Students are expected to develop the skills necessary for writing persuasive and informative texts. They will skillfully research a variety of topics and present that information through a variety of media. In addition, students will evaluate their own writing as well as critically read the writing of others.

PR: English I and II  
SEM: 1-2 CR: ½-1

Literary Genres: Multicultural Literature (11-12) #1846  
Through the study of literature that reflects a particular people or social group, students will recognize how writers represent and reveal their cultures and traditions in texts. Students will also discover how well-written literary texts serve as models for their own writing.

PR: English I and II  
SEM: 1-2 CR: ½ -1

See Counselor for course availability

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Literary Genres—Film (11-12) #1844
Students will analyze a variety of literary texts and their film counterparts in order to compare and contrast author's purpose and a variety of other features of each genre. In addition, students are expected to read and view critically in order to evaluate a text or film.
PR: English I and II SEM: 1-2 CR: ½ -1

Literary Genres—Poetry (11-12) #1845
Students will read and analyze poetry, focusing on how writers use poetic elements and form to create meaning. Using mentor texts from multiple literary time periods, students will study poets and their work to serve as models for their own writing. They will have the opportunity to respond to oral, written, and electronic text while connecting to and expanding their knowledge of poetry.
PR: Eng I and II SEM: 1-2 CR: ½ -1

Literary Genres—Science Fiction (11-12) #1847
Students will read and analyze science fiction, from its origin in ancient texts to its popular presence in modern culture. Using mentor texts from time periods, students will study science fiction writers and their work to serve as models for their own writing. They will have the opportunity to respond to oral, written, and electronic text while connecting to and expanding their knowledge of the genre.
PR: Eng I and II SEM: 1-2 CR: ½ -1

Visual Media Analysis and Production M (11-12) #1991
Students will understand how media such as film, radio, Internet, television, magazines, and newspapers influence society's behavior. Students will analyze all forms of media and film, as well as produce their own ads, commercials, screenplays, etc.
SEM: 1 CR: ½

Contemporary Media (11-12) #1970
Students will learn how media influences tastes, behaviors, purchasing and voting decisions. This course will explore the history and evolution of media used for mass communication. Students will analyze, create and evaluate visual and auditory messages.
SEM: 2 CR: 1

Journalism
Journalism I (9-12) #1701
This course is designed to introduce students to the history of mass media and its role in contemporary society. Included are the study of the basic features of journalism and newspaper production, freedom and responsibility of the press, career opportunities in mass communications, and writing to fulfill a variety of assignments.
SEM: 2 CR: 1

Advanced Journalism—Newspaper I (9-12) #1740
Advanced Journalism—Newspaper II (10-12) #1750
Advanced Journalism—Newspaper III (11-12) #1760
Students develop and produce the school newspaper, and participate in advanced study of feature, column, editorial, and sports writing. Additionally, they learn the role of advertising in newspaper publication, how to define editorial policy, how to conduct interviews, and how to use other appropriate writing techniques. Students also learn current trends in format and publishing techniques, graphics, design, and layout considerations in publishing newspapers.
SEM: 2 CR: 1

Advanced Journalism Honors—Newspaper I (9-12) #1745
Advanced Journalism Honors—Newspaper II (10-12) #1755
Advanced Journalism Honors—Newspaper III (11-12) #1765
Open to students in editorial/leadership roles, this is an advanced study of journalism, editorial management, and publication analysis, focusing on the newspaper or news magazine.
SEM: 2 CR: 1

Advanced Journalism—Yearbook I (9-12) #1710
Advanced Journalism—Yearbook II M (10-12) #1721
Advanced Journalism—Yearbook III (11-12) #1730
Advanced Journalism—Yearbook III M (11-12) #1731
Students develop and produce the school yearbook, taking responsibility for the merchandising and financial components of its production. Coursework includes an advanced study of feature, sports, headline and caption writing; the study of current trends in formats and techniques used in publishing; graphics, design, and layout considerations in publishing a yearbook; the printing process, and preparation of press-ready materials.
SEM: 2 CR: 1

Advanced Broadcast Journalism I (9-12) #1716
Advanced Broadcast Journalism II (10-12) #1718
Advanced Broadcast Journalism III (11-12) #1732
Students enrolled in this course apply and use their journalistic skills for a variety of purposes. Coursework includes learning the laws and ethical considerations that affect broadcast journalism; learning the role and function of broadcast journalism; critiquing and analyzing the significance of visual representations; and learning to create and produce a broadcast journalism product.
SEM: 2 CR: 1

Adv. Broadcast Journalism—Honors I (9-12) #1717
Adv. Broadcast Journalism—Honors II (10-12) #1719
Adv. Broadcast Journalism—Honors III (11-12) #1733
Open to students in editorial/leadership roles, this is an advanced study of broadcast journalism, program production management, and program analysis.
SEM: 2 CR: 1

Photography I (10-12) #1780
This course includes the study of photographic composition; use of the camera; and photographic techniques such as framing, silhouette, and use of depth-of-field. Students must have daily access to a 35mm SLR camera for use in this class.
SEM: 2 CR: 1

Independent Study: Journalism (12) #1790
This course focuses on editing, leadership, and the development of higher-level thinking skills concerning journalism values, principles, law, ethics, writing, and reporting.
PR: Advanced Journalism I, II, III
SEM: 2 CR: 1

Journalism Forum
Student journalists spend a day learning about mass communication career opportunities from such media professionals as photographers, reporters, news anchors, public relations directors, and others.

Reading
Reading I (9-12) #1590
Reading II (10-12) #1592
Reading III (11-12) #1594
Reading I, II, and III offer students reading instruction to successfully navigate academic demands and learn lifelong literary skills. These courses are designed for students who are having considerable difficulty in reading. Students will learn study strategies, test-taking skills, the literary processes necessary for handling a wide variety of texts, including school materials, work-related reading, and self-selected pleasure reading. Students eligible for this class include those who meet any of the following criteria: students who fail to pass the reading objectives of the STAAR 8th grade reading or EOC tests, fail two or more content subjects, or are designated as at-risk. This course is designed to teach reading as an critical life skill.
PR: Recommendations of counselor SEM: 2 CR: 1

Communication Applications (9-12) #1900
Communication Applications M (9-12) #1902
(This course is a requirement for the graduation plan.) Students will identify, analyze, develop, and evaluate communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations.
SEM: 1 CR: 1/2

Speech Electives
Debate I Honors (9-12) #1930
Debate II Honors (10-12) #1932
Debate III Honors (11-12) #1933
This course of study is designed to teach argumentation skills and the elements of debate. Students will become familiar with various debate formats, research skills, and effective presentations. They will learn to analyze topics and to support a point of view. Participation in UIL, TFL and/or National Speech and Debate competition is required.
SEM: 2 CR: 1

Oral Interpretation I (9-12) #1920
Oral Interpretation II (10-12) #1922
Oral Interpretation III (11-12) #1923
Students will select, research, analyze, adapt, interpret, and perform literary texts as a communication art. This course involves oral interpretation of literature: prose, poetry, and drama. Competition events include extemporaneous speaking, oration, dramatic and humorous interpretation, and duet acting. Participation in UIL, TFL and/or NFL competition is required.
SEM: 2 CR: 1

Public Speaking I (9-12) #1943
Public Speaking II (10-12) #1944
Public Speaking III (11-12) #1945
Students in this course will understand the concepts and skills necessary for public dialogue. It provides an in-depth analysis of communication and rhetoric through the study of famous speeches, propaganda, mass media, mock trials, and logic.
SEM: 2 CR: 1

Independent Study: Speech Honors (12) #1950
This course focuses on research and development of higher-level thinking skills concerning historical, political, social, and economic questions similar to those introduced to students in Debate I, II, and III. The depth of research and study, the intensity of exploration, and the polish of oral presentation will be such as to demonstrate superlative control and execution of speech skills.
PR: Debate I, II, III SEM: 2 CR: 1

See Counselor for course availability
2018-2019 High School Course Catalog
English ESL (9-12)
This course is designed for students who are at a beginning level of English proficiency. Instruction emphasizes an integrated language arts approach to strengthening oral and written language skills in social as well as academic English. The teacher also clarifies key concepts and academic vocabulary from the students’ other content areas.
PR: LPAC Approval
SEM: 1-2 CR: 1/2-1 local credit, 1 state credit

English I SOL (9-12)
This course may be substituted for English I for immigrant students with limited English proficiency only. The course incorporates both second language acquisition essential knowledge and skills and English language arts essential knowledge and skills.
PR: LPAC Approval
SEM: 2 CR: 1 state credit

English II SOL (10-12)
This course may be substituted for English II for immigrant students with limited English proficiency only. The course incorporates both second language acquisition essential knowledge and skills and English language arts essential knowledge and skills.
PR: LPAC Approval
SEM: 2 CR: 1 state credit

Newcomers English Language Development (NELD) A #9121
This course is offered during the student’s first semester and designed to provide instructional opportunities for secondary recent immigrant students with little or no English proficiency. These students are newcomers less than 12 months in U.S. schools and have scored at the negligible/very limited CALP level of the state approved English oral language proficiency tests. This course will be issued as an elective credit during a time frame of the student’s first semester. The development of communicative language proficiency occurs through targeted lessons based on students’ needs, although academic language proficiency is the focus of instruction. This course enables students to become increasingly more proficient in English in all four language domains. Teachers of NELD A validate students’ native language and culture as a valuable resource and as a foundation to attain the target language. It will develop language, survival vocabulary, and the basic building blocks of literacy for newly arrived and preliterate students. NELD-A is a prerequisite to NELD-B.
SEM: 2 CR: 1

Newcomers English Language Development (NELD) B #9122
NELD-A is a prerequisite to NELD-B. NELD-B is a second semester course designed to provide educational opportunities for immigrants who have limited experience in the American school system. More rigorous than NELD-A, this course prepares students for a smooth transition and success with the ESOL/ELPS, and ELA TEKS leading to the College & Career Readiness. This course enables students to become increasingly more proficient in English in all four domains to address federal Annual Measurable Achievement Objectives (AMAOs). Students are challenged to apply higher-order thinking skills and have access to curriculum that covers reading, writing, listening, speaking, and second language acquisition. Teachers of NELD-B validate students’ native language and culture as a valuable resource and as a foundation to attain the target language. The students’ heritage and culture, the tapestry of American cultures, and local cultural aesthetics are resources for language lessons. The Newcomers English Language Development B teacher will facilitate cognitive, affective, and linguistic development in compliance with Subchapter BB of Chapter 89 provisions under the Texas Education Code, §§29.051-29.064.
PR: NELD-A
SEM: 2 CR: 1

Social Intelligence for ESL Students #9123
This course provides ESL students with the necessary knowledge and skills required for successful adaptation to a new community and educational environment. Students will learn skills to navigate through social situations, such as conflict resolution, communication, decision making, cultural awareness, etc.

Academic Decathlon
Academic Decathlon/Humanities I Honors (9-12) #1856
Academic Decathlon/Humanities II Honors (9-12) #1858
Research and Technical Writing Honors (9-12) #1831
English Independent Studies Honors (9-12) #1142
These Humanities courses are designed to prepare students for the Academic Decathlon Contest. The purposes are to develop a greater respect for knowledge, to develop lifetime skills in speech and interview, to gain a better appreciation for music and art, and to promote wholesome competition in academic areas of study. The contest includes six tests of academic strength, speech, essay, and interview. Team members will receive honors credit for this course.
PR: Teacher Approval
SEM: 2 CR: 1

Academic Decathlon/Public Speaking I Honors (9-12) #1940
Academic Decathlon/Public Speaking II Honors (9-12) #1941
Academic Decathlon/Public Speaking III Honors (9-12) #1942
Speech Independent Study Honors #1952
These Public Speaking courses are designed to prepare students for the Academic Decathlon Contest. The purposes are to develop a greater respect for knowledge, to develop lifetime skills in speech and interview, to gain a better appreciation for music and art, and to promote wholesome competition in academic areas of study. The contest includes six tests of academic strength, speech, essay, and interview. Team members will receive honors credit for this course.
PR: Teacher Approval
SEM: 2 CR: 1

Gifted and Enrichment (Advanced Learning Programs for High Achievers) (ALPHA)
Independent Study Mentorship (ISM) Honors (11-12) #4920 & #4921
This course is open to eleventh and twelfth grade students in the Gifted and Talented Program and those who are in honors/preAP classes. ISM students conduct comprehensive research resulting in an original product or performance. Students may choose to work in any content area. They seek guidance from a professional mentor(s) in the process of designing their research and producing their product. Students learn task commitment and time management as prerequisites to completing successful projects. Productive questioning strategies, critical thinking, time management, and techniques for performing higher-level research are taught in this course. Students needing Communication Applications credit may receive it with this course.
PR: Junior or senior, honors or GT
Personal transportation to mentoring sites; Honors level work
Application approval required.
SEM: 2 to 4 CR: Consult GT teacher

GT Student Leadership Honors #9060
This Honors course is designed for freshman and sophomore students who are in the Gifted and Talented Program. Students will have an opportunity to study, practice, and develop group and individual leadership and organization skills. These skills include, but are not limited to, decision-making skills, problem-solving techniques, communication skills, leadership roles, human relation skills and understanding the need for civic responsibility. Students will also be provided opportunities to explore future college options and to prepare for the PSAT. This course is a hands-on, lab-oriented approach to leadership and college preparation. Students may participate in the NEFE Financial Literacy Program and two Jr. Achievement programs. They will also leave the class with a beginning resume in hand and will receive Communication Applications credit.
PR: Enrollment in GT Program required
SEM: 2 CR: 1 Honors

GT Leadership II #9068
GT Leadership II is a semester elective class open to all identified 10th and 11th grade students. This semester course can be blocked with Health or Speech Communication Application. Students will be taught by the Gifted Specialist for the GT Leadership II portion of the year. In GT Leadership II, students will be provided opportunities to develop and implement their own community service project. Students will work on research skills as well as continue to improve their verbal and non-verbal communication skills throughout the year through service learning.
PR: Consult GT Teacher
SEM: 1 CR: 1/2 Honors

AVID
AVID Advancement Via Individual Determination (AVID) is an academic elective course that prepares students for college readiness and success, and it is scheduled during the regular school day as a year-long course. Each week, students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. AVID 1/2 (9) #9056
The ninth grade AVID Elective course will serve as a review/introduction of the AVID philosophy and strategies. Students will work on academic and personal goals and communication, adjusting to the high school setting.

AVID 3 (10) #9058
In the tenth grade AVID Elective course, 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.

AVID 4 (11) #9059
The eleventh grade 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.

AVID Senior Seminar (12) #9026
This course builds on the previous year’s focus, along with a focus on writing and critical thinking expected of first- and second-year college students. In addition, there are college-bound activities and tasks that should be achieved during senior year that support students as they apply to four-year universities and confirm their postsecondary plans.
SEM: 2 CR: 1

See Counselor for course availability

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**Senior Seminar**

**Senior Seminar (12) #9027**

This is a college transition course. Students examine numerous research-based learning strategies that are proven to lead to academic success such as goal-setting, effective time management, handling stress, note-taking, active reading, test-taking strategies, and conducting research.

SEM: 2 CR: 1

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**Mathematics**

**Algebra I (9-12) #2150**

Algebra 1 (9) #2170

Algebra 1 M #2171

Algebra 1 M Pre-AP M #2161

The purpose of this course is to provide a foundation for students to solve problems using functions, symbolic reasoning and mathematical modeling. This course includes the study of linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions in both mathematical and real-world situations. The study of polynomials, radical expressions, sequences, laws of exponents and systems of linear equations and inequalities will also be included. This course provides a foundation for upper level mathematics courses.

PR: 8th grade math

SEM: 2 CR: 1

**Algebra I Pre-AP (9) #2160**

Algebra I Pre-AP M #2161

This course is designed to include all the Algebra I NISD Standards and TEKS with an emphasis on complex problem-solving. This will build a foundation for success in AP Calculus and AP Statistics.

PR: 8th grade math

SEM: 2 CR: 1

**Geometry (9-12) #2300**

Geometry M #2307

Geometry (9) #2306

The purpose of this course is to strengthen mathematical reasoning skills in geometric contexts. This course includes plane and solid geometry, coordinate geometry, and transformational geometry. It provides the study of traditional and non-traditional proofs, transformations, similarities, coordinate geometry, area, and volume.

PR: Algebra 1

SEM: 2 CR: 1

**Geometry Pre-AP (9-12) #2350**

Geometry Pre-AP M #2348

Geometry Pre-AP (9) #2349

This course provides an enriched geometry program with a greater emphasis on logical reasoning, higher order thinking skills, and problem solving. All topics and credits given for Geometry above apply to this course. Most students will have completed Algebra 1 Pre-AP prior to enrolling in Geometry Pre-AP.

PR: Algebra 1

SEM: 2 CR: 1

**Algebra II (9-12) #2200**

Algebra II M #2204

The purpose of this course is to extend the concepts and skills developed in Algebra 1. Students will explore families of functions and their related transformations, equations and associated solutions. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. Students will use real-world data and technology to solve problems using these mathematical models.

PR: Algebra 1

SEM: 2 CR: 1

**Algebra II Pre-AP (9-12) #2240**

Algebra II Pre-AP M #2236

Algebra II Pre-AP (9) #2239

This course provides an enriched course in Algebra II. It emphasizes higher order thinking skills, problem solving, and preparation for higher levels of mathematics and related fields. Most Algebra II Pre-AP students successfully completed Geometry Pre-AP.

PR: Algebra I

SEM: 2 CR: 1

**College Prep Math (Independent Study Mathematics--Advanced Algebra 3) (12th) #2873**

College Prep Math (Independent Study Mathematics--Advanced Algebra 3) M #2874

The purpose of this course is to reinforce and build upon algebra topics to prepare the student for college readiness. This course is a blend of Elementary and Intermediate Algebra which will prepare the student for success in a college-entry math course, such as College Algebra. The coursework requires students to be proficient both with and without the calculator.

PR: Geometry and Algebra II

**Mathematical Models with Applications (10-12) #2350**

Mathematical Models with Applications M #2501

This course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions.

PR: Algebra I

SEM: 2 CR: 1

**Algebraic Reasoning (10-12) #2298**

In this course, students will study functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness.

PR: Algebra I

SEM: 2 CR: 1

**Statistics (10-12) #2806**

In this course, 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.

PR: Algebra I

SEM: 2 CR: 1

**Precalculus (10-12) #2400**

Precalculus M #2401

The purpose of this course is to explore many advanced mathematical models which are often used in science, engineering, and other career fields. Topics include: properties and graphs of trigonometric and circular functions and their applications; properties and graphs of special functions; higher degree polynomial functions, sequences and series.

PR: Geometry and Algebra II

SEM: 2 CR: 1

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**Advanced Quantitative Reasoning (11-12) #2877**

Advanced Quantitative Reasoning D #2879

AQR is an engaging and rigorous project-based course that prepares students to become well-educated and highly informed 21st century citizens. The course emphasizes statistics and financial applications, and it prepares students to use algebra, geometry, trigonometry, and discrete mathematics to model a range of situations and solve problems.

PR: Geometry and Algebra II

SEM: 2 CR: 1

**Independent Study Mathematics--College Algebra (11-12) #2871**

Independent Study Mathematics--College Algebra D #2872

This course includes the study of quadratics, polynomial, rational, logarithmic, and exponential functions, systems of equations, progressions, sequences and series, and matrices and determinants.

PR: Geometry and Algebra II

SEM: 2 CR: 1

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Please note course selection(s) may change due to ARD committee placement decisions for students receiving special education services
Statistics OnRamps #2810
This course is a dual-enrollment data analysis course for students seeking to develop the quantitative reasoning skills and habits of mind necessary to succeed in the higher education environment. This course will target conceptual understanding and hone highly-relevant mathematical skills through scaffolded introduction to statistical methodologies, informal game play and strategic lab exercises that engage students in hands-on analysis of real data. Valuable programing and coding skills are acquired as a means to conducting this analysis. Team-based problem-solving is highly valued, and assessments will guide students through self-reflective analyses of their own preparedness and depth of understanding. Students will experience high quality curriculum designed by the faculty at The University of Texas at Austin. Students can earn three hours of UT credit, with feedback and assessment provided by UT course staff.
PR: Algebra I; Geometry and Algebra (preferred)
OnRamps College Algebra #2299
This course is aligned to the TEKS Standards for Algebra II. Big Ideas:
*Function Families
  - Linear and Absolute Value Functions
  - Quadratic, and Cubic Functions
*Polynomial, Rational, and Radical Functions
*Exponential and Logarithmic Functions
*Function Compositions, Transformations, and Inverses
*Matrices and Systems of Equations and Inequalities
*Complex Number System
*Modelling, Data Analysis, and Function Regression
*Sequences, Series, and the Binomial Theorem
PR: Algebra 2

Advanced Placement Courses

AP Calculus AB (11-12) #2610
AP Calculus AB M #2621
AP Calculus AB D #2600
AP Calculus AP M D #2631
This course is a rigorous college-level calculus course leading to the College Board Advanced Placement AB Calculus Exam and to possible college credit for one semester. Topics include: concepts and skills of limit, differentiation, integration, and applications of calculus.
PR: Precalculus
AP Calculus BC (11-12) #2630
AP Calculus BC M #2632
AP Calculus BC D #2639
AP Calculus BC M D #2631
Calculus AP BC is equivalent to two full semesters of college calculus. Students may earn this college credit by scoring 3 or higher on the Advanced Placement BC examination. In addition to the material covered in Calculus AB, the BC course includes concepts and applications of polar, vectors, sequences and series.
PR: Precalculus
AP Statistics (10 - 12) #2800
AP Statistics M #2801
AP Statistics D #2805
The purpose of the Advanced Placement Statistics course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. Students who successfully complete the course and examination may receive Credit and/or advanced placement for a one-semester introductory college statistics course.
PR: Geometry and Algebra II

Technology Applications

Principles of CS AP #7104
(O’Connor, John Jay, Brandeis, Brennan, Clark, Harlan, Health Careers only)
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. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. The technology applications curriculum emphasizes the skills and qualities set by International Society for Technology in Education standards for students: empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator. This course will satisfy one of the four Technology Applications credits required to earn a STEM endorsement.
PR: None

Computer Science 1 PreAP (9-12) #7110
(O’Connor, John Jay, Brandeis, Brennan, Marshall, Clark, Harlan, Health Careers only)
Computer Science 1 PreAP will foster students’ creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts. The technology applications curriculum emphasizes the skills and qualities set by International Society for Technology in Education standards for students: empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator. This course will satisfy one of the four Technology Applications credits required to earn a STEM endorsement.
PR: Algebra 1

Computer Science 2 AP (10-12) #7214
(O’Connor, John Jay, Brandeis, Brennan, Marshall, Clark, Harlan, Health Careers only)
CS2 extends student knowledge from CS1. The AP Computer Science A course 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 object-oriented and imperative problem solving and design using the 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 is equivalent to many CS1 courses in colleges and universities. Students will have opportunity to earn college credit through Advanced Placement exam administered by College Board. The technology applications curriculum emphasizes the skills and qualities set by International Society for Technology in Education standards for students: empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator. This course will satisfy one of the four Technology Applications credits required to earn a STEM endorsement.
PR: Algebra 1 AND CS1 OR Fundamentals

Computer Science 3 H (11-12) #7310
(O’Connor, John Jay, Brandeis, Brennan, Clark, Harlan, Health Careers only)
CS3 H extends student knowledge from the previous years of study. Students produce independent projects through in-depth study of selected topics based on Computer Science coursework, student interest, and hardware and software resources. Students will create program solutions, develop choice and iterative algorithms, and understand object-oriented design concepts of inner classes, outer classes, and anonymous classes. The student is expected to write programs and communicate with proper programming style as well as work in software design teams. The technology applications curriculum emphasizes the skills and qualities set by International Society for Technology in Education standards for students: empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator. This course will satisfy one of the four Technology Applications credits required to earn a STEM endorsement.
PR: Computer Science 2

Science

Core Science Courses
Grade 8 Science STAAR achievement and middle school science course grades will be considered in determining freshman science placement.

Biography (9) #3100
Biography M (9) #3101
Biography C (9) #3103
Students study a variety of topics that includes structures and functions of cells and viruses; growth and development of cells; cells, tissues and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment. The State of Texas Assessment of Academic Readiness (STAAR) exam will be administered at the end of this course. (Minimum 40% lab)
PR: None

Science

Check Deadlines Required to Apply for Dual Credit Courses.
Biology Pre-AP (9) #3120
Biology Pre-AP M (9) #3121
Students in this advanced course investigate the same topics as the Biology course, enriched with higher level content and investigations to prepare for the AP Biology course. The State of Texas Assessment of Academic Readiness (STAAR) exam will be administered at the end of this course. (Minimum 40% lab)
PR: None
SEM: 2  Science CR: 1

Integrated Physics and Chemistry (IPC) (9-10) #3200
Integrated Physics and Chemistry (IPC) C (9-10) #3203
Students study the concepts in physics including force, motion, and energy and in chemistry including properties and changes of matter. Instruction will include laboratory and field investigations using scientific methods, critical thinking and problem solving. IPC is often taken after Biology and before Chemistry or Physics.
(Minimum 40% lab)
PR: Algebra I, Biology, concurrent enrollment in a second math course
SEM: 2  Science CR: 1

Chemistry Pre-AP (10-12) #3309
Chemistry Pre-AP M (10-12) #3311
Students in this advanced course investigate the same topics as Chemistry, enriched with higher level content and lab investigations to prepare for the AP Chemistry course. (Minimum 40% lab)
PR: Algebra I, Biology, concurrent enrollment in a second math course
SEM: 2  Science CR: 1

Physics (11-12) #3400
Physics M (11-12) #3401
Students study a variety of topics that includes characteristics and changes of matter, use of the periodic table, the development of atomic theory, chemical bonding, stoichiometry, gas laws, solutions, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives. (Minimum 40% lab)
PR: Algebra I, Biology, concurrent enrollment in a second math course
SEM: 2  Science CR: 1

Aquatic Science (11-12) #3800
Aquatic Science M (11-12) #3801
Aquatic Science C (11-12) #3803
Students learn the interactions of biotic and abiotic components in a variety of aquatic systems, including impacts on fresh and marine aquatic systems. (Minimum 40%, lab)
PR: Biology and Chemistry (Chemistry may be taken concurrently)
SEM: 2 CR: 1

Astronomy (11-12) #3805
Astronomy M (11-12) #3806
Students conduct observations of the sky and study astronomy in civilizations, patterns and objects in the sky, our place in space, the moon, reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration within a conceptual framework.
PR: Biology plus one year of a physical science (IPC, Chemistry or Physics) which may be taken concurrently
SEM: 2 CR: 1

Environmental Systems (11-12) #3560
Environmental Systems M (11-12) #3561
Environmental Systems C (11-12) #3503
Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, and changes in environments. (Minimum 40% lab)
PR: Biology and one year of physical science (IPC, Chemistry, or Physics)
SEM: 2 CR: 1

Earth and Space Science (11-12) #3510
Earth and Space Science M (11-12) #3517
This capstone course builds on students’ prior scientific and academic knowledge and skills. It takes an Earth systems approach to the themes of Earth in space and time, solid Earth, and fluid Earth. These topics will be studied through three strands—systems, energy, and relevance. The adopted textbook is at the introductory college level. (Minimum 40% lab)
PR: Biology, Chemistry, Physics (One of these may be taken concurrently.) Algebra I and Geometry plus a third math may be taken concurrently.
SEM: 2  Science CR: 1

CTE courses that grant science credit
Anatomy and Physiology (11-12) #8380
Anatomy and Physiology M (11-12) #8377
Students in Anatomy and Physiology study the structure and functions of the human body; its systems, and interactions among these systems to maintain homeostasis. This is a Career Technology Education course that awards science elective credit. (Minimum 40% lab)
PR: Biology and a second science credit
SEM: 2  Science CR: 1

Anatomy and Physiology H (11-12) #8379
In addition to the description for course #8380, this honors level course will feature several of the following: lab practical tests, free response assessments, study of scholarly articles, increased quantitative analysis of data, research projects or case studies, student-designed experimentation, and collaborations with hospitals, universities and research facilities. (Minimum 40% lab)
PR: Biology and Chemistry
SEM: 2  Science CR: 1

Biotechnology I (11-12) #8719
Students will explore the emerging field of biotechnology including its application in fermented and genetically modified foods, biopharmaceuticals, and bioinformatics. Applications will include microbiology, DNA analysis, tissue culturing, genetic engineering, and bioethics. Students will practice lab techniques including calculating, measuring preparing, and analyzing substances; microbial culturing and staining; and laboratory documentation and management. (Minimum 40% lab)
PR: Biology and Chemistry (Recommended: Principles of Biosciences)
SEM: 2  Science CR: 1

Biotechnology II (11-12) #8720
Biotechnology II has the components of any rigorous scientific or bioengineering program of study from the problem identification, investigation design, data collection, data analysis, and formulation and presentation of the conclusions. This course applies the standard skills mastered in Biotechnology I and includes assay design. After taking this course, students should be prepared for entry-level lab technician jobs. (Minimum 40% lab and fieldwork)
PR: Biotechnology I, Biology, and Chemistry
SEM: 2  Science CR: 1

Engineering Design and Problem Solving (11-12) #8707
Engineering Design and Problem Solving M (11-12) #8709
Students will integrate their knowledge of science, math, and technology tools to solve engineering design problems. Applications will include the history and development of engineering, professional communication of engineering information; developing and managing an engineering project; and creating solutions to real-world engineering problems. (Minimum 40% lab)
PR: Algebra I and Geometry
SEM: 2  Science CR: 1

Food Science (12) #8430
Students apply science principles to food including acids and bases, food safety and microbiology, food’s chemical properties, types of mixtures, functions of enzymes, fermentation, leavening agents, additives, energy, nutrients/vitamins/minerals, carbohydrates/fats/proteins, water, and food preservation methods. (Minimum 40% lab)
PR: 3 units of science including Biology and
SEM: 2  Science CR: 1

Forensic Science (11-12) #8553
Students apply science to connect a violation of the law to a specific criminal, criminal act or behavior and the victim. Students learn terminology and procedures related to the search and examination of physical evidence, collect and analyze evidence such as fingerprints, fibers, glass, paint, soil, fluids, and cartridge cases, as well as study the history and legal aspects of forensics. (Minimum 40% lab)
PR: Biology and Chemistry
SEM: 2  Science CR: 1

Medical Microbiology (11-12) #8361
Medical Microbiology D (11-12) #8338
Medical Microbiology M (11-12) #8337
Students explore the microbial world, studying topics such as the role of microorganisms in health and disease, pathogenic and non-pathogenic microorganisms, laboratory procedures, microorganism identification, control and defenses against diseases and infections, and drug-resistant and emerging diseases. (Minimum 40% lab)
PR: Biology and
SEM: 2  Science CR: 1

Pathophysiology (11-12) #8362
Pathophysiology M (11-12) #8387
Students focus on disease mechanisms and how they affect humans, as well as prevention and treatment of disease. Students will differentiate between normal and abnormal physiology at the cellular, organ and organism levels, identify changes that indicate diseases, factors contributing to disease, causes of disease and the body’s response, and disease prevention and control. Students will conduct laboratory and field investigations using scientific methods, critical thinking and scientific problem solving. (minimum 40% lab)
PR: Biology and Chemistry
SEM: 2  Science CR: 1

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Advanced Placement Courses

AP Biology (11-12) #3130
AP Biology M (11-12) #3131
AP Biology D (11-12) #3133

This is a rigorous college level course organized around the underlying concepts that govern chemical systems: atomic theory, the forces within matter, changes of matter, kinet-
ic molecular theory, thermodynamics and equilibria. This course includes many math applications and the lab science practices designated by the College Board. Students successful in this course have likely completed Biology, Chemistry, Algebra I, and Geometry. Algebra II may be taken concurrently.

SEm: 2 Science CR: 1

AP Capstone: Year 1-AP Seminar (10-11) #3900

Brandeis Only

Developed at the request of College Board Higher Education membership, the AP Capstone program is built on the foundation of two new AP courses – AP Seminar and AP Research – and is designed to complement and enhance the in-depth, discipline-specific study provided through other AP courses. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop valid evidence-based arguments. In AP Capstone Year 2, these students will enroll in AP Research. Students earn the AP Capstone diploma by completing coursework (AP Seminar and AP Research) and AP exams (scoring three or higher on these two AP exams, as well as on four additional AP exams of their choosing). The Capstone signifies the outstanding academic achievement of college-level academic and research skills.

PR: PreAP experience

SEM: 2 Science CR: 1, Speech CR: ½

AP Capstone: Year 2-AP Research (11-12) #3901

Brandeis Only

AP Research was developed by the College Board Higher Education membership to follow the Capstone Year 1 Seminar course in which students investigated real world science topics from multiple perspectives. In this course, students will cultivate the skills and discipline necessary to conduct independent research in order to produce and defend their own scholarly work. Students earn the AP Capstone diploma by completing coursework for both AP Seminar and AP Research and scoring three or higher on both AP Capstone exams, as well as on four additional AP exams of their choosing. The Capstone diploma signifies their outstanding academic achievement of college-level academic and research skills.

PR: AP Capstone Seminar

SEM: 2 Science CR: 1

AP Chemistry (11-12) #3330
AP Chemistry M (11-12) #3331

This is a rigorous college course organized around the underlying concepts that govern chemical systems: atomic theory, the forces within matter, changes of matter, kinet-
ic molecular theory, thermodynamics and equilibria. This course includes many math applications and the lab science practices designated by the College Board. Students successful in this course have likely completed Biology, Chemistry, Algebra I, and Geometry. Algebra II may be taken concurrently.

SEM: 2 Science CR: 1

AP Environmental Science (11-12) #3500
AP Environmental Science M (11-12) #3501
AP Environmental Science D (11-12) #3505

This course is a rigorous, college-level study of environmental topics including the interdependence of Earth’s systems; human populations dynamics; renewable and nonrenewable resources, environmental quality; global changes and their consequences; and environmental decision-making. The course also includes the strong lab component designated by the College Board. Students will prepare to take the AP Environmental Science Exam in May. Students successful in this course have likely completed Biology and Chemistry.

SEM: 2 Science CR: 1

AP Physics 1 (11-12) #3435
AP Physics 1 M (11-12) #3436

AP Physics 1 replaced PreAP Physics. AP Physics 1 and AP Physics 2 are each one-year courses. Students in AP Physics 1 will study kinematics, Newton’s laws, circular and rotational motion, universal gravitation, harmonic motion, impulse, momentum, collisions, work, energy, electrostatics, DC circuits, and mechanical waves including sound. This course includes the lab science practices designated by the College Board. Students will prepare to take the AP Physics 1 Exam in May. This credit counts as a student’s physics course for graduation. Students successful in this course have likely completed Biology, Chemistry, Algebra I, Geometry, and Algebra II. Algebra II may be taken currently. After this course, students may take AP Physics 2, AP Physics C (calculus-based physics), another AP science course or other science elective.

SEM: 2 Science CR: 1

AP Physics 2 (11-12) #3440
AP Physics 2 M (11-12) #3441

This course must be taken after AP Physics 1. This course builds on the topics of AP Physics 1 and includes thermodynamics, fluids, electrostatics, DC and RC circuits, magnetism and electromagnetic induction, waves and optics, plus quantum, atomic and nuclear physics. This course includes the lab science practices designated by the College Board. Students prepare to take the AP Physics 2 Exam in May. This course does not count as a student’s physics course for graduation. Students successful in this course have likely completed Biology, Chemistry, AP Physics 1, Algebra I, Geometry, Algebra II.

Precalculus may be taken concurrently.

SEM: 2 Science CR: 1

AP Physics C-Mechanics (11-12) #3452
AP Physics C-Mechanics (11-12) #3453

(Year long course)

AP Physics 1 is a prerequisite for this course. This rigorous course is most often taken by students preparing for higher education in the physical sciences, engineering, or electronics. Designing and conducting investigations and problem solving will apply calculus and technology aligned with the College Board framework including kinematics; conductors, capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism. Students will prepare to take the AP Physics C-Electricity & Magnetism exam in May. Students successful in this course are likely to have completed Biology, Chemistry, AP Physics 1, AP Physics C-Mechanics, Algebra I, Geometry, Algebra II, Precalculus and Calculus.

Calculation may be taken concurrently.

SEM: 1 Science CR: 1

OnRamps Chemistry #3332

Principles of Chemistry I addresses the nature of matter, energy, chemical reactions, and the systems of chemistry. The course begins with a review of descriptive chemistry of matter in the natural world as well as compositional and reaction stoichiometry of chemical compounds.

SEM: 2 Science CR: 1

OnRamps Physics 1 (11-12) #3460

This dual enrollment, rigorous college level course is organized around the major concepts in Newtonian mechanics including motion, forces, heat and sound. This course includes technology-based investigations, problem solving, peer instruction and assessments designed and graded by UT Physics professors while being taught and also graded by NISD teachers. Students earn credit in the associated high school course which fulfills Physics credit for graduation and may also earn UT credit.

PR: Algebra 1, Algebra 2, and Geometry

SEM: 2 Science CR: 1

OnRamps Physics 2 (11-12) #3461

This dual enrollment, rigorous college level course is organized around major physics concepts including electric, magnetic, electromagnetic waves, optics, and nuclear physics. This course includes technology-based investigations, problem solving and assessments designed and graded by UT Physics professors while being taught and also graded by NISD teachers. Students earn credit in the associated high school course and may also earn UT credit.

PR: Algebra 1, Algebra 2, Geometry, Physics 1 OnRamps (Recommended: Precalculus or Trigonometry)

SEM: 2 Science CR: 1

OnRamps Geoscience (11-12) #3520

This dual enrollment, rigorous college level course is organized around major concepts in physical geology and environmental sciences including earth systems and processes, climate change, sustainability, energy resources, land use, and natural hazards with the goal of providing literacy in the geosciences. This course includes technology-based investigations, problem solving and assessments designed and graded by UT Geosciences professors while being taught and also graded by NISD teachers. Students earn credit in the associated high school course (Earth and Space Science) and may also earn UT credit.

PR: Biology, Chemistry, and Physics (one may be concurrent); Algebra 1 and Geometry plus a third math which may be concurrent

SEM: 2 Science CR: 1
Social Studies

It is recommended that students take World Geography in 9th grade, World History in 10th, United States History in 11th, and Government/Economics in 12th grade.

Core Courses

World Geography Studies (9-12) #4300
World Geography Studies (9-12) M #4301
This course examines people, places, and environments at local, regional, national, and international levels. Students will study the influence of geography on events of the past and present; the characteristics of major landforms, climates, and ecosystems; and the political, economic, and social processes that shape cultural patterns of regions.
PR: None
SEM: 2 CR: 1

Pre-AP World Geography (9-12) #4310
Pre-AP World Geography M (9-12) #4311
This course provides an enriched world geography program with a greater emphasis on logical reasoning, higher order thinking skills, and problem solving. All topics and credits given for World Geography above apply to this course. Most students will have completed eighth grade Pre-AP U.S. History prior to enrolling in World Geography Honors.
PR: None
SEM: 2 CR: 1

World History Studies (9-12) #4200
World History Studies M (9-12) #4203
World History Studies Dual (9-12) #4255
This course emphasizes the study of significant people, places, and events of the past and present; the characteristics of major landforms, climates, and ecosystems; and the political, economic, and social processes that shape cultural patterns of regions.
PR: None
SEM: 2 CR: 1

Pre-AP World History (10-12) #4230
Pre-AP World History M (10-12) #4231
This course is much like the AP World History program. Course content will be similar to the College Board requirements, but will follow the District’s guidelines. This course may be taken in place of the regular World History course.
PR: None
SEM: 2 CR: 1

United States History Studies Since Reconstruction Dual (11-12) #4100
United States History Studies Since Reconstruction M (11-12) #4103M
United States History Studies Since Reconstruction Dual (11-12) #4260
This course is the second year of a two-year sequential study begun in the 8th grade. It includes historical content focusing on the political, economic, and social events and issues of the period from 1877 to the present.
PR: None
SEM: 2 CR: 1

United States Government (12) #4400
United States Government M (12) #4401
This course is designed to provide students with an understanding of the political, economic, and social events and issues of the period from 1877 to the present.
PR: None
SEM: 1 CR: 1/2

Economics with Emphasis on the Free Enterprise System and Its Benefits (12) #4500
Economics with Emphasis on the Free Enterprise System and Its Benefits M (12) #4501
This course focuses on the basic principles concerning production, consumption, distribution of goods and services in the United States and a comparison with those in other countries around the world. Students will examine the rights and responsibilities of consumers and businesses in a free enterprise system.
PR: None
SEM: 1 CR: 1/2

Social Studies Electives

Issues Involving Critical Thinking in the Social Studies (11-12) #4901
This course focuses on the basic principles concerning production, consumption, distribution of goods and services in the United States and a comparison with those in other countries around the world. Students will examine the rights and responsibilities of consumers and businesses in a free enterprise system.
PR: Core Courses
SEM: 1 CR: 1/2

Psychology (11-12) #4700
Psychology P-AP (11-12) #4720
Psychology Dual (11-12) #4721
This course is designed to allow students to consider the development of the individual and the personality. The course focuses on such topics as theories of human development, personality, motivation, and learning. The aim is to help students become more effective in their careers and in their personal lives.
PR: Core Courses
SEM: 1 CR: 1/2

Sociology (11-12) #4800
Sociology H (11-12) #4810
Sociology D (11-12) #4811
This course is designed for students who desire a better understanding of themselves through a study of society. Students examine topics such as the history and systems of sociology, cultural and social norms, social institutions, and mass communication through the study of dynamics and models of individual and group relationships.
PR: Core Courses
SEM: 1 CR: 1/2

United States History Studies Since Reconstruction Dual (11-12) #4100
United States History Studies Since Reconstruction M (11-12) #4103M
United States History Studies Since Reconstruction Dual (11-12) #4260
This course is designed to allow students to consider the development of the individual and the personality. The course focuses on such topics as theories of human development, personality, motivation, and learning. The aim is to help students become more effective in their careers and in their personal lives.
PR: Core Courses
SEM: 1 CR: 1/2

United States Government (12) #4400
United States Government M (12) #4401
This course focuses on the principles and beliefs upon which the United States was founded and on the structure, functions, and powers of government at the national, state, and local levels. A significant focus of the course is on the U.S. Constitution, its underlying principles and ideas, and the form of government it created.
PR: None
SEM: 1 CR: 1/2

Texas History Day
Texas History Day is part of the National History Day program, and provides opportunities for students in grades six through twelve to develop their knowledge of history, critical thinking, analytical skills, and creativity with competitive events on a district, regional, state, and national level.

Street Law (11-12) #4679
Street Law H (11-12) #4675
This course focuses primarily on the criminal justice system -- crimes, investigations, the arrest and arraignment phase, the trial, the differences in the juvenile justice system. Guest speakers -- policemen, private investigators, and judges -- introduce the law and the legal system in the United States.
PR: Core Courses
SEM: 1 CR: 1/2

World Area Studies: Global Economy Honors (11-12) #4600
This course concentrates on the theory and practice of international trade and finance. Its focus is on the following: development economics; world trade equilibrium; commercial policy with specific concentration on trade agreements; exchange rates and their risk on international lending markets; and macroeconomics linkage between countries.
PR: Core Courses
SEM: 1 CR: 1/2

A Study in Comparative Religions Honors (12) #4690
A Study in Comparative Religions is a senior honors social studies elective. It offers students an opportunity to compare five major world religions-Judaism, Hinduism, Christianity, Buddhism, and Islam. The course emphasizes scholarly research and historical inquiry that will assist students to become global citizens.
PR: None
SEM: 1 CR: 1/2

Advanced Placement Elective Courses

AP European History (11-12) #4625
This course introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. The goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. Students may earn college credit through the College Board AP Examination which is offered in May of each year. The fee for the exam is the responsibility of the student.
PR: Core Courses
SEM: 2 CR: 1

AP Human Geography Incorporating World Geography Studies TEKS (9-10) #4316
AP Human Geography Incorporating World Geography Studies TEKS M (9-10) #4317
AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students may earn college credit through the College Board AP Examination which is offered in May of each year. The fee for the AP exam is the responsibility of the student. This course may be used as a substitute for World Geography Studies.
PR: None
SEM: 2 CR: 1
This course provides a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price-level determination, and also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. This course may be used to meet the Economics requirement for graduation.

AP Macroeconomics (11-12) #4504
AP Macroeconomics M (11-12) #4505
AP Macroeconomics Dual (11-12) #4506
AP Macroeconomics Dual M (11-12) #4507

This course focuses on developing speaking and listening comprehension skills. Students are exposed to basic reading and writing skills. Students are introduced to the people, their customs, and other aspects of their culture. Students have the opportunity to work in pairs and small groups as well as role-play real-life situations using the target language.

AP Psychology (11-12) #4730

This course includes the history of psychology and studies in research methods and statistical analysis, human growth and development, learning and memory, intellec-
tual abilities and testing, motivation and emotion, and psychological disturbances and therapies. Students may earn college credit through the College Board AP Examination which is offered in May of each year. The fee for the AP exam is the responsibility of the student.

PR: None

SEM: 1 CR: 1/2

AP United States History incorporating United States History Studies TEKS (11-12) #4150
AP United States History incorporating United States History Studies TEKS Dual (11-12) #4155
AP United States History incorporating United States History Studies TEKS M (11-12) #4158

The purpose of this course is to develop greater understanding of the evolution of global processes and contact in interaction with different types of human societies. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of cultural, institutional, and technological precursors that, along with geography, set the human stage. Specific themes provide further organization to the course. This course may be taken in place of the World History course. Students may earn college credit through the College Board AP Examination, which is offered in May of each year. The fee for the AP exam is the responsibility of the student.

PR: None

SEM: 2 CR: 1

AP World Language and Culture (11-12) #4450
AP World Language and Culture M (11-12) #4451
AP World Language and Culture Dual (11-12) #4452
AP World Language and Culture Dual M (11-12) #4551

This course may be used as a substitute for World History Studies.

PR: None

SEM: 2 CR: 1

AP Capstone Social Studies-Seminar (10-11) #4910

Developed at the request of College Board Higher Education membership, the AP Capstone program is built on the foundation of two new AP courses – AP Seminar and AP Research – and is designed to complement and enhance the in-depth, discipline-specific study provided through other AP courses. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop valid evidence-based arguments. In AP Capstone Year 2, these students will enroll in AP Research. Students earn the AP Capstone diploma by both completing coursework (AP Seminar and AP Research) and AP exams (scoring three or higher on these two AP exams, as well as on four additional AP exams of their choosing). The Capstone™ signifies their outstanding academic achievement of college-level academic and research skills.

PR: PreAP experience

SEM: 2 CR: 1

International Languages

French, German, Spanish, Latin, American Sign Language (ASL)

The International Languages offered in Northside ISD are French, German, Latin, Spanish, and ASL (offered at Marshall HS only). Since the approach to the teaching of all modern languages is similar, the following descriptions are applicable to each level of each language. French, German and Spanish courses consistently use the four modes of communication; speaking, listening, reading and writing. Latin is a classical language where great emphasis is placed on the skill of reading. ASL is a performance-based language; students will develop their signing skills in authentic, real-world situations. Concept-based curriculum is enhanced with the integration of the five Cs of: Communication, Cultures, Connections, Comparisons, and Communities. The Texas Essential Knowledge and Skills for Languages Other Than English (TEKS for LOTE) are the foundation of all Northside ISD International Languages curriculum.

Languages Other Than English - Level 1 (9-11)

French #5911
German #5920
Spanish #5720

Languages Other Than English - Level 2 Regular (9-12)

French #5912
German #5922
Spanish #5730

Languages Other Than English - Level 2 Pre-AP (9-12)

French #5913
German #5923
Spanish #5735

Languages Other Than English - Level 3 AP (9-12)

French #5914
German #5924
Spanish #5736

OnRamps United States History (11-12) #4170

This yearlong U.S. History course combines the University at Austin designed college experience in a high school classroom setting. Students engage with high-quality content and build digital literacy skills and have the opportunity to earn three hours of college credit from the University of Texas at Austin. This course may be used to meet the United States History Studies requirement for graduation.

PR: None

SEM: 2 CR: 1
Spanish Level 2 Pre-AP for Spanish Speakers (9-12) #5737
This course is for students who understand and speak some Spanish at a basic level. It offers students opportunities to expand their knowledge of Spanish using special materials and activities designed for Spanish speakers. Students will continue to develop and refine their Spanish skills in speaking, listening, reading, and writing through an enriched curriculum concentrating on Hispanic Culture, Customs, Heritage, and History.
PR: Language Survey and Placement Test
SEM: 2 CR: 1

Languages Other Than English - Level 3 Regular (9-12)
French #5901
German #5929
Spanish M #5741
Spanish Dual #5743
Students continue to work towards proficiency in speaking and listening comprehension. Students continue to expand their reading comprehension and writing skills. Culture topics are integrated throughout the curriculum.
PR: 70 in Level 2 or 80 or higher on the Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Level 3 Pre-AP (9-12)
French #5914
German #5924
Spanish #5745
Spanish M #5746
Spanish Dual #5744
Spanish Dual M #5762
Students continue to work towards proficiency in speaking and listening comprehension. The study of some condensed literary works will incorporate the development of reading comprehension and writing skills. Culture topics are integrated throughout the curriculum. Students will do independent, pair, and group work to allow for increased creativity and the use of higher-order thinking skills.
PR: 80 or higher in Level 2 Pre-AP recommended or 90 or higher in Level 2 Regular recommended or 90 or higher on the Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Level 4 AP Language & Culture (9-12)
French #5915
German #5926
Spanish #5757
Spanish M #5759
This course will integrate the College Board and Northside ISD curriculum in order to prepare students for the Advanced Placement Language and Culture exam. Group and independent activities will be utilized to facilitate intensive student use of the target language in all aspects of the course. Upon successful completion of the Advanced Placement exam; students may be eligible to receive several hours of college credit.
PR: 80 or higher in 3 Pre-AP recommended or 90 or higher in 3 Regular recommended or 90 or higher on the Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Level 5 AP Literature & Culture (9-12)
Spanish #5767
Spanish M #5768
This course will integrate the College Board and Northside ISD curriculum in order to prepare students for the Advanced Placement Literature and Culture exam. Several authors and their works will be discussed and analyzed. Group and independent activities will be utilized to facilitate intensive student use of the target language in all aspects of the course. Upon successful completion of the Advanced Placement exam; students may be eligible to receive several hours of college credit.
PR: 80 or higher in 4 AP recommended
SEM: 2 CR: 1

Languages Other Than English - Latin Level 1 (9-11) #5940
This course offers the students the ability to read Latin phrases and sentences. Vocabulary and grammatical structures are introduced within the context of the readings. Students are exposed to Roman history and culture.
PR: None
SEM: 2 CR: 1

Languages Other Than English - Latin Level 2 (9-12) #5942
This course offers the students the opportunity to continue developing their reading skills in Latin while at the same time increasing their knowledge of grammatical structures. Additional vocabulary is learned within the context of the readings. There is more in-depth study of Roman culture and history.
PR: 70 in Latin 1 or 80 or higher on Latin 1 Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Latin Level 2 Pre-AP (9-12) #5943
The Latin 2 Honors course follows the same material as the Latin 2 regular. The curriculum is enhanced with additional projects and in-depth studies of the material covered.
PR: 80 in Latin 1 recommended or 90 or higher on Latin 1 Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Latin Level 3 Pre-AP (10-12) #5944
This course emphasizes more difficult aspects of grammar with an expansion of vocabulary. The study of Latin prose and poetry will be integrated with related topics of culture and civilization. Reading and writing skills will be emphasized.
PR: 80 in Latin 2 recommended or 90 or higher on the Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - Latin Level 4 AP (11-12) #5947
This course will continue an emphasis on difficult aspects of grammar with expanded vocabulary. The study of Latin poetry and prose will be integrated with related topics of culture and civilization. Students will read, translate, and interpret primary sources of a variety of Latin poets.
PR: 80 or higher in Latin 3 recommended or 90 or higher on the Credit by Exam
SEM: 2 CR: 1

Languages Other Than English - American Sign Language ASL Level 1 (9-12) #5961 - OFFERED AT MARSHALL HS ONLY
This course is an introductory course of the study of the receptive and expressive aspect of signs, non-manual communication, and grammatical features of ASL in everyday situations and other meaningful contexts. Students will learn basic introductions, greetings, describe people in general, and talk about family members. In addition, students will gain an understanding of using facial expressions, manual signs, and classifiers to convey meanings in ASL using perceptive and signing skills.
PR: None
SEM: 2 CR: 1

Languages Other Than English - American Sign Language ASL Level 2 #5962 - OFFERED AT MARSHALL HS ONLY
This course builds on the language skills acquired in ASL 1. Students will develop their signing skills in real-world, authentic situations and further explore cultural perspectives of the deaf community. The Curriculum emphasizes subjects learned in ASL 1 and further enhances student’s signing skills and fluidity. “Speed reading” on finger spelled words as well and signed statements are utilized within each of the units in this course. Signing and perceptive skills are mastered and taken to a new level.
PR: 70 or higher in ASL 1
SEM: 2 CR: 1

Languages Other Than English - American Sign Language ASL Level 2 Honors #5965 - OFFERED AT MARSHALL HS ONLY
This course builds on the language skills acquired in ASL 1. Students will develop their signing skills in real-world, authentic situations and further explore cultural perspectives of the deaf community. The Curriculum emphasizes subjects learned in ASL 1 and further enhances student’s signing skills and fluidity. “Speed reading” on finger spelled words as well and signed statements are utilized within each of the units in this course. Signing and perceptive skills are mastered and taken to a new level. The curriculum is enhanced with additional projects and in-depth studies of the material covered.
PR: 80 or higher in ASL 1 recommended
SEM: 2 CR: 1

Languages Other Than English - American Sign Language ASL Level 3 Honors #5966 - OFFERED AT MARSHALL HS ONLY
This course continues the emphasis on communication established in levels 1 and 2. Students will learn structures and vocabulary necessary to interact socially and communicate in daily living situations. This level of signing is highly rigorous and focuses more on the use of non-manual markers and classifiers, rather than the use of manual signs. Students will learn to imply and sign essential ASL skills through elaborate conversations involving and using their signing and perceptive skills.
PR: 80 or higher in ASL 2 recommended
SEM: 2 CR: 1

Please Note:
Students will have the opportunity to enroll in several levels of language classes from 1-6 and may take regular, Pre-AP, and/or Advanced Placement classes. With the opportunity to begin language study in middle school, students may continue the same language in the advanced levels or they are encouraged to begin the study of another international language whenever possible.
Health Education

Health Education (9-12)
Health Education .5 #5010
This course is designed to ensure that students acquire the health information and skills necessary to become healthy adults. The major areas of study are: emotional, mental, and physical health; the ill effects of alcohol, drugs, and tobacco on the body and environment; first aid; the prevention of accidents; AIDS education; and diseases. Students will also receive training in cardiopulmonary resuscitation (CPR) leading to certification from the American Heart Association.
PR: None
SEM: 1 CR: 1/2

Physical Education Substitutions

Athletics (9-12) - (PE Credit)
(Click with counselors for course offerings)
Numerous athletic programs under UIL affiliation are offered for students in the high schools. Students who participate in these UIL sports may earn a maximum of 4 units in P.E. credit in these courses. Since these athletic teams compete with other 6A schools, students must try out for the teams by demonstrating strong ability in the skills needed for field performance.
PR: Tryout

Principles of Dance I (9-12) - (PE Credit)
(Classes meets during the regular school day)
Principles of Dance I #5595
Principles of Dance I is designed to introduce students to various mediums of dance, including ballet, modern dance, tap, jazz, musical theatre, and world dance forms. Emphasis is on the development of technical and mind/body coordination skills, physical strength, and creativity. Instruction focuses on training the student to combine and coordinate all the elements of dance performance when set to music. Each course will enhance student confidence, poise, collaborative skills through solo and ensemble performances. Dance students will have multiple opportunities to perform in campus dance recitals, city/state venues, and musicals. No prior dance training is required to enroll in Principles of Dance Level I.
PR: None
SEM: 2 CR: 1 - PE

PE Substitution - 100 minutes of Moderate to Vigorous Physical Activity (PE Credit)
For students who meet PE substitution credit of 100 minutes per week of moderate to vigorous physical activity before school and/or after school may be awarded .5 credit of PE as defined for extra-curricular activities. The courses in which this rule may be applied are:
- Dance Performance Ensemble I #5559
- Dance Performance Ensemble II (Pep) #5560
- Dance Performance Ensemble II (Dance) #5561
- Dance Performance Ensemble II (Drill) #5562
- Dance Performance Ensemble II (Cheer) #5563
- Ballet I (Brandeis HS only) #5597
- Ballet II (Brandeis HS only) #5598
- Jazz I (Stevens HS only) #5601
- Jazz II (Stevens HS only) #5602
- Modern Dance I (Brennan HS only) #5599
- Modern Dance II (Brennan HS only) #5600
- Band Flags I #5569
- Band Flags II #5571
- Concert Band I #5577
- Concert Band II #5578
- Symphonic Band I #5575
- Symphonic Band II #5576

JROTC—PE Substitution (9-12)
- Air Force Science I #5621
- Navel Science I #5611

Spirit Teams
Performance/Ensemble I, Pep Squad (9-12) #6839
Performance/Ensemble II, Pep Squad (10-12) #6840
Performance/Ensemble III, Pep Squad (11-12) #6841
Performance/Ensemble IV, Pep Squad (12) #6842
Performance/Ensemble II, Dance Team (10-12) #6844
Performance/Ensemble III, Dance Team (11-12) #6845
Performance/Ensemble IV, Dance Team (12) #6846
Performance/Ensemble II, Drill Team (10-12) #6848
Performance/Ensemble III, Drill Team (11-12) #6849
Performance/Ensemble IV, Drill Team (12) #6850
Performance/Ensemble I, Cheer (10-12) #6852
Performance/Ensemble III, Cheer (11-12) #6853
Performance/Ensemble IV, Cheer (12) #6854

All ten comprehensive high schools provide spirit organizations whose major functions are to serve as spirit, service, and performing groups for their schools. Students must meet eligibility requirements to participate. No prior experience is required to enroll in Pep Squad. Students must tryout for Cheer, Dance & Drill Teams. Participation includes attendance at all designated activities, summer camp, practices, competitions, clinics, and enrollment in the required class. The required class involves a physical education and / or fine arts equivalent curriculum that includes fitness, leadership skills, beginning to advanced cheer and dance skills, etc.
PR: Pep Squad - None
PR: Cheer, Dance/ Drill Tryout - Tryout
SEM: 2 CR: 1 Fine Arts and/or 1 PE

What’s In Your Go Center?
Internet Access for Research
Career Information
*Books, Magazines, Reference Guides
Career Interest Inventories
*Choice360 and Career Cruising
Military Information
*Recruiters on the campus during the year.
Videos:
*Careers, Job Search, Colleges, SAT Prep
Registration Packets:
*SAT/ACT, Prep Course (SAT), THEA
Catalogs:
*Colleges, Community Colleges, Universities
Applications:
*Admissions Applications available here.
*Texas Common Application
*Community College Application
*Applications can be downloaded from the internet.
Information on Apprenticeships
Art I (9-12) #6941
High School Art I is Concept-based. Curriculum units include drawing, painting, printmaking, three dimensional art, fiber, digital art and media, and compositions of mixed media. Students work toward mastery level in originality and creativity. No prior art experience is required to be eligible for this course.
PR: None
SEM: 2 CR: 1

Art II (9-12) #6946
High School Art II is Concept-based and is designed to build on the experience of the Curriculum units of Art I. Assignments and student problem solving are more complex in drawing, painting, printmaking, three dimensional art, fiber, digital art and media, and compositions of mixed media. Artists, artist styles, and periods of art history become a focus, as does extensive creativity, imagery, individualization, and gallery display.
PR: Art I/MS Art 3/Student Portfolio
SEM: 2 CR: 1

Art III (10-11) #6947
High School Art III is Concept-based and provides for opportunities in creative expression on a more advanced level than those of Art I and Art II. Emphasis continues to be placed on understanding and recognition of artists, artist styles, and periods of art history. The significance and value of created art is accentuated along with extended creativity and portfolio development.
PR: Art II/Student Portfolio
SEM: 2 CR: 1

Art IV (11-12) #6948
High School Art IV is Concept-based and is an advanced course designed to expand on the experiences and skills developed in Art I, Art II, and Art III. Rigorous assignments and student problem solving are individualized to accommodate students’ desires to further explore media and ideas of their own choice. Student portfolios and gallery experiences are developed extensively.
PR: Art III/Student Portfolio
SEM: 2 CR: 1

Art III, Drawing (10-11) #6953
High School Art III Drawing is Concept-based and is designed to build on the experiences of the Curriculum units of previous art courses. Assignments and student problem solving are more complex in drawing, drawing types, drawing techniques, and the various drawing media. Drawing as used by artists, as used in artist styles, and as observed in periods of art history become a focus. Extensive creativity, imagery, individualization, and gallery display in the drawing media are the expectations.
PR: Art II
SEM: 2 CR: 1

Art III, Painting (10-12) #6973
High School Art III Painting is Concept-based and is designed to build on the experiences of the Curriculum units of previous art courses. Assignments and student problem solving are more complex with concentration in painting, painting styles, painting techniques and the various paint media. Painting artists, painting artist styles, and periods of art history involved with painting become a focus. Extensive creativity, imagery, individualization, and gallery display in the painting media are the expectations.
PR: Art II
SEM: 2 CR: 1

Art III, Sculpture (10-12) #6963
High School Art III Sculpture is Concept-based and is designed to build on the experiences of the Curriculum units of previous art courses. Assignments and student problem solving are more complex with concentration in sculpture, sculpture types, sculpture techniques and the various sculpture media. Sculpture artists, sculpture artist styles, and periods of art history involved with sculpture become a focus. Extensive creativity, imagery, individualization, and gallery display in the sculpture media are the expectations.
PR: Art II
SEM: 2 CR: 1

Art III, Ceramics (10-12) #6993
High School Art III Ceramics is Concept-based and is designed to build on the experiences of the Curriculum units of previous art courses. Assignments and student problem solving are more complex with concentration in ceramics, ceramics types, ceramic building methods-including wheel throwing, glazing techniques and the various clay and glaze media. Ceramic artists, ceramic artist styles and purposes, and periods of art history involved with ceramics become a focus. Extensive creativity, imagery, individualization, and gallery display in the ceramic media are the expectations.
PR: Art II
SEM: 2 CR: 1

Art III, Digital Art and Media (10-12) #6983
High School Art III Digital Art and Media is Concept-based and is designed to build on the experiences of the Curriculum units of previous art courses. Assignments and student problem solving are more complex with concentration in digital art and media, digital art and media types, digital art and media creation methods, and digital art and media various software usage. Digital art and media artists, digital art and media artist styles, and periods of art history involved with digital art and media become a focus. Extensive creativity, imagery, individualization, and gallery display in digital art and media are the expectations.
PR: Art II
SEM: 2 CR: 1

Art IV, Drawing (11-12) #6955
High School Art IV Drawing is Concept-based and is designed to build on the experiences of the Curriculum units of Art III Drawing. Assignments and student problem solving are extremely complex requiring considerable concentration to achieve the high level of competency expected. Expanding both depth and breadth in drawing, drawing types, drawing techniques, and various drawing media is a portfolio requirement. Drawing as used by artists, as used in artist styles, and as observed in periods of art history become a springboard for personal inspiration for more extensive creativity, imagery, and individualization. Frequent gallery displays showcasing various media are required.
PR: Art III, Drawing II
SEM: 2 CR: 1

Art IV, Painting (11-12) #6974
High School Art IV Painting is Concept-based and is designed to build on the experiences of the Curriculum units of Art III Painting. Assignments and student problem solving are extremely complex requiring considerable concentration to achieve the high level of competency expected. Expanding both depth and breadth in painting, painting styles, painting techniques and the various paint media is a portfolio requirement. Painting artists, painting artist styles, and periods of art history involved with painting become a springboard for personal inspiration for more extensive creativity, imagery, and individualization. Frequent gallery displays in the various painting media are required...
PR: Art III, Painting II
SEM: 2 CR: 1

Art IV, Sculpture (11-12) #6964
High School Art IV Sculpture is Concept-based and is designed to build on the experiences of the Curriculum units of Art III Sculpture. Assignments and student problem solving are extremely complex requiring considerable concentration to achieve the high level of competency expected. Expanding both depth and breadth in sculpture, sculpture types, sculpture techniques and the various sculpture media is a portfolio requirement. Sculpture artists, sculpture artist styles, and periods of art history involved with sculpture become a springboard for personal inspiration for more extensive creativity, imagery, and individualization. Frequent gallery displays showcasing various sculpture are required.
PR: Art III, Sculpture II
SEM: 2 CR: 1

Art IV, Digital Art and Media (11-12) #6984
High School Art IV Digital Art and Media is Concept-based and is designed to build on the experiences of the Curriculum units of Art III Digital Art and Media. Assignments and student problem solving are extremely complex requiring considerable concentration to achieve the high level of competency expected. Expanding both depth and breadth in digital art and media, digital art and media types, digital art and media creation methods, and digital art and media various software usage is a portfolio requirement. Digital art and media artists, digital art and media artist styles, and periods of art history involved with digital art and media become a springboard for personal inspiration for more extensive creativity, imagery, and individualization. Frequent gallery displays showcasing various digital art and media are required.
PR: Art III, Digital Art and Media
SEM: 2 CR: 1

Advanced Placement

Art History AP (10-12) #6985
Advanced Placement Art History challenges students to an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine and critically analyze major forms of artistic expression. AP Art History provides students an independent track of study that is rigorous and academically challenging. Students complete course with the AP Art History exam. Course availability depends upon teacher certification in AP Art History
PR: Core/Art/Student Portfolio/Student Interest
SEM: 2 CR: 1
Art Drawing Portfolio AP (10-12) #6944
AP Portfolio, Studio Art Drawing enables students to develop in-depth personal styles and themes in original creation of drawing artworks. Portfolio students address three components within a basic three-section structure: Quality Section, Concentration Section, and Breadth Section. Students are required to show competence in high levels of commitment and rigor throughout the created body of artwork. Students complete course with submission of digital AP portfolio in Studio Art Drawing. Course availability depends upon teacher certification.
PR: Art/Student Portfolio/Student Interest
SEM: 2 CR: 1

Art 2-D Portfolio AP (10-12) #6988
AP Portfolio, 2-D Design enables students to develop in-depth personal styles and themes in original creation of 2-D Design artworks. Portfolio students address three components within a basic three-section structure: Quality Section, Concentration Section, and Breadth Section. Students are required to show competence in high levels of commitment and rigor throughout the created body of artwork. Students complete course with submission of digital AP portfolio in 2-D Design. Course availability depends upon teacher certification.
PR: Art/Student Portfolio/Student Interest
SEM: 2 CR: 1

Art 3-D Portfolio AP (10-12) #6989
AP Portfolio, 3-D Design enables students to develop in-depth personal styles and themes in original creation of 3-D Design artworks. Portfolio students address three components within a basic three-section structure: Quality Section, Concentration Section, and Breadth Section. Students are required to show competence in high levels of commitment and rigor throughout the created body of artwork. Students complete course with submission of digital AP portfolio in 3-D Design. Course availability depends upon teacher certification.
PR: Art/Student Portfolio/Student Interest
SEM: 2 CR: 1

Dual Credit
Art Appreciation D (9-12) – MARSHALL, STEVENS, AND WARREN HS ONLY #6995
Students take Dual Credit Art Appreciation on their high school campus. Dual Credit Art Appreciation students work in various art media to explore the purposes and processes in the visual arts including evaluation of multiple selected works. Content is college level and college paced. Students are required to show competence in high levels of commitment and rigor throughout the year of study.
PR: Student Interest
SEM: 2 CR: 1

Band
Prep Band I-IV (9-12) #6131
This course is designed for students who are learning to play a band instrument for the first time OR for students that are in the early stages of learning to play an instrument. Little or no prior experience is required for this course. Campus band director will assess student skill ability for this class. Basic music fundamentals include tone, rhythm, and technique development. Students are eligible to participate in campus concert performances and UIL performance assessments and will perform music literature from various music genres. Enrollment in this course constitutes some agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.
PR: Audition/Rubric
SEM: 2 CR: 1

Concert Band I (9-12) #6121
Concert Band II (10-12) #6122
Concert Band III (11-12) #6123
Concert Band IV (12) #6124
This course is designed to build upon student skills for playing a band instrument acquired from previous courses of study. Increased performance skills will include increased music notation, technical ability, music expression, and increased precision regarding basic fundamentals for performance. All genres of music will be performed. This course includes development of skills applied to indoor/concerts as well as the fall seasonal marching band performances. Minimum of 4 hours weekly outside the school day are required for rehearsals to adequately address performance requirements for the course. UIL performance assessments and student eligibility for Texas All-State Ensembles are included in this course work. Scholarship opportunities are available. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.
PR: Audition/Rubric
SEM: 2 CR: 1

Symphonic Band I (9-12) #6101
Symphonic Band II (10-12) #6102
Symphonic Band III (11-12) #6103
Symphonic Band IV (12) #6104
This course is designed for students to develop a mastery level for playing a band instrument acquired from previous courses of study. Students will acquire advanced skills needed to perform very complex music literature. Students will develop strong leadership skills, evoke high levels of expression, and perform literature of all genres and ensemble instrumentation. This course includes development of skills applied to indoor concerts as well as the fall seasonal marching band performances. Minimum of 4 hours weekly outside the school day are required for rehearsals to adequately address performance requirements for the course. UIL performance assessments and student eligibility for Texas All-State Ensembles are included in this course work. Scholarship opportunities are numerable. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.
PR: Audition/Rubric
SEM: 2 CR: 1

Jazz Band I (9-12) NOT AVAILABLE AT HCIS #6141
Jazz Band II (10-12) NOT AVAILABLE AT HCIS #6142
Jazz Band III (11-12) NOT AVAILABLE AT HCIS #6143
Jazz Band IV (12) NOT AVAILABLE AT HCIS #6144
This course is designed as an enrichment opportunity for students to apply instrumental music skills to the jazz medium. Students will study jazz history, learn to improvise, and perform jazz literature of all styles. With the exception of rhythm section instruments required for the jazz course (piano, bass, rhythm guitar, and trapseet), all students must be a concurrent member of the Prep, Concert, or Symphonic Band. Sound music fundamentals are a pre-requisite for success in this course. Texas All-State Ensembles and large scholarship opportunities are included in this course work. Students will perform extensively in public venues. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.
PR: Audition/Rubric
SEM: 2 CR: 1

Instrumental Ensemble I (9-12) #6310
Instrumental Ensemble II (10-12) #6312
Instrumental Ensemble III (11-12) #6313
Instrumental Ensemble IV (12) #6314
This series of courses are designed for students interested in developing extensive detailed performance applications on a specific music instrument. Students work independently at their own pace, in small ensemble settings of unique instrumentation (i.e. brass choirs, woodwind choirs, etc) and apply skills developed in concert, recital, and other various performance venues. Student audio portfolios are created, university audition recitals are developed, and audition preparations for Texas all-state are all part of the curriculum. In addition, students desiring to learn to play more than one instrument can be enrolled in this class for individualized instruction. Each course builds upon the student’s skill level developed in previous courses of study.
PR: Audition/Rubric
SEM: 2 CR: 1

Guitar I (9-12) #6381
Guitar II (10-12) #6382
Guitar III (11-12) #6384
Guitar IV (12) #6385 (Brennan and Stevens only)
This series of courses are designed for students interested in learning to play guitar. Each course builds upon skills learned in the previous course(s) of study. No prior experience is required for this course. Course is available only on those campuses where a certified instructor is assigned. Campus music instructor will assess student skill ability for each class. Basic music fundamentals include music notation, rhythm, counting, and guitar performance applications. Students will study and rehearse music of all styles. Opportunity for concert performances is included with each course. Enrollment in this course constitutes some agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.
PR: Audition/Rubric
SEM: 2 CR: 1

For Schedule of Events and Programs, see the Fine Arts Web Page at www.nisd.net
Choir

Choir I Treble (9-12) #6451  
Choir II Treble (10-12) #6452  
Choir III Treble (11-12) #6453  
Choir IV Treble (12) #6454  

This course develops skills in proper vocal production and music reading. Students learn to improve their singing voice, sight-reading and ensemble skills through performance participation. Choral literature will include all genres of vocal music written for the treble voice. Each level of this course, will build on the foundation of the previous course. Students will develop in confidence and collaborative skills through performance opportunities in solo, small and larger vocal ensembles. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Audition/Rubric  
SEM: 2 CR: 1

Choir I Advanced Treble (9-12) #6461  
Choir II Advanced Treble (10-12) #6462  
Choir III Advanced Treble (11-12) #6463  
Choir IV Advanced Treble (12) #6464  

This course develops the most advanced treble musicians and gives students the opportunity to improve their skills in vocal production, sight-reading, and ensemble participation. Choral literature will include secular and sacred music from all times and periods of music in the treble range. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Audition/Rubric  
SEM: 2 CR: 1

Choir I Tenor Bass (9-12) #6501  
Choir II Tenor Bass (10-12) #6502  
Choir III Tenor Bass (11-12) #6503  
Choir IV Tenor Bass (12) #6504  

This course develops skills in proper vocal production and music reading. Students learn to improve their singing voice, sight-reading, and ensemble skills through performance participation. Choral literature will include all genres of vocal music written for their tenor bass voice range. Each level of this course, will build on the foundation of the previous course. Students will develop confidence and collaborative skills through performance opportunities in solo, small and large vocal ensembles. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Audition/Rubric  
SEM: 2 CR: 1

Choir I Mixed (9-12) #6431  
Choir II Mixed (10-12) #6432  
Choir III Mixed (11-12) #6433  
Choir IV Mixed (12) #6434  

This course develops the most advanced choral musicians and gives students the opportunity to improve their skills in vocal production, sight-reading, and ensemble participation. Choral literature will include secular and sacred music from all times and periods of music for all vocal ranges. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Auditions/Rubric  
SEM: 2 CR: 1

Vocal Ensembles I (9-12) #6511  
Vocal Ensembles II (10-12) #6512  
Vocal Ensembles III (11-12) #6513  
Vocal Ensembles IV (12) #6514  

This course develops additional skills of advanced students with strong music fundamentals. Students will explore non-traditional ensemble techniques and literature of all styles. Size and composition of each group is designed to meet the requirements of the music being studied. Ensembles will consist of madrigals, vocal jazz, show choirs and other contemporary music genres.  
PR: Concurrent enrollment in choir/Audition/Rubric  
SEM: 2 CR: 1

Dance

Principles of Dance I (9-12) #6811  
Principles of Dance II (10-12) #6812  
Principles of Dance III (11-12) #6813  
Principles of Dance IV (12) #6814  

Principles of Dance I is designed to introduce students to various mediums of dance, including ballet, modern dance, tap, jazz, musical theatre, and world dance forms. Emphasis is on the development of technical and mind/body coordination skills, physical strength, and creativity. Instruction focuses on training the student to coordinate and coordinate all the elements of dance performance when set to music. Principles of Dance I is a general dance survey course and forms the foundation for Principl-es of Dance II, III, IV. Each level of dance instruction builds on the foundation of knowledge and skills established at prior levels. Each course will enhance student confidence, poise, collaborative skills through solo and ensemble performances. Dance students will have multiple opportunities to perform in campus dance recitals, city/state venues, and musical. Level numbers represent achievement levels, not student grade level. No prior dance training is required to enroll in Principles of Dance Level I.  
PR for Level I: None  
SEM: 2 CR: 1

Ballet I (9-12) #6821  
Ballet II (10-12) #6822  
Ballet III (11-12) #6823  
Ballet IV (12) #6824  

(These courses offered at Brandeis H.S. only.)  

This course will develop self-discipline and healthy bodies while applying ballet etiquette and dance safety. Students recognize ballet major works, styles, and ballet artists in history. Students will learn how to execute ballet technique, use ballet vocabulary, and perform ballet exercises, combinations, and created movement sequences or studies. Students will apply ballet technique and coordinate all the elements of dance performance. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Audition  
SEM: 2 CR: 1

Modern Dance I (9-12) #6831  
Modern Dance II (10-12) #6832  
Modern Dance III (11-12) #6833  
Modern Dance IV (12) #6834  

(These courses offered at Brennan H.S. only.)  

This course will develop the students’ ability to recognize major modern/contemporary dance works, styles, and dance artists in history. Students will execute modern/contemporary dance technique, use modern/contemporary vocabulary, and perform memorized movement exercises, combinations, and created movement sequences or studies. Students will apply modern/contemporary dance technique and dance safety and will explore technology applications for modern/contemporary dance movement. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.  
PR: Audition  
SEM: 2 CR: 1

Mariachi

Mariachi I Prep (9-12) #6351  
Mariachi II Prep (10-12) #6352  
Mariachi III Prep (11-12) #6353  
Mariachi IV Prep (12) #6354  

(These courses offered at Holmes & Jay H.S. only.)

This course is designed for students who want to learn to play an instrument used in mariachi. Little or no prior experience is required for this course. Instruments taught in this class include guitar, vihuela, and guitar. Trumpet, violin, and vocal students that are beginners are encouraged to enroll in a prep band or choir class to learn the basic music fundamentals. Campus orchestra director will assess student skill ability. Basic music fundamentals include music reading, rhythm, and technique development needed for each instrument. Stage presence, student confidence, and performance preparation are emphasized. Students are eligible to participate in some campus concert venues. Music of all mariachi genres is explored. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.  
PR: Audition/Rubric  
SEM: 2 CR: 1

Mariachi I Intermediate (9-12) #6355  
Mariachi II Intermediate (10-12) #6356  
Mariachi III Intermediate (11-12) #6357  
Mariachi IV Intermediate (12) #6358  

(These courses offered at Holmes & Jay H.S. only.)

This course is designed for students to build upon the mariachi fundamentals learned previously and to develop further performance techniques used in mariachi literature. Students will increase technical, musical, and expressive elements needed to perform more challenging literature in a variety of mariachi styles. Guitar, vihuela, guitarron, trumpet, violin, and vocal students rehearse collaboratively with increased public performances to be included. Some sectional rehearsal time is required outside the school day. The history of mariachi and connections to Folkloric Music are explored more extensively. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements.  
PR: Audition/Rubric  
SEM: 2 CR: 1
This course is designed for students who want to develop a mastery level of performance ability in mariachi. Students will apply advanced technical, musical, and lyrical applications to challenging mariachi literature of all styles. Guitar, vihuela, guitarron, trumpet, violin, and vocal students rehearse collaboratively with heavy emphasis on public performances. Extensive collaboration with Folkloric Music and Dance are explored. A minimum of 2 hours per week of time is required outside the school day for sectionals, rehearsals, and public performances. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements. PR: Audition/Rubric  SEM: 2 CR: 1

Music Appreciation I (9-12) #6540  
Music Appreciation IA (9-12) #6548  
Music Appreciation IB (9-12) #6549  

This course is designed for students interested in studying the history of music, major time periods in which music developed as an art form, and the composers that impacted music literature of the world. Students will listen to, identify, and analyze major music compositions and trace the impact of such compositions through the development of world cultures. Students will also connect the creation and evolution of music instrument construction to various cultures around the world. No prior music knowledge is required to enroll in this course. PR: NONE  SEM: 2 CR: 1

Music Theory I (9-12) #6531  
Music Theory II (10-12) #6532  
Music Theory AP (9-12) #6537  

This series of courses are designed for students interested in developing music notation writing skills and composition skills. Students will develop an understanding of basic music theory construction of melodic and harmonic lines of music as well as chord construction. Each course builds upon skills developed in previous courses. Students analyze and compose lines of music. Piano keyboard skills are used for theory applications. Applied Music Theory is offered on campuses where a certified AP Music Theory Instructor is available. Students completing Music Theory I are eligible for AP Music Theory OR music instructors can recommend students with strong music backgrounds for AP Music Theory courses. Student compositions are performed by various ensembles. Scholarship awards are available for recognized compositions. Students are eligible to acquire college credit through the College Board AP Music Theory Exam process. PR: Teacher Recommendation/Rubric  SEM: 2 CR: 1

Orchestra I Symphonic (9-12) #6239  
Orchestra II Symphonic (10-12) #6240  
Orchestra III Symphonic (11-12) #6241  
Orchestra IV Symphonic (12) #6242  

This course is designed for students to develop a mastery level for playing a string instrument acquired from previous courses of study. Students will acquire advanced skills needed to perform very complex music literature. Students will develop strong leadership skills, evoke high levels of expression, and perform literature of all genres and ensemble instrumentation. The course will require some rehearsal time outside of the school day to prepare for various concerts. UIL performance assessments and student eligibility for Texas All-State Ensembles are included in this course work. Students are eligible for selection to perform in campus full orchestra ensemble concerts. Scholarship opportunities are numerous. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extra-curricular requirements. PR: Audition/Rubric  SEM: 2 CR: 1

Music Appreciation IA (9-12) #6548  
Music Appreciation IB (9-12) #6549  

This course is designed for students interested in studying the history of music, major time periods in which music developed as an art form, and the composers that impacted music literature of the world. Students will listen to, identify, and analyze major music compositions and trace the impact of such compositions through the development of world cultures. Students will also connect the creation and evolution of music instrument construction to various cultures around the world. No prior music knowledge is required to enroll in this course. PR: NONE  SEM: 2 CR: 1
### Theatre

#### Theatre Arts I (9-12) #6631
Theatre Arts I is offered to students who are new to high school theatre. Theatre Arts I students will learn an appreciation for Theatre as an art form while examining both the acting and technical aspects of theatre. The interdependence of theatrical elements, the collaborative process, and creative problem solving skills will be employed as students begin to identify the impact of theatre on contemporary society, relate historical and cultural influences on theatre, appreciate theatre as a reflection of life, give and receive constructive criticism, and identify career opportunities in the Theatre Arts.

PR: None

SEM: 2 CR: 1

#### Technical Theatre II (10-12) #6642
Technical Theatre II is offered to students who have successfully completed Technical Theatre I and want to continue to build upon the skills learned in that course. Students will learn the techniques of design, process of composition, and color theory as they begin to analyze dramatic scripts and apply the design process. Advanced techniques in the building of scenery, costumes, and props and the execution of lighting and sound will be examined. Students will gain an appreciation for world cultures and their contributions to Theatre Arts. Career opportunities in Technical Theatre will be explored while students begin to prepared resumes and portfolios of their theatrical design experiences. Technical Theatre II is a project based course that will require students to practice the safe use of shop tools and materials.

PR: Technical Theatre I

SEM: 2 CR: 1

#### Technical Theatre III (11-12) #6643
Technical Theatre III is a continuation of study from Technical Theatre II. Students will explore advanced techniques in scenery construction, costume construction, makeup application, lighting design, sound design, and theatrical marketing. Students will demonstrate the design process by working as a member of a collaborative design team in designing technical elements for theatrical productions. Technical Theatre III is a project based course that will require students to practice the safe use of shop tools and materials.

PR: Technical Theatre II

SEM: 2 CR: 1

#### Technical Theatre IV (12) #6644
Technical Theatre IV is the culmination of the study of Technical Theatre Arts in high school. Students will enhance the skills obtained in Technical Theatre I-III. Technical Theatre IV students will model the design process by designing the technical elements for a theatrical production. Students will demonstrate leadership skills by supervising the creation of their artistic designs in scenery, costumes, lighting, and sound giving students an appreciation for the full production process. Students will focus on a specific career in Technical Theatre and complete a resume and portfolio of their theatrical design experiences. Technical Theatre IV is a project based course that will require students to practice the safe use of shop tools and materials.

PR: Technical Theatre III

SEM: 2 CR: 1

#### Theatre Production I (9-12) #6651
Theatre Production I is offered at some NISD high schools. This course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements. Musical Theatre students are required to participate in theatrical productions. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.

PR: None

SEM: 2 CR: 1

#### Theatre Production II (10-12) #6652
Musical Theatre II (10-12) #6672
Musical Theatre III (11-12) #6673
Musical Theatre IV (12) #6674
(These courses are offered at Taft H.S. only.)

Musical Theatre will expose students to a wide range of onstage performance disciplines, including acting performance, vocal performance, and dance performance. Students will receive comprehensive and rigorous instruction in varied styles of musical theatre, with special attention to the top principles of stage movement, vocal technique, choreography, acting, and characterization. Musical Theatre students are required to participate in theatrical productions. Enrollment in this course constitutes agreement to fulfill all curricular, co-curricular, and extracurricular requirements.

PR: None

SEM: 2 CR: 1

#### OnRamps Arts and Entertainment Technologies
This course presents a broad overview of digital media technologies, software, and applications along with the fundamental concepts of digital representations of images and signals. Students study an assortment of entertainment concepts or experiences, discover the underlying technology involved, and learn how this technology is delivered to the participant. In pursuit of answers to such questions, students also consider the cultural, philosophical, ethical, and practical aspects of entertainment technology.

PR: None

SEM: 2 CR: 1

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**Summer Fine Arts Camps in Band, Choir, Orchestra, Theatre, and Visual Arts may be available throughout the district.**

**Contact your campus Fine Arts instructors for detailed information.**
**Aerospace Science 1 (9-12) #5621**

(AS-100) A Journey into Aviation History is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief astronomical and space exploration history. (LE-100) Traditions, Wellness and Foundations of Citizenship introduces students to history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and examines the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success.

**PR:** None

**Aerospace Science 2 (10-12) #5622**

Option 1 - (AS-200) The Science of Flight: A Gateway to New Horizons focuses on how airplanes fly, how weather conditions affect flight, flight and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Students. Option 2 - (AS-220) Cultural Studies: An Introduction to Global Awareness introduces students to the world’s cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. (LE-200) Communication, Awareness, and Leadership stresses communications skills and cadet corps activities. Information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development.

**PR:** Aerospace Science 1

**Aerospace Science 3 (10-12) #5623**

(AS-300) Exploring Space: The High Frontier is a study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and on to modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. (LE-300) Life Skills and Career Opportunities is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st century. Students learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. Students learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving for grocery shopping, apartment selection and life with roommates. Students learn how to apply for vocational or technical school, community college, or a college/university.

**PR:** Aerospace Science 1

**Aerospace Science 4 (12) #5624**

Option 1 - (AS-400) Management of the Cadet Corps allows students to manage all aspects of operations during their fourth year in the Air Force Junior ROTC program. This hands-on experience affords students the opportunity to put theories from the Principles of Management textbook and previous leadership courses into practice under the guidance and supervision of the corps instructors. Planning, organizing, coordinating, directing, controlling, and decision-making are done by students. Students put into practice their communication, decision-making, personal-interaction, managerial, and organizational skills. (LE-400) Principles of Management exposes students to the fundamentals of management and provides them with necessary skills needed to put into practice what they have learned during their time in AFJROTC.

**PR:** Aerospace Science 1

Option 2 - (AS-410) Survival provides training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. Survival also presents “good to know” information that would be useful in any situation.

**PR:** Aerospace Science 1

**Aerospace Science 5 (12) #5625**

The Wellness Program is the Aerospace Science Physical Fitness Course (PE credit is given to AFJROTC students). The program focuses on individual base line improvement with the goal of achieving a national standard as calculated with age and gender.

**PR:** None

Sequencing of Air Force Junior ROTC courses may not be the same at all campuses. Please consult the campus Air Force Junior ROTC syllabus for the proper sequence of courses.

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**JROTC CLASSES**

**Air Force:** Brandeis, Brennan, Clark, Holmes, Jay, O’Connor, Taft / Communications Arts, Warren, and Stevens.

**Naval Science:** Marshall only

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**Naval Science 1 (9-12) #5611**

The first year of Naval Science focuses on military drill, military etiquette, naval customs and traditions, and physical fitness. Leadership and communication skills, Sea Power and the role of naval forces in history are also covered. The first year student will also be exposed to the sport of air rifle shooting with emphasis on safety.

**PR:** None

**SEM:** 2 CR: 1

**Naval Science 2 (10-12) #5612**

The Naval Science 2 curriculum builds on the leadership and military drill foundations established in Naval Science 1. Academics include Maritime Military History and Sciences to include geography, oceanography, meteorology, astronomy, and physical science. Cadets will also be given opportunities for hands-on leadership experience.

**PR:** NS-1 or equivalent

**SEM:** 2 CR: 1

**Naval Science 3 (11-12) #5613**

Naval Science 3 is about leadership development. These are the cadets who will be running our Corps the next year. Cadets are place in leadership roles and are given the opportunity to be “in charge.” They are expected to take the initiative, lead by example, and demonstrate that they are ready to accept additional responsibility. Physical fitness and military drill is also emphasized. The college admission process and the importance of continuing education after high school are stressed.

**PR:** NS-2 or equivalent

**SEM:** 2 CR: 1

**Naval Science 4 (12) #5614**

This is the year cadets are “in charge”. They are placed in leadership positions from the commander, supply, administration and operations and are held accountable. This is the graduation exercise for leadership. Cadets learn first hand what it takes to be a manager and a leader. They also command our drill teams, air rifle teams, physical fitness and academic teams.

**PR:** NS-3 or equivalent

**SEM:** 2 CR: 1

**Naval Science: Drill Team/Air Rifle Team (9-12)**

For Drill Team/Air Rifle Team Members Only.

**SEM:** 2 CR: 0

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**Credit Recovery/Advancement Opportunities**

There are several options for students to recover credits due to failure or to advance in credits. Northside ISD offers the following:

- Summer School
- Correspondence courses
- Credit by Exam
- Credit Retrieval
- Online courses

For more information and to plan your credit recovery or advancement, speak to your high school counselor.
Northside Independent School District

*Note: These courses award state credit only if participation requirements are met.

Grades 9-12: Students may participate in classroom based Special Education CTE courses, as established by the ARD committee. These courses may begin at any grade level.

**Dollars and Sense** – Students will focus on consumer practices and responsibilities, the money management process, decision-making skills, impact of technology, and preparation for human services careers.

**Retailing and E-Tailing** – Students will have the opportunity to learn about business conduct, ethics and cultural diversity in a business. They will also complete transactions, returns and communicate effectively in a retail setting. Teamwork, leadership and organizational skills are identified and practiced throughout various scenarios.

**Entrepreneurship** – Students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles to begin and operate a business while also illustrating how to meet the needs of the customer.

Grade 11-12: Students may participate in the Career Preparation course I and II as established by the ARD committee for 3 periods. This course provides opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, and communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for training and workplace success. Students may participate in either AM or PM (community-based training-schedule permitting). A student cannot be enrolled in both AM and PM sections.

*Career Preparation includes the entire Department of Labor Work-Based Learning continuum for eligible students to include:

  - Career Exploration – up to 5 hours per skill set
  - Career Assessment – up to 90 hours per skill set
  - Work Related Training – up to 120 hours per skill set
  - Cooperative Work Experience – VAC 08 (Paid or Unpaid experience)

**Students considered for VAC 08 (paid or unpaid) must be discussed with Area Coordinator prior to the ARD.

Grades 11-12: Students may participate in **Marketing Dynamics** as established by the ARDC for a 3 period course. Students will learn to use effective listening, reading, speaking, written and nonverbal communication skills effectively for targeted audiences. The students will have an opportunity to develop short and long term goals and will recognize that careers are ever changing and require self-assessment, research and preparation to develop and implement responsible decisions. Matching personal interests and aptitudes to selected careers, resume building, letters of application and mock employment interviews will also be a critical component of this course. This course may include a student internship/unpaid experience course with Area Coordinator experience.
# NISD Four Year Plan with Endorsement

Refer to page 3 in the NISD Course Catalog for graduation credit requirements. Parents and students are encouraged to use this planning guide to track course completion and plan for upcoming years.

NAME ____________________________ ID ____________

**ENDORSEMENT & STRAND:** Select your endorsement and indicate your intended strand

- [ ] Arts & Humanities
- [ ] Business & Industry
- [ ] Public Service
- [ ] STEM (Science, Technology, Engineering, Math)
- [ ] Multidisciplinary Studies

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<thead>
<tr>
<th>9th Grade</th>
<th>10th Grade</th>
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**Middle School Credit/s:**

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**Additional Graduation Requirements:**

- 2 credits of language other than English
- 1 credit of fine art
- .5 credit of health
- .5 credit of speech

See Counselor for course availability
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<th>Subject Area</th>
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*See graduation requirements on page 3.

Alternate Selections:


