# Galveston Ball High School 2024-2025



# Curriculum and Course Guide

# TABLE OF CONTENTS

GENERAL INFORMATION Semester Averaging Class Rank/ GPA	4 5
GRADUATION REQUIREMENTS & DIPLOMA PLANS	
Graduation Plans	7
Endorsements	
Performance Acknowledgements	10
Ball High Programs of Study	11
Ball High 4 Year Plan	12
g	
SCHEDULING GUIDELINES	14
DUAL CREDIT CLASSES and ADVANCED PLACEMENT COURSES Advanced Placement and Honors placement	15
Dual Credit	
Dual Credit Academy	
CCMR	19
SAT/ ACT / TSIA 2.0	20
Apply Texas/ Common App/ FAFSA	21
NCAA INFORMATION	22

#### BALL HIGH SCHOOL COURSES

English Language Arts Courses	24
Mathematics Courses	28
Science Courses	31
Social Studies Courses	35
Fine Arts Courses	39
Physical Education Courses	44
Junior Reserve Officer Training Corps (JROTC) Courses	46
Languages Other Than English (LOTE) Courses	47
Speech and Debate	50
Elective Courses	
Local Electives	52
Career and Technology Courses	54
	90

#### NON DISCRIMINATION STATEMENT

It is the policy of Ball High School not to discriminate on the basis of race, ethnic origin, sex, or handicap in its educational program, activities, or employment policies as required by Title IX of the 1972 Educational Amendments.

All courses are open to students regardless of race, sex, color, national origin, creed, disadvantaging or handicapping condition The information in this course guide is subject to change based on decisions made by the Texas State Legislature and Texas Education Agency after January, 2015.

# SEMESTER AVERAGING—HIGH SCHOOL COURSE WORK

Students in high school credit courses receive separate and independent grades for each semester for a year long course. Semester averages from the Fall and Spring semester of the same academic year will be averaged to calculate a yearly average for course credit. If the semesters' average of the same course equals a 70 or higher, credit for the entire course will be awarded. The following exceptions apply:

- Summer School and alternative delivery instruction (e.g. Credit Recovery, Correspondence, etc.) will not be considered for semester grade averaging
- 2. The attendance requirements or a waiver must be met.

#### **GRADING SCALE**

A = 90-100 B = 80-89 C = 70- 79 F = 0-69

#### HONOR GRADUATE REQUIREMENTS

To graduate with Highest Honors, a student must earn a grade point average of 4.0. To graduate with Honors, a student must earn a grade point average of 3.5. Courses shall be classified and weighted as HONORS, AP and DUAL CREDIT.

#### **CLASSIFICATION of STUDENTS**

Student classification is determined by cohort (1st-4th years in high school) and the number of credits accumulated by the end of the preceding year.

To be a 9th grade student (freshman).....successful completion of 8th grade To be a 10th grade student (sophomore).....Second year and 5 credits required To be an 11th grade student (junior).....Third year and 10 credits required To be a 12th grade student (senior).....Fourth year and 15 credits required

For each semester course passed with a 70 or above, the student receives one-half credit

#### **DEFINITIONS OF CREDIT**

Honors (H) - Honors class on 5.0 GPA scale

Advanced Placement (AP) - Advanced Placement course on 5.0 GPA scale

Dual Credit (DC) - College course for high school credit on 5.0 GPA scale

**Continuing Education Course (CE)** - College continuing ed course on 5.0 scale

On-level (Regular) - Traditional class on a 4.0 scale

**Local Credit (LOC)** - Course offered as a local credit only—NO GPA for course

Grade	AP/DC/CE/ HONORS	ON-LEVEL
	grade pts	grade pts
100	5.0	4.0
99	4.9	3.9
98	4.8	3.8
97	4.7	3.7
96	4.6	3.6
95	4.5	3.5
94	4.4	3.4
93	4.3	3.3
92	4.2	3.2
91	4.1	3.1
90	4.0	3.0
89	3.9	2.9
88	3.8	2.8
87	3.7	2.7
86	3.6	2.6
85	3.5	2.5
84	3.4	2.4
83	3.3	2.3
82	3.2	2.2
81	3.1	2.1
80	3.0	2.0
79	2.9	1.9
78	2.8	1.8
77	2.7	1.7
76	2.6	1.6
75	2.5	1.5
74	2.4	1.4
73	2.3	1.3
72	2.2	1.2
71	2.1	1.1
70	2.0	1.0
Below 70	0	0

## **CLASS RANK**

Class rank for seniors shall be based on a weighted grade point average (GPA) computed from semester grades earned in grades 9-12. Grades earned in high school courses taken in grade 8 shall not be included in the calculation of GPA. Except for grades earned for athletic courses, Tornettes, cheerleading, student aide, student council, band and local courses, all semester grades shall be converted to grade points according to the district's weighted scale.

Courses shall be classified and weighted as AP/HONORS/DC/CE or on-level.

Class rank indicates how a student's grades compare with those of other students in his class. Class rank shall be determined by the number of accumulated grade points divided by the number of courses with final grades.

Estimated class rank is determined for students prior to the fall semester of their sophomore, junior and senior year. Seniors receive three additional rankings which shall be calculated as follows: one in December, one in January, the other at the end of the fifth six weeks to identify honor graduates for commencement exercises. Any graduating student (including students graduating early\*) will be ranked with the class with which they graduate. \*Students graduating early will be classified as a senior in January ranking.

All correspondence courses are excluded from GPA and/or rank.

All Ball High in person will be weighted according to their classification and be calculated into GPA and/or rank.

Correspondence courses offered through non-Ball High (GISD) entities are excluded from GPA and/or rank.

# STATE TESTING INFORMATION

# STAAR

Students are required to complete the STAAR

assessments in each of the following areas:

Algebra I

Biology

US History

English I

English II

Sample STAAR questions can be found at:

www.tea.state.tx.us/student.assessment/staar

# **GALVESTON ISD GRADUATION PLAN**

# FOUNDATION + ENDORSEMENTS—26 CREDITS

- **4 credits English**-English I, II, III, IV or one credit in an advanced English course
- **4 credits Mathematics**-Algebra I, Geometry, two credits in an advanced math course
- 4 credits Science-Biology, one credit in IPC or in additional authorized advanced science course, two credits in any advanced science course
- **3 credits Social Studies**-US History, Government, Economics, and World Geography or World History
- 2 credits Language Other than English or Computer Programming
- 1 credit Physical Education
- 1 credit Fine Arts
- .5 credits of Professional Communication
- **6.5 credits in Electives** (may include CTE or certification courses)

# Credit requirements specific to at least one endorsement

In accordance with Texas Education Code (TEC), §28.0256, beginning with students enrolled in **12th grade** during the **2021-2022 school year**, each student must do one of the following in order to graduate:

- Complete and submit a Free Application for Federal Student Aid (FAFSA);
- Complete and submit a Texas Application for State Financial Aid (TASFA); or
- Submit a signed opt-out form.

# FOUNDATION ONLY-22 CREDITS

- **4 credits English**-English I, II, III, IV or one credit in an advanced English course
- **3 credits Mathematics**-Algebra I, Geometry, one credit in advanced math course
- **3 credits Science**-Biology, IPC or an advanced science course, an additional advanced science course
- **3 credits Social Studies**-US History, Government, Economics, and World Geography or World History
- 2 credits Language Other than English or Computer Programming
- 1 credit Physical Education
- 1 credit Fine Arts
- .5 credits of Professional Communication
- **4.5 credits in Electives** (may include CTE or certification courses)
- Students may opt to Foundation-only after completing sophomore year.

In accordance with Texas Education Code (TEC), §28.0256, beginning with students enrolled in **12th grade** during the **2021-2022 school year**, each student must do one of the following in order to graduate:

- Complete and submit a Free Application for Federal Student Aid (FAFSA);
- Complete and submit a Texas Application for State Financial Aid (TASFA); or
- Submit a signed opt-out form.

# **ENDORSEMENTS**

A student may earn an endorsement by successfully completing:

- Curriculum requirements for the endorsement
- Four credits in math
- Four credits in science
- Two additional elective credits
- Endorsements may be earned in the following areas:
  - STEM
  - Business & Industry
    - Public Service
    - Arts & Humanities
    - Multidisciplinary

# DISTINGUISHED LEVEL OF ACHIEVEMENT

A student may earn a distinguished level of achievement by successfully completing:

- A total of four credits in mathematics, which must include Algebra II
- A total of four credits in science
- The remaining curriculum requirements
- The curriculum requirements for at least one endorsement

A student must earn distinguished level of achievement to be eligible for top 10% automatic admission to state colleges and universities

# PERFORMANCE ACKNOWLEDGEMENTS

A student may earn a performance acknowledgment:

- For outstanding performance
  - in a dual credit course at least 12 college hours With a 3.0 or higher, <u>or</u>
  - 2. in bilingualism and bi-literacy
    - a. Completing all ELA requirements with a minimum of 80 as an average <u>AND</u>
    - b. Completion of at least 3 credits in the same language with a minimum of 80 as an average

# <u>Or</u>

3. on an AP test with a score of 3 or higher, or

4. on the PSAT by earning a score that qualifies for recognition as a commended scholar or higher, or the SAT by earning a combined critical reading and math score of at least 1250, or the ACT by earning a composite score of 28 (excluding writing)

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• For earning a nationally or internationally recognized business or industry certification or license

# BALL HIGH PROGRAMS OF STUDY

•	Automotive & Collision Repair	p.56
•	Biomedical Science	p.58
•	Carpentry	
•	Cosmetology & Personal Care Services	
•	Culinary Arts	
•	Cybersecurity	
•	Digital Communications (Audio/Video Production)	
•	Engineering Foundations	
•	Entrepreneurship	
•	Graphic Design & Interactive Media(Commercial Phot	
•	Graphic Design & Interactive Media (Graphic Design).	
•	Heath Informatics (Health Admin)	
•	Healthcare Therapeutic (EMT)	
•	Healthcare Therapeutic (PCT)	
•	Lodging & Resort Management	
•	Maritime, Distribution & Logistics	
•	Mechanical & Aerospace Engineering (Rockets)	
•	Programming & Software Development	
•	Robotics and Automation Technology	
•	Teaching & Training (BESTT)	
•	Welding	

Ball High School 4 Year Plan				
Name:	ne: <u>Example Student</u> ID #: <u>12345</u> Program of Study (CTE): <u>Engineering</u>			
The Four Year Plan is intended to give you and your parent(s) a guide to use as you progress through high school. You will want to review the plan each year to make sure you are taking the required courses for graduation. Your counselor will have sample <u>Career Plans of Study</u> for each of the Endorsements that are listed on this page. You may use these as guides to help you select courses that support your career goals. Make sure that you are taking the academic courses that support your post-secondary plans.				
	sement:			EOC Exams
Bu	TEM siness and Industry		ì	1
	ts and Humanities ublic Services		En	glish I EOC
	Iultidisciplinary Stud	dies	En	glish II EOC
Progra	m of Study:		Al	gebra I EOC
	aduation Plan Type		Bi	ology EOC
	Foundation with Endor Distinguished Level of (Algebra II)		US History EOC	
Pd	8 <sup>th</sup> Grade (HS Courses)	9 <sup>th</sup> Grade 10 <sup>th</sup> Grade		10 <sup>th</sup> Grade
1	,	English 1 F	Honors	English 2 Honors
2	Algebra 1	Geometry I		Algebra II Honors
3		Biology H	onors	Chemistry Honors
4		US History	Honors	Human Geo AP
5		Intro to Engi	ineering	Prin of Engineering
6	Spanish 1	Spanish II l	Honors	Music DC/Speech DC
7	Art 1	Art 2	2	Tennis
8		Tennis		Art 3 Honors
Pd	11 <sup>th</sup>	Grade		12 <sup>th</sup> Grade
1		sh 3 DC		English 4 AP
2	College	e Alg DC	(	Calculus AB/BC DC
3	3 Physics 1 AP Biology AP			
4				
5	Aerospace Eng Engineering D&P			
6	Psych DC/Soci DC Calculus DC Lab			
	7 Art History AP			Tennis
8	Те	Tennis Early Release		

Ball High School 4 Year Plan				
Name: ID #:         Program of Study (CTE):				
The Four Year Plan is intended to give you and your parent(s) a guide to use as you progress through high school. You will want to review the plan each year to make sure you are taking the required courses for graduation. Your counselor will have sample <u>Career Plans of Study</u> for each of the Endorsements that are listed on this page. You may use these as guides to help you select courses that support your career goals. Make sure that you are taking the academic courses that support your post-secondary plans.				
Endo	rsement:			EOC Exams
	TEM usiness and Industry	7	(must mee	et requirement for all)
A	rts and Humanities		Er	nglish I EOC
	ublic Services Aultidisciplinary Stu	dies	Er	nglish II EOC
Progra	am of Study:		Al	gebra I EOC
•	aduation Plan Typ		Bi	ology EOC
	Foundation with Endo Distinguished Level o (Algebra II)	f Achievement	ement	
Pd	8 <sup>th</sup> Grade (HS Courses)	9 <sup>th</sup> Grade 10 <sup>th</sup> Grade		10 <sup>th</sup> Grade
1				
2				
3				
4 5				
<u> </u>				
7				
8				
Pd	1 1 <sup>th</sup>	Grade		12 <sup>th</sup> Grade
ru	11	Grade		12 Glaue
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# SCHEDULING GUIDELINES

Galveston ISD strives to provide the highest quality education while working to be responsive to the individual student's needs. The participation and commitment of parents and students during registration and scheduling is a major component in reaching this goal.

Master schedules are developed in the spring prior to the upcoming school year. Selections during registration indicate how many teachers and sections will be needed for a course. The process allows administrators to plan and staff for optimum academic strength. For this reason, it is critical to make registration choices carefully. There will be NO CHANGES to course selections once the current school year is over.

Registration and scheduling procedures are as follows:

- During the spring semester, counselors will provide information to students about the registration process. Included will be information regarding course selection & career pathways. Registration forms should be completed by students and parents prior to individually meeting with counselors.
- 2. Students will meet individually with their counselor to complete their registration form and their personal graduation plan.
- Students who do not have the paperwork completed may have limited choices in the scheduling process. \* Courses will be selected for the student by the counselor and are final.

# POLICIES AND PROCEDURES

**Senior Year Schedule:** Senior students are required to take 8 courses regardless of the number of credits they need to graduate. A student must have passed all portions of the STAAR tests and have earned a CCMR point to be allowed early release which may be included as part of the 8 required courses. Seniors who have 1 or more portions of STAAR remaining will be placed in STAAR remediation courses.

Attendance Requirement: An important learning objective of all BHS classes is to help prepare students for the world of work. Good attendance is therefore necessary. More than 10 absences in a semester will result in denial of credit. See an assistant principal to determine if methods for reinstatement of credit are available to each individual.

**Dropping and Changing Classes:** Classes that students choose during registration for both fall and spring semesters are considered FINAL. No changes will be made from selected courses. Students may submit a Class Change Request Form during the first week of each semester if it is for one of the following reasons:

- 1. Passed the course and earned credit.
- 2. Need a course to graduate and it is not on schedule.
- 3. Chose a course on my selection sheet and it is not on my schedule.

The form requires signed approval by lead counselor. Changes may only be submitted during the first week of each semester.

**Leveling Classes**: During the first two weeks of each semester, schedules may be adjusted by administration to balance class sizes as needed.

#### HONORS AND ADVANCED PLACEMENT (AP) COURSES

## HONORS:

HONORS is defined as any course students take which leads to success:

- in an Advanced Placement course, and/or
- on an Advanced Placement exam, and/or
- in any course of study regardless of whether students attend a four-year university, a community college, a technical institute, or enter the workplace.

All HONORS courses offer the opportunity to:

- provide students with the skills and strategies necessary to be independent successful learners.
- challenge the student's creative and analytical reading, thinking, presenting, and writing skills.
- align with a standard of performance as indicated by AP examinations.
- become lifelong learners who participate yearly in AP conferences and institutes.

## ADVANCED PLACEMENT:

The purpose of College Board Advanced Placement (AP) courses is to prepare the students for college work and/or AP exams that provide students the opportunity to receive college credit. By earning a college's required grade on an AP Exam (usually a 3, 4, or 5), students may receive the equivalent of credit for a semester's or year's worth of coursework. This could also save the student (parent) the cost of tuition or books for that required course.

A Ball High School Advanced Placement course follows the curriculum developed by the College Board Advanced Placement Program. (A Ball High student enrolled in an AP course studies a standardized curriculum similar to other AP courses offered across the country.) A course designated as AP is therefore recognized nationally by high schools, colleges, and universities for the consistency of its curriculum.

## ADVANCED PLACEMENT COURSES:

- are more demanding than regular high school courses
- are recommended for highly motivated students.
- are different from the regular high school courses in that they are taught with college curricula and college level materials. (The curriculum of an AP course is at an accelerated pace, and performance is assessed at the analysis and synthesis level).
- allow students the opportunity to engage in subjects at a greater depth than regular courses.
- give the students the background and preparation that will prove beneficial for student success when enrolled in college.

# DUAL CREDIT



Ball High students in conjunction with Galveston College, have the opportunity to earn high school credit through college course credit. Students may choose to earn college credit by enrolling at Galveston College under the dual credit arrangement during the school year and/or summer. Theses courses are taught on the Ball High campus, Galveston College campus, and/or online.

To participate in this program, students register at Ball High <u>and</u> Galveston College during the prior school year. Students may also be required to pay Galveston College tuition and fees. Costs are set by the college. Financial aid may be available

To be eligible to take academic dual coursework, students must meet one of the following requirements (depending on the dual courses the students desires to take) :

- 1. Take the TSI assessment and assess as college ready
- 2. Take the ACT test and score a composite of 23 or higher with a minimum of 19 or higher in the corresponding sections of the English or Math
- 3. Take the SAT and score a minimum of 530 in mathematics and a 480 in Verbal.
- 4. Take the PSAT/NMSAT and score a minimum of 460 on evidence-based reading and writing test and/or a score of 510 on the mathematics test.
- Achieve a score of 4000 on English II STAAR EOC and /or a score of 4000 on the Algebra I STAAR EOC and in conjunction, a passing grade in the Algebra II Course.

# For full details please visit our website https://ball.gisd.org/counseling/dual-credit

Ball High Course	Galveston College Course	Galveston College Course
Anatomy & Physiology	BIOL 2401	BIOL 2402
Art Appreciation	ARTS 1301	
Biology	BIOL 1406	BIOL 1407
Business Comm	SPCH 1321	
British Literature	ENGL 2332	
Calculus AB/BC	MATH 2413 (Calculus I)	MATH 2414 (Calculus II)
Chemistry	CHEM 1411	CHEM 1412
College Alg/Pre-Calc	MATH 1314 (College Algebra)	MATH 2312 (Pre-Calculus)
English III or English IV	ENGL1301	ENGL1302
Environmental Science	ENVR 1301/ENVR 1101	ENVR 1302/ENVR 1102

#### Academic Courses for Dual Credit

Federal Government	GOVT 2305	
Film Appreciation	DRAM 2366	
Learning Frameworks	PSYC 1300	
Music Appreciation	MUSI 1306	
Philosophy	PHIL 1301	
Physics	PHYS 1401	PHYS 1402
Psychology	PSYC 2301	
Sociology	SOCI 1301	
Stats	MATH 1342	
Tech Writing	ENGL 2311	
Texas Government	GOVT 2306	
US History	HIST 1301	HIST 1302
Western Civilization	HIST 2311	HIST 2312

#### Workforce Courses and Continuing Education Courses for Dual Credit are listed on each individual CTE Course.

\*\*Any dual credit course other than those listed above must be pre-approved by GISD before taking.

# Dual Credit Academy

Ball High Students, in conjunction with Galveston College, that meet the following criteria may be eligible to participate in Ball High's Dual Credit Academy.

- Must be College Ready before sophomore year begins.
- All students agreeing to participate will take Dual Credit Learning Frameworks (PSYC 1300) and Dual Music Appreciation as a sophomore.
- The 42 hours earned during high school are the core hours offered in every 4-year degree plan in every public 4 year college and university in the state Texas.
- Automatic transfer and acceptance of these hours.
- Takes the guess work out of what dual credit to take, what will be accepted, etc.

To participate in this program, students register at Ball High <u>and</u> Galveston College during the prior school year. Students may also be required to pay Galveston College tuition and fees. Costs are set by the college.

# College, Career, Military Readiness (CCMR)

# TSIA 2.0—CCMR Initiative

All sophomores will be given the opportunity to take the TSIA 2.0 before the end of the school year or when deemed academically capable. If a student meets college readiness through TSIA 2.0 before end of sophomore year, a student may qualify for one period of Early Release period during junior year.

# **Early Graduates**

In order to qualify for early graduation (graduating a year early), all STAAR test must be passed, a CCMR point must be earned, and must graduate with 26 credits and earn an endorsement.

# Ways to earn a CCMR point at Ball High School

	TSIA 2.0 ELAR/Math	ACT ELAR/Math	SAT ELAR/Math	AP Exam
Minimum Requirement	ELAR> 945 <u>AND</u> <u>ESSAY &gt;</u> 5	Eng & Rdg Combined <u>&gt; 4</u> 0	ELAR <u>&gt;</u> 480	≥ 3 on one or more exam
	MATH <u>&gt;</u> 950	MATH <u>&gt;</u> 22	MATH <u>&gt;</u> 530	
	Dual Credit Course	Industry Based Certification (IBC)	Level I or II Certification (College Reported)	College Prep English and Math
Minimum Requirement	<ul> <li>≥ 3 hours of credit in ELA or Math</li> <li>OR</li> <li>≥ 9 hours of credits cumulated across all subjects</li> </ul>	Earn an approved IBC while in high school <u>PLUS ≥ 1</u> Level 2 or higher course in an aligned Program of Study	Earn a Level I or Level II Certificate	Course Credit in <u>BOTH</u> College Prep English and College Prep Math
		Armed F	Forces	
	Minimum Requireme	Enlist in th Armed Fo the Texas National C with a con D4 Form	rces or Guard	

# Universities and Colleges require students to take a test for college admission

# PSAT/SAT ACT TSIA 2.0

# PSAT/SAT

# www.collegeboard.org

Each assessment in the SAT Suite of Assessments — the SAT, PSAT/NMSQT, PSAT 10, and PSAT 8/9 — includes a Reading Test, a Writing and Language Test, and a Math Test. PSAT 10 is offered at no charge to all sophomores in the fall. Freshman and Juniors may sign up for their respective PSAT exam for a fee during the PSAT fall testing date. The SAT also features an <u>optional essay component</u>, which some colleges will require. Questions throughout the assessments focus on skills that matter most for college readiness and success, according to the latest research.

Students are required to register on-line @ www.collegeboard.com. Study guides and practice tests are available on the College Board website. Refer to the website for testing dates offered at Ball High School.

There is a fee required to register for the exam. Fee waivers are available from your student's high school counselor for students that qualify.

Campus ID numbers used for test registration are 442690. Some colleges require SAT II exams in addition to SAT I. These are subject area

tests in such disciplines as language, math, social studies, and science.

# ACT - American College Test

# www.act.org

The ACT is a college entrance exam. The test is a set of four multiple choice questions which cover English, math, reading, science and an optional writing test. Students are required to register on-line @ www.act.org.

Study guides and practice tests are available on-line www.act.org. Multiple testing dates are offered each year, please refer to the website for more details. The assessment has a fee associated with the exam and must be paid upon registration. Fee waivers are available from your student's high school counselor for student's that qualify.

Campus ID number used for ACT is 442690

# TSIA 2.0—Texas Success Initiative Assessment 2.0

The Texas Success Initiative Assessment 2.0 (TSIA 2.0) is a series of placement tests for students enrolling in public colleges and universities in Texas. The tests help Texas schools determine whether you're ready for college-level courses in the areas of reading, writing, and math. If you're not ready for college-level courses, the tests help determine what types of courses or intervention will best prepare you for college-level course work. TSIA 2.0 is offered on the Ball High School campus at NO CHARGE.

# Universities and Colleges applications and financial aid

# Apply Texas (use for Applying to Texas Colleges)

Apply Texas is a centralized web portal for prospective students from Texas and other states to apply for admission to Texas higher education institutions. The purpose of the program is to allow students to complete one application and submit it to multiple institutions of higher education.

# **Common App**

## www.commonapp.org

The Common Application is an undergraduate college admission application that applicants may use to apply to over 1,000 member colleges and universities in all 50 U.S. states and the District of Columbia, as well as in Canada, China, Japan, and many European countries.

# FAFSA

# studentaid.gov/h/apply-for-aid/fafsa

Federal Student Aid is the largest provider of financial aid for college in the U.S. Understand aid, apply for aid, and manage your student loans today. Required for graduation.

## www.applytexas.org

# The National Collegiate Athletic Association (NCAA) Core Curriculum

Many college sports are regulated by the National Collegiate Athletic Association (NCAA), an organization that has established rules on eligibility, recruiting, and financial aid. If students are applying to college and plan to participate in Division I or Division II sports, they must be certified by the NCAA Initial Eligibility Clearinghouse. The Clearinghouse will analyze academic information and determine if students meet the NCAA's initial eligibility requirements.

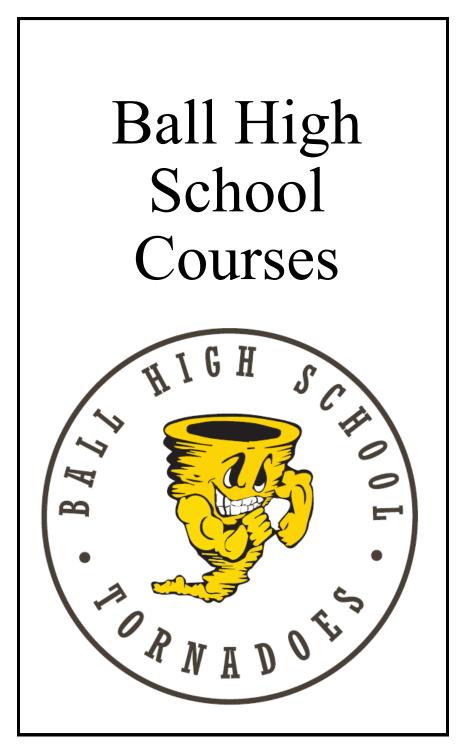
Specific academic requirements for Division I and Division II sports can be found on the NCAA website at <a href="http://www.ncaa.org">www.ncaa.org</a>.

Athletes must register with Core Course GPA for eligibility verification.

Students wanting to participate in Division I or Division II sports should start the certification process by the end of their 8th grade year.

A free copy of the Guide for College Bound Athletes is available by calling 1-888-638-3731 or by visiting the website at www.ncaa.org.

# For more information contact: GISD Athletic Director Office at 409.766.5883 or your student's athletic coach





#### ENGLISH 1

Prereguisite: None

Grade 9

Students will continue to enhance and refine their communication skills. They write in a variety of Forms where an emphasis is placed on the development of theses, organization, and elaboration of logical arguments. Students are expected to edit their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English-producing error-free final drafts. Additionally, students read extensively in multiple genres from world literature and learn literary terms associated with the selections being read.

ENGLISH 1 HONORS		ENG 115
Prerequisite: None	Grade 9	1 Credit

Honors classes emphasize advanced reading, analytical reasoning skills, and expository writing in preparation for the Advanced Placement exams in language and literature given during the junior and senior years.

ENGLISH 2		ENG 221
Prerequisite: English 1	Grade 10	1 Credit

The sophomore curriculum integrates reading, writing, speaking, listening, and thinking skills with a wide variety of world literature as a base. This class will utilize collaborative, process-oriented instructional strategies to create a student-centered classroom Students will learn about the composing process, multi-paragraph environment. compositions, writing for purpose, and evaluative writing with documentation, critical thinking skills, literary analysis, reading comprehension, Vocabulary, and oral communication. These strategies and skills will enable the student to participate and communicate effectively in an increasingly complex society.

#### ENGLISH 2 HONORS

Prerequisite: English 1

English 2 Honors prepares students for college-credit AP courses that follow. In addition to covering the essential elements of English 2, this course emphasizes advanced placement skills including further refinement in grammar/usage/sentence structure study, Intensive literary analysis, extensive independent reading, and writing in various literary formats. It also involves vocabulary building, literary genre study, and independent research.

Grade 10

ENGLISH 3		ENG 321
Prerequisite: English 2	Grade 11	1 Credit

English 3 has an integrated curriculum consisting of reading, writing, and listening/ speaking/media. In reading, we focus primarily on works from American authors, and in writing we create personal, business, and Critical pieces, including documented essays with primary and secondary sources. Treatment of grammar and mechanics is usually individualized to meet a particular student's needs within the writing process. Vocabulary generally comes from works read so that the words are meaningful and not isolated; however, we will study vocabulary words (and etymology) that are used frequently on the SAT. Listening/speaking/media is generally integrated with the reading and writing. although we also look at ways that the particular presentation of an idea (medium) affects our comprehension of it.

ENG 121

1 Credit

ENG 215 1 Credit

ENGLISH 3 AP			ENG 315
Prereguisite: English 2	Grade11	1 Credit	

English 3 AP prepares students to take the English Language and Composition Exam for which they might earn college credit. In addition to covering the essential elements of English 3, this course includes features of the Advanced Placement program. Emphasis is placed upon in-depth study of major works of American literature, development of high level literary analysis skills which are reflected in students' essays of literary analysis, study of major rhetorical forms, and development of personal writing style. The course also involves extensive outside reading and a research project.

ENGLISH 3 DC		ENG 390
Prerequisite: Meet College Requirements and English 2	Grade 11	1Credit

ENGL 1301-Intensive study of and practice in writing processes, from invention and researching to drafting, revision, and editing, both individually and collaboratively, Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.

ENGL 1302-Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

ENGLISH 4		ENG_421
Prerequisite: English 3 and has met TSI college readiness	Grade 12	1 Credit

This course fuses reading, language and writing with British literature. Focus is on literary and composition skills. Short literature selections as well as four to six novels are included in the curriculum. Students also required to do a literary analysis research project.

ENGLISH 4 COLLEGE PREP		ENG 441
Prerequisite: English 3 and has not met TSI college readiness	Grade 12	1 Credit

This course is designed to prepare students for college level reading and writing intensive courses including ENGL 1301. The focus of this course will be to apply critical thinking skills for organizing, analyzing, and retaining material. Students will learn to write effective, logical essays, utilizing textual support. Students will develop reading comprehension strategies to analyze, synthesize, and make value judgements using critical thinking. Students will take TSIA 2.0 at least once prior to completing the course.

ENGLISH 4 AP		ENG 415
Prerequisite: English 3	Grade 12	1 Credit

AP English 4 prepares students to take the English Literature and Composition Exam for which they might earn College credit. In addition to covering the Texas Essential Knowledge and Skills (TEKS) of English 4, the course adheres to criteria for the Advanced Placement program. This course involves extensive reading from various genres and cultures. Analytical writing and discussion are required . Students are expected to sit for the National AP exam.

ENGLISH 4-COMP 1 & COMP 2 DC		ENG 590
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Prerequisite: Meet College Requirements, English 3 Grade 11 1 Credit

ENGL 1301-Intensive study of and practice in writing processes, from invention and researching to drafting, revision, and editing, both individually and collaboratively, Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analvsis.

ENGL 1302-Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

ENGLISH 4- BRITISH LITERATURE DC		ENG 695
Prerequisite: English 1301 DC	Grade 12	1/2 Credit

ENGL 2322-A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. This course will cover works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ENGLISH 4 -TECHNICAL WRITING DC		ENG 690
Prerequisite: English 1301 DC	Grade 12	1/2 Credit

ENGL 2311-Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents.

<b>GREEK MYTHOLOGY</b>	(ELECTIVE CREDIT)	ENG 500
Prerequisite: None	Grades 10-12	1/2 Credit

Classical Mythology is a survey of ancient Greek and Roman stories about heroes, gods and the universe and illustrates the influence of these myths on the art. literature and culture of the modern world. Study of these ancient myths forces us to reevaluate our own questions and answers, our own way of looking at the world, and our place in it. This course involves a great deal of reading and writing. The student's progress is periodically assessed with a 2-3 page essay.

WORLD MYTHOLOGY	(ELECTIVE CREDIT)	ENG 501
Prerequisite: None	Grades 10-12	1/2 Credit

This course focuses on the study and understanding of Native American myths and beliefs made through literature, oral traditions, and lifestyles. This class also introduces Norse and Middle Eastern mythology through the study of themes and narratives that emphasize the importance of mythical elements to the modern world. This course involves a great deal of reading and writing. The student's progress is periodically assessed by a 2-3 page essay.

#### CREATIVE WRITING (ELECTIVE CREDIT)

Prerequisite: None

Grade 11-12

ENG 502

This course will study various genres of literature through a creative writing aesthetic. Students will strengthen writing skills through the exploration of critical thinking using dynamic pieces of literature. Students will use these outlets to illustrate creativity that aligns with English IV standards. Students will be assessed through multiple creative writing projects, literary analysis, and writing journals.

VISUAL MEDIA ANA	ALYSIS AND PROD (ELECTIVE CREDIT)	ENG 503
Prerequisite: None	Grade 11-12	1/2 Credit

This course will emphasis film as a genre of literature. Through the lens of film, students will be able to use film as a tool in order to deepen their understanding of theme, structure, and style. Students will use thematic units to explore the relationship of film and fiction/nonfiction texts. Visual Media use thematic units to explore the relationship of film and fiction/nonfiction texts. Visual Media Production Analysis and Production will allow students to extend their knowledge obtained in creative writing by allowing them to demonstrate their creativity through a student led project.

READING 1-3		RDL 301-303
Prerequisite: None	Grades 9 –11	1 Credit each

Students are taught basic reading and study skills. An integrated approach through Reading and writing prepares students for the STAAR test.

# MATHEMATICS

Grades 9-12

#### ALGEBRA 1

Prerequisite: Grade 8 Math

GEOMETRY HONORS

ALGEBRA 2

Prerequisite: Geometry

This course develops a foundation for all higher-level mathematics courses. The functional approach as mandated by the Texas Essential Knowledge and Skills (TEKS) is used to cover all of the Algebra 1 essential knowledge and skills. Algebraic topics to be coved include linear equations and inequalities in one and two variables, operations with polynomials, graphing and solving functions (linear and quadratic, and an introduction to rational and radial expressions).

GEOMETRY		MTH 321
Prerequisite: Algebra 1	Grades 9-12	1 Credit

Geometry connects to algebra and to world outside of school through a variety of applications. Students will study geometric structure and patterns dimensionally. Students will also study the geometry of location and congruence, as well as the geometry of size, similarity and shape. Students will have access to technology for analysis and computation.

Prerequisite: Algebra 1	Grades 9-12	1 Credit
Geometry Honors provides	students college-level work in hig	h school mathematics

Honors provides students college-level work in high school mathem The work load of this class is rigorous and intensive. Students will have homework daily and projects will be completed each six weeks. Geometry connects to algebra throughout the course and connects to the world outside of school through a variety of applications. Students will study geometric structure, geometric patterns, dimensionally and the geometry of location, congruence and the geometry of size, similarity and the geometry of shape. Students are expected to have access to technology for analysis and computation.

MATHEMATICS MODELS WITH APPLICATIONS		MTH 221
Prerequisite: Algebra 1	Grades 10-11	1 Credit
Students use mathematical methods to model and solve real life applied problems		

Students use mathematical methods to model and solve real-life applied problems involving money, data, chance, patterns, music, design, and science. Students use mathematical models from algebra, geometry, probability, and statistics, and connections among these to solve problems from a wide variety of advanced applications in both mathematical and nonmathematical situations.

Algebra 2 provides students with an in-depth look at functional relationships in problem
solving situations. Students will study foundations for functions, algebra and geometry,
quadratic and square root functions, rational functions, and exponential and logarithmic
functions. Students are expected to have regular access to technology for analysis and
computation.

Grades 10-12



MTH 121

1 Credit

MTH 315

MTH 421

1 Credit

## **ALGEBRA 2 HONORS**

Prerequisite: Geometry

Algebra 2 provides students with an in-depth look at functional relationships in problem solving situations. Students will study foundations for functions, algebra and geometry, guadratic and square root functions, rational functions, and exponential and logarithmic functions. Students are expected to have regular access to technology for analysis and computation.

Grades 10-12

PRE-CALCULUS AP		MTH 515
Prerequisite: Algebra II	Grades 11-12	1 Credit

In AP Pre-Calculus, students explore everyday situations and phenomena using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. They will learn how to observe, explore, and build mathematical meaning from dynamic systems, an important practice for thriving in an ever-changing world. AP Pre-Calculus prepares students for other college-level mathematics and science courses. The framework delineates content and skills common to college Pre-Calculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.

COLLEGE ALG/PRE-CALCULUS DC		MTH 520
Prerequisites: Meet College Requirements, Algebra II	Grades 11-12	1 Credit

MATH 1314-In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

MATH 2312-A concise integrated treatment of the mathematical concepts necessary for calculus. Intended for students with good ability in mathematics. Elementary functions and their graphs, including polynomials, rational algebraic functions, exponential and logarithmic concepts, geometric and trigonometric functions, systems of equations and inequalities and topics from analytic geometry.

COLLEGE ALGEBRA PREPARATION		MTH 701
Prerequisites: Algebra II	Grade 12	1 Credit

Designed for students who have completed Algebra II but need to strengthen their algebra skills before taking College level math. Students will extend their level of math skills and reasoning beyond the topics covered in Algebra II. Some topics include functions and basic trigonometry. Students will take TSIA 2.0 at least once prior to completing the course.

CALCULUS AB ONLY AP		MTH 806
Prerequisite:Pre-Cal	Grades 12	1 Credit

Calculus AB provides students college-level work in high school mathematics. The work load of this course is rigorous and intensive. Students will have homework daily and projects will be completed each six weeks. All topics will be covered in preparation for the Advanced Placement Calculus AB exam.

#### CALCULUS AB/BC AND LAB DC

DC: MTH 870/ 871/LOC870

Prerequisite: Meet College Requirements and Pre-Cal DC Grades 12 2 Credits

MATH 2413-Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem. And rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

MATH 2414-Differentiation and integration of transcendental functions, parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

STATISTICS AP		MTH 805
Prerequisite: Honors Algebra 2	Grades 11—12	1 Credit

AP Statistics is designed for students who wish to complete studies equivalent to a one semester, introductory, non—calculus based college course in statistics. The purpose is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed for four broad conceptual themes: (1) Exploring data: describing patterns and departures from patterns; (2) Sampling and Experimentation: planning and conducting a study: (3) Anticipating Patterns: exploring random phenomena using probability and simulation: (4) Statistical Inference: estimating population parameters and testing hypothesis.

STATISTICS DC (Math Elective Credit)		MTH 815
Prerequisite: 4 year-long math credits	Grades 12	0.5 Credit

MATH 1342-Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing.





#### BIOLOGY

Prerequisite: None

Grade 9

SCI 121 1 Credit

SCI 860

SCI 321

SCI 315

1 Credit

This laboratory course is oriented toward students following a general curriculum and introduces the basic concepts and theories of the chemical and cellular basis for life, botany, zoology, microbiology, human anatomy and physiology, genetics, evolution, taxonomy, and ecology. Lab exercises are emphasized and special projects are required each semester.

BIOLOGY HONORS		SCI 115
Prereguisite: None	Grade 9	1 Credit

This laboratory course is designed for advanced college-bound students. It is oriented toward objectives beyond the TEKS in the concepts and theories of chemical and cellular basis for life, botany, zoology, microbiology, human anatomy and physiology, taxonomy, genetics, evolution, and ecology. Students will be expected to read and understand the text on their own, leaving class time for in-depth study of various topics.

#### BIOLOGY AP

DICECCI A		001000
Prerequisite: Bio, Chem	Grades 10-12	1 Credit

This course gives students the opportunity for Advanced Placement in biological sciences through the AP exam. Students are also afforded the opportunity to practice appropriate investigative techniques. The curriculum includes detailed biochemical, organism and population studies. A major portion of class time is devoted to laboratory work.

BIOLOGY DC		SCI 865
Prerequisite: Meet College Requirements, Bio, Chem	Grade 12	1 Credit

BIOL 1406-The first of a two-semester course surveying interdisciplinary studies and principles to explore the scientific methodology and frameworks for understanding biological systems. This course focuses on basic concepts related to chemistry of inorganic and organic molecules, cell structure and function, metabolism, photosynthesis and cellular respiration, mitosis and meiosis, Mendelian patterns of inheritance, DNA and chromosomal organization and function, gene activity, biotechnology, evolution, origin and history of life. It includes a practical laboratory with emphasis on the application of fundamental principles of biology as well as critical thinking.

BIOL 1407-The second of a two-semester course surveying interdisciplinary studies and principles to explore classification, evolution, and comparative-level organization of living systems. This course focuses on basic concepts related to microbiology and evolution of prokaryotes and eukaryotes, plant structure and function, invertebrates and vertebrates, comparative animal biology and organ systems, and ecology. It includes a practical laboratory with emphasis on the application of fundamental principles of biology as well as critical thinking.

INTEGRATED PHYSICS	& CHEMISTRY	SCI 221
Prerequisite: None	Grades 9-10	1 Credit

This course is one semester of pre-chemistry and one semester of pre-physics to prepare students for more rigorous coursework in upper level science courses. This course must be taken PRIOR to Chemistry or Physics

#### **CHEMISTRY**

Prerequisite: Biology and Algebra 1	Grades 9-12	1 Credit

Chemistry is the study of basic principles of chemistry and emphasizes the application of the concepts of chemistry in practical situations.

Grades 9-12

#### CHEMISTRY HONORS

Prerequisite: Bio & Alg 1

Honors Chemistry prepares the student for a college freshman course in chemistry or AP chemistry. The laboratory work requires the use of initiative in following written instructions.

CHEMISTRY AP		SCI 850/LOC850
Prerequisite: Chemistry	Grades 10-12	1 Credit

AP Chemistry is a double blocked course that follows the College Board framework. The textbook content must be done independently so that in depth laboratory work supporting the college level curriculum necessary for the AP Chemistry Exam can be completed during class. Students will have opportunities to practice appropriate investigative techniques.

PHYSICS		SCI 421
Prerequisite: completed or enrolled in Algebra 2	Grades 11-12	1 Credit

This course studies the interactions between matter and energy and the organization of observed phenomena into useful and meaningful relationships. This course offers an overview of physics for the student who may or may not be college bound.

PHYSICS 1 (Classical) Algebra-Based AP		SCI 800
Prerequisite: Algebra 2	Grades 11-12	1 Credit

Students will cultivate their understanding of physics and science practices as they explore the following topics: kinetics, dynamics, circular motion and universal law of gravitation, simple harmonic motion, rotational motion, electrostatics, DC circuits, mechanical waves and sound. This course prepares students for the AP Physics 1 exam.

PHYSICS 2 (Modern) Algebra	a-Based AP	SCI 810
Prerequisite: AP Physics 1	Grades 12	1 Credit

Students will cultivate their understanding of physics and science practices as they explore the following topics: thermodynamics, fluid statics and dynamics, electrostatics, DC circuits and RC circuits, magnetism and electromagnetism induction, geometric and physical optics, quantum physics, atomic physics, and nuclear physics. This course prepares students for the AP Physics 2 exam and is equivalent to the second semester of an introductory college course in algebra-based physics.

PHYSICS C Calculus Based AP		SCI 820
Prerequisite: Concurrently enrolled in Calculus	Grade 12	1 Credit

Students will explore concepts such as kinematics: Newton's laws of motion, work. energy, and power; systems of particles and linear momentum; rotation; oscillations; and gravitation. You'll do hands-on laboratory work and in-class activities to investigate phenomena and use calculus to solve problems.

#### AQUATIC SCIENCE

Prerequisite: IPC or Chemistry

Aquatic Science is the composite study of the biological, physical, chemical and geological aspects of the ongoing oceans. Exploration of current issues involving the environment is a vital component of this science course. Students are also involved in many laboratory and local field investigations and projects, including one for the science fair or an approved independent study.

ENV	/IRONI	MENT	AL S	YSTEMS		
-		10.0	2		0 1 11 10	

Prerequisite: IPC or Chemistry

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

SCI 650 1 Credit

SCI 601

1 Credit

Grades 11-12

Grades 11-12

## ENVIRONMENTAL SCIENCE AP

Prerequisite: Bio, Chem

Grades 11-12

Grades 11-12

<u>SCI 870</u>

Credit

This course, designed for students to receive college credit by the AP Exam in environmental science, is a project-based class. The course allows students to design and develop investigative techniques as it relates to local ecological problems. A major portion of the class is devoted to laboratory and field investigations. Students will be expected to read and understand the text on their own. A designed and developed independent investigation (approved by the instructor) is required.

#### ENVIRONMENTAL SCIENCE DC

SCI875 1 Credit

Prerequisite: Meet College Requirements

ENVR 1301/1101 General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. The first of a two-semester course surveying interdisciplinary studies and principles for understanding our environment and frameworks for understanding science, systems, and ethics. The course focuses on basic concepts related to chemistry of living and non-living systems, communities and species interaction, sustainability, population biology, environmental health, food and agriculture, pest control, biodiversity and resources use. It includes readings, group discussions, and critical thinking with emphasis on current environmental issues. This course is designed to fulfill three credit hours of the Life & Physical Science component of the core curriculum for non-science majors.

ENVR 1302/1102 General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. The second of a two-semester course sequence surveying interdisciplinary studies and principles for understanding our environment. This course focuses on basic concepts related to geology and earth resources, global warming, weather, air and water quality, conventional and sustainable energy, hazardous wastes, ecological economics and environmental policies. It includes readings, group discussions, and critical thinking with emphasis on current environmental issues. This course is designed to fulfill three credit hours of the Life & Physical Science component of the core curriculum for non-science majors.

#### ANATOMY & PHYSIOLOGY (CTE SCIENCE)

Prerequisite: IPC or Chemistry Grades 10-12

In this course, students will study the human body. Students will learn about the twelve systems of the body and how they all work together. These twelve systems are: integumentary, circulatory, respiratory, muscular, skeletal, nervous, digestive, excretory, reproductive, endocrine, immune, and lymphatic. Students will explore these systems by conducting laboratory investigations with dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

ANATOMY & PHYSIOLOGY D	C (CTE SCIENCE)	SCI 505
Prerequisite: BIOL 1406 DC	Grades 10-12	1 Credit

BIOL 2401-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The first of a twosemester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the integumentary, skeletal, muscular and nervous systems.

BIOL 2402-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The second of a two -semester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the endocrine, circulatory, respiratory, digestive, excretory and reproductive systems.

SCI 501

1 Credit

# FORENSIC SCIENCE (CTE SCIENCE)

Prerequisite: IPC or Chemistry

Students will use a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

Grades 10-12

MEDICAL MICROBIOLOGY	(CTE SCIENCE)	SCI 830
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications.

#### PATHOPHYSIOLOGY (CTE SCIENCE)

Prerequisite: Chemistry and at least one credit from a level 2 course within either the Health Science Career Cluster or the Biomedical pathway (preferably, Anatomy and Grades 11-12 Physiology) 1 Credit

This course focuses on the changes in cellular and systematic physiology that occur in prevalent or important medical conditions like osteoporosis and cancer. At the cellular level, students will cover the responses to tissue injury, abnormal cell growth, and the immune system. Students will investigate the physiological basis of problems associated with most of the major organ systems. The course will be laboratory based including dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

## FOOD SCIENCE (CTE SCIENCE)

Prerequisites: Chemistry and at least one credit from a level 2 course or higher in the Hospitality & Tourism Career Cluster Grades 11- 12 1 Credit

This course allows students examine the nature and properties of foods, food microbiology, and the principles of science in food production, processing, preparation, and preservation; use scientific methods to conduct laboratory and field investigations; and make informed decisions using critical thinking and scientific problem solving. This course provides students a foundation for further study that leads to occupations in food and beverage services; the health sciences; agriculture, food, and natural resources; and human services.

SCI 701

1 Credit

SCI 510

SCI 900



#### WORLD GEOGRAPHY Prerequisite: None

SOC 121

SOC 700

1 credit

This course is designed for students to examine people, places and environments at local, regional, national and international scales. Using the eight strands of the Texas Essential Knowledge and Skills (TEKS), students develop global awareness and improve their skills of reading, writing, graph interpretation, map symbol interpretation, current events, and library skills. The study of both physical and cultural geography will be emphasized while relating the material to students' everyday lives and \developing skills for life-long use. Written reports, group and individual projects may be required.

Grade 9—10

#### HUMAN GEOGRAPHY AP

Prerequisite: None

Grades 10-12

This course 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 landscapes analysis to examine human social organization and its environmental consequences. They also learn methods and tools geographers use in their science and practice. Reports, charting and graphing, Power—Point/Excel, and current events projects may be required. Students will have the opportunity to earn college credit for this course.

WORLD HISTORY		SOC 221
Prereguisite: None	Grades 9-10	1 Credit

This is a survey course for students preparing them to understand world and national events. Topics for the course may include any and all significant historic events, people and trends having an impact on our world today. Reading, writing and listening to historic accounts and analyzing them is a large part of the course.

U.S. HISTORY		SOC 321
Prerequisite: None	Grades 9-12	1 Credit

This is a survey course of American history post Civil War to the present. Using the eight strands of the Texas Essential Knowledge and Skills (TEKS), this course provides the student with the opportunity to understand some the social, economic, and political forces that have shaped American society. Attention is given to the development of reading, writing, and research skills and limited outside assignments may be given.

US HISTORY HONORS		SOC 315
Prerequisite: None	Grade 9 –10	1 Credit

This is a survey course of United States history from post Civil War to the present. Skills required for passing the AP exam in American History will be integrated into the course. A significant amount of outside reading and writing are required as well as research projects.

#### US HISTORY DC SOC 605 Grades 11-12 1 Credit

Prerequisite: Meet College Requirements

HIST 1301-A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government.

HIST 1302-A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War, and post-Cold War eras. Themes that may be addressed in the United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.

#### US GOVERNMENT

Prerequisite: None

Grades 11-12

SOC 401

1/2 Credit

This course emphasizes the general and fundamental workings of the American governmental system. Outside reports and/or projects maybe required.

US GOVERNMENT AND POLITICS AP		SOC 405
Prerequisite: None	Grades 11-12	1/2 Credit

This is a survey course of American government specifically designed to prepare the student for passing the AP exam in American government. Significant amounts of outside reading and writing are required as well as research projects and presentations.

US GOVERNMENT AND POLITICS DC		SOC 490
Prerequisite: Meet College Requirements	Grades 11-12	1/2 Credit

GOVT 2305-Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.

ECONOMICS W/EMPHASIS ON FREE ENTERPRISE SYSTEM		SOC 501
Prerequisite: None	Grades 11-12	1/2 Credit

This course deals with the fundamental elements and concepts of economics. The purpose of the course is to improve student understanding of economics by raising their interest in economic issues and by teaching them to reason carefully about economic activity. The class presents personal, local, national, and international issues or events in order to stimulate students' curiosity and to provide them an opportunity to learn and practice economic reasoning.

## PERSONAL FINANCIAL LITERACY AND ECONOMICS

Prerequisite: None

Grade 11-12

SOC 502 <sup>1</sup>/<sub>2</sub> Credit

Students will demonstrate the ability to anticipate and address financial challenges as these challenges occur over their lifetime. Students are introduced to common economic and personal financial planning terms and concepts. Students gain the ability to lead productive and financially self-sufficient lives. The course requires that students demonstrate critical thinking by exploring how to invest in themselves with education and skill development, earn income, and budget for spending, saving, investing, and protecting. Students will examine their individual responsibility for managing their personal finances and understand the impact on standard of living and long-term financial well-being. Students will connect how their financial decision-making impacts the greater economy. Students may not be awarded credit for both this course and the personal financial literacy course.

ECONOMICS AP		SOC 505
Prerequisite: None	Grades 11-12	1/2 Credit

This is a survey course of economics designed to give the student thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price determination, and also develops students' familiarity with economic performance measures, economic growth, and international trade.

WESTERN CIVILIZATION DC (ELECT	TIVE CREDIT)	SOC805
Prerequisite: Meet College Requirements	Grade 12	1 Credit

HIST 2311-A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations.

HIST 2312-A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism.

SOCIOLOGY (ELE	ECTIVE CREDIT)	SOC 910
Prerequisite: None	Grades 10-12	1/2 Credit

This course includes a brief survey of society, social institutions, and social relationships. Study focuses on the process of interaction, organized patterns of collective behavior and the structure and function of human groups.

SOCIOLOGY DC (ELECTIVE CREDIT)		SOC 915
Prerequisite: Meet College Requirements	Grades 11-12	1/2 Credit

SOCI 1301-The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.

PSYCHOLOGY (ELECTIVE CREDIT) Grades 10-12

Prereguisite: None

This course is an introduction to psychology which considers the development of the individual and the personality. Students will focus on topics such as theories of human development, personality, motivation, and learning.

PSYCHOLOGY DC (ELECTIVE CRE	DIT)	SOC 925
Prerequisite: Meet College Requirements	Grades 11-12	1/2 Credit

PSYC 2301-A survey of the major topics in psychology topics, theories and approaches to the scientific study of behavior and mental processes.

PSYCHOLOGY AP (ELECTIVE CREDIT)		SOC 900 & SOC 901
Prerequisite: None	Grades 10 –12	1 Credit

This course is the equivalent of an introductory level college course in psychology- the scientific study of behavior and mental processes. This course is designed for the student to take and pass the AP exam and receive college credit for the course. These two courses are paired.

PHILOSOPHY DC (ELECTIVE CREDIT)		SOC 930
Prerequisite: Meet College Requirements	Grades 11-12	1/2 Credit

PHIL 1301-A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications.

GALVESTON HISTORY	(ELECTIVE CREDIT)	SOC 810
Prerequisite: None	Grade 10-12	1/2 Credit

This is a semester long course that will look at Galveston's unique history. The course will look at the island's history from its early discovery and settlement, to present day. In this history, the student will analyze political, economic, social, and technological issues that are unique to Galveston. The student will also be introduced to the islands unique bio-diversity including its seasonal weather and unique climate. The course will also aim to present current events and issues to the student and try to inspire the student to participate in local politics in Galveston and inform them of their local civic responsibilities. This course will work in connection with local elected officials, entrepreneurs, the local media, local celebrities and others for the student complete projects specific to Galveston. The course will highlight all of Galveston's great historical accomplishments and historical figures from all parts of the community.

## FINANCIAL LITERACY (online)

Prereauisite: None

Grade 10-12

1/2 Credit

This elective course will provide students with Personal Financial Literacy is a one semester course that will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lives .

## DRAWING AND CERAMICS

ART 1 Prerequisite: None

This course emphasizes the study of basic art concepts through design and composition and will explore the use of a variety of media. The student will develop skills, abilities and techniques used to learn two-dimensional designs.

Grades 9-12

AR	<b>Z</b>

Prerequisite: Art 1

Applied visual art is designed to expand a student's experience in working with basic art concepts and to introduce additional techniques and media related to areas of drawing and painting.

## **ART 3 2D DESIGN & DRAWING HONORS**

Prerequisite: Art 2

This course expects students to develop a comprehensive portfolio displaying clear student voice and focused exploration. Emphasis will be placed on the production of a body of quality art work. This includes a student's generated sketchbook representing personal voice, style, and ideation. Students will address all three sections of the AP Studio Art 2-D and Drawing portfolio: Breadth, Concentration and Quality, as well as artistic integrity. Students will be challenged to develop their own personal response to demonstrate mastery of concept, composition, and execution of their personal idea and themes.

ART 4 STUDIO - 2D D	ESIGN & DRAWING AP	ARL 104
Prereguisite: Art 3	Grades 11-12	1 Credit

Prerequisite: Art 3

The AP Studio Art 4 program enables highly motivated students to do college level work in studio art while still in high school. AP Studio art differs from most high school art courses in that it demands a student's personal commitment to the time, maturity, and expense required to produce a portfolio for evaluation. Therefore, the program is intended for students seriously committed to studying art and is not recommended for the casually interested. ( Up to nine hours AP credit)

## ART 5 STUDIO - DRAWING AP

Prerequisite: Art 4

The AP Studio Art 5 program enables highly motivated students to do college level work in studio art while still in high school. AP Studio art differs from most high school art courses in that it demands a student's personal commitment to the time, maturity, and expense required to produce a portfolio for evaluation. Therefore, the program is intended for students seriously committed to studying art and is not recommended for the casually interested. ( Up to nine hours AP credit)

Grades 11-12

This course allows students to work with clay. Students study the basic material and tools used to design pottery and three dimensional sculpture. Each subsequent semester is devoted to improving skills and developing more intricate and advanced techniques.

Grades 11-12

ART 103 1 Credit

ARL 105 1 Credit

ART 202

1 Credit

ART 102

ART 101

1 Credit

1 Credit



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ART 2—CE	RAMICS	1
Prerequisite:	Art 1	

Grades 10-12

Grades 10-12

applications in ceramics highlight this course. ART 3D DESIGN AP Grades 11-12 Prerequisite: Ceramics 1

Advanced techniques in clay and glaze technology, as well as instruction in sculptural applications in ceramics highlight this course.

Advanced techniques in clay and glaze technology, as well as instruction in sculptural

Grades 11-12

ART HISTORY AP		ART 305
Prerequisite: None	Grades 11-12	1 Credit

This course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective.

## CHOIR AND MUSIC

<b>BALL HIGH BEGINNING CHOIR</b>	TREBLE/TENOR BASS	MUS 611/612
Prerequisite: None	Grades 9-12	1 Credit

This course teaches the basic skills of singing and music reading. Instruction includes music history and theory. Emphasis will be given to developing voice. Students in this choir will have opportunity to perform publicly.

BALL HIGH SYMPHONIC MIXED CHOIR 2-4		MUS 622-624
Prerequisite: Instructor approval	Grades 10-12	1 Credit each
This course explores choral music from current popular and contemporary music.		

Students in this choir will perform publicly on a regular basis and will compete in regional and UIL choral competitions.

MUSIC STUDIES I HONORS		MUS 670
Prerequisite: None	Grades 9-12	1 Credit

Theoretical concepts including scales, intervals, triads and acoustical properties of sound as they relate to music, rhythmic, melodic, harmonic and formal structures. Course includes part writing, aural skills and analysis.

MUSIC APPRECIATION DC		MUS 675
Prerequisite: Meet College Requirements	Grades 10-12	0.5 Credit

MUSI 1306-Understanding music through the study of cultural periods, major composers, and musical elements; illustrated with audio recordings and/or live performances.

## **ART 3—CERAMICS 2 HONORS**

Prerequisite: Ceramics 1

ART 203 1 Credit

ART 204 1 Credit

## DANCE

DANCE 1		PEL 601
Prerequisite: None	Grades 9-12	1 Credit

This course is an introduction to dance as art and music. It is designed to teach movement fundamentals and give an orientation to dance by using different forms of dance. Instruction will begin with ballet and ballet terminology as the foundation for further dance exploration. Other dance instruction will include a mixture of some of the following: Latin dance; Salsa and Merengue; Afro-ethnic dance; modern dance; folk/ ethnic; jazz; and hip hop. Some background, history and terminology will be introduced with each area of dance. There will also be a strong emphasis on warm-up and stretching. Students will be exposed to different forms of music, both contemporary and classical.

DANCE 2		PEL 602
Prerequisite: Dance 1	Grades 10-12	1 Credit

This course will focus primarily on ballet dance instruction and terminology. The student will spend class time at the bar and on center combinations. The student will also be introduced to modern and lyrical dance. The dancer will study information on the care and strengthening of the body, the history of ballet, the professional world of ballet as well as information about ballet-related careers in other fields. The class will also pursue ballet-related field trips to see professional or pre-professional company performances when available. The students will participate in choreography, rehearsals, production and public performance of dance works.

DANCE 3		PEL 603
Prerequisite: Dance 2	Grades 11-12	1 Credit

This course is continuation of the study of the fine art of dance. This course focuses on ballet movement and studies for the improvement of student dancers. Much time will be Spent at the bar and on center combinations. The students will explore the strengthening of the body, the history of ballet, the professional world of dance and careers available in the field of dance. The students will participate in choreography, rehearsals, production and public performance of dance works.

DANCE 4		PEL 604
Prerequisite: Dance 3	Grades 11-12	1 Credit

This course is continuation of the study of the fine art of dance. This course focuses on ballet movement and studies for the improvement of student dancers. Much time will be spent at the bar and on center combinations. The students will explore the strengthening of the body, the history of ballet, the professional world of dance and careers available in the field of dance. The students will participate in choreography, rehearsals, production and public performance of dance works.

TORNETTES I-IV		PEL 611-614
Prerequisite: Selection through tryout process	Grades 9-12	1 Credit each

The course is designed to teach dance/drill team movements as well as dance skills. Members are selected through tryouts and screening. Activities include performing for athletic events, summer camp, parades, contests and involvement in other community projects. Attendance at after-school/before-school practice is mandatory. Participation in the Spring Show is mandatory. Additional fees are required.

## BAND

## MARCHING BAND/WIND ENSEMBLE

Prerequisite: Director approval Grades 9-12 (for 9th and 10th grade 0.5 PE Fall, 0.5 Fine Arts Spring)

This course consists of all wind players in the marching, Wind Ensemble and Symphonic bands. The students will be expected to perform at concerts, clinics, and competitions. The fall semester will focus on marching techniques and marching music for football games and UIL competition. Band members must perform at all football games, parades, competitions, and performances related to marching band. Students are expected to attend Monday through Friday rehearsals after school each throughout the entire fall semester. Students are also required to attend all UIL rehearsals and performances.

The spring semester will focus on UIL concert and sight-reading competition, solo and ensemble competition, and possible end-of-year competitions and performances. Students will be expected to attend all after school rehearsals, sectionals, perform at all UIL and other competitions.

Marching Band will be divided into two different groups for the spring semester. Based on playing ability, students will be placed in wind ensemble or symphonic band.

PERCUSSION
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Prerequisite: Director approval Grades 9-12 (for 9th and 10th grade 0.5 PE Fall, 0.5 Fine Arts Spring)

This course consists of all wind players in the marching, Wind Ensemble and Symphonic bands. The students will be expected to perform at concerts, clinics, and competitions. The fall semester will focus on marching techniques and marching music for football games and UIL competition. Band members must perform at all football games, parades, competitions, and performances related to marching band. Students are expected to attend Monday through Friday rehearsals after school each throughout the entire fall semester. Students are also required to attend all UIL rehearsals and performances.

## THEATRE

<b>TECHNICAL THEATRE</b>	1	THL 611
Prerequisite: None	Grades 9-12	1 Credit

This course is designed for the student interested in pursuing the craft of state design and execution and theatre management. The student will explore scenery, properties, lighting, costumes, makeup, sound, public relations, and research and design. Students will share in the theatre experience by working in the various areas associated with overall production. The students will also evaluate the work of other technicians and expand his or her appreciation of theatre through attendance at and involvement in theatrical events.

## TECHNICAL THEATRE 2

Prerequisite: Tech Theater Grades 10-12

This course is designed for the student interested in pursuing the craft of state design and execution and theatre management. The student will explore scenery, properties, lighting, costumes, makeup, sound, public relations, and research and design. Students will share in the theatre experience by working in the various areas associated with overall production. The students will also evaluate the work of other technicians and expand his or her appreciation of theatre through attendance at and involvement in theatrical events.

THL 612 1 Credit

MUS 101-104 1 Credit each

MUS 201-204

1 Credit each

## **TECHNICAL THEATRE 3**

Prerequisite: Tech Theater 2 Grades 11 - 12

This course is designed for the student interested in pursuing the craft of state design and execution and theatre management. The student will explore scenery, properties, lighting, costumes, makeup, sound, public relations, and research and design. Students will share in the theatre experience by working in the various areas associated with overall production. The students will also evaluate the work of other technicians and expand his or her appreciation of theatre through attendance at and involvement in theatrical events.

## **TECHNICAL THEATRE 4**

**THEATRE ARTS 1** 

Prerequisite: Tech Theater 3 Grades 11-12

This course is designed for the student interested in pursuing the craft of state design and execution and theatre management. The student will explore scenery, properties, lighting, costumes, makeup, sound, public relations, and research and design. Students will share in the theatre experience by working in the various areas associated with overall production. The students will also evaluate the work of other technicians and expand his or her appreciation of theatre through attendance at and involvement in theatrical events.

Prerequisite: None	Grades 9-12	1 Credit
ties in all manners of theatrica expressive use of voice and	erformance class that focuses on al production. Emphasis is place body, and collaborative constru- de a basic understanding of clas	d upon appropriate and ction of student written

and theater history. Students will be exposed to a variety of examples of theatrical craft, both in live performance and recordings. Basic stagecraft elements will be explored, including lighting, sound design, and stagecraft.

THEATRE ARTS 2		THL 602
Prerequisite: Theater Arts 1	Grades 10-12	1 Credit

This course is designed to emphasize advanced study in two areas: acting and design. Course units will include the study of advanced acting techniques and application of the design elements for the stage through group and individual projects. Involvement in co-curricular productions, contests, and/or other such activities is an integral requirement in the class.

#### THEATRE ARTS 3

Prerequisite: Theater Arts 2

This course provides the third year student with advanced actor training, a broad understanding of dramatic literature, and training in the specialized skills of playwriting, design, and directing. Involvement in co-curricular productions, contests, and/or other such activities is an integral requirement of the class.

#### THEATRE ARTS 4

Prerequisite: Theater Arts 3

Theatre Arts 4 continues to provide the advanced theatre student with extensive actor preparation, as well as specialized training in areas of special interest to the individual student. Among these are theatre literature, design, directing, and playwriting. Emphasis is on the refinement of skills. Involvement in co-curricular productions, contests, and/or other such activities is an integral requirement of the class.

1 Credit

THL 613

THL 614 1 Credit

THL 601

THL 603 1 Credit

THL 604

1 Credit

Grades 12

Grades 11-12



## All Physical Education and PE Substitute courses fulfill CPR according to TEC 28.0023

INDIVIDUAL & TEAM SPORTS		PED 110
Prerequisite: None	Grade 9	1 Credit
This course will allow students to u active lifestyle through participation ir		ortance of exhibiting a physically
FOUNDATIONS OF PHYSICAL	FITNESS	PED 120
Prerequisite: None	Grade 10	1 Credit
This course will allow students to develop a concept of wellness and an understanding about the process of becoming fit.		
AEROBIC ACTIVITIES		PED 130
Prerequisite: None	Grades 11	1 Credit

This course will allow students to develop skills in physical activity and health, movement, and social development through aerobic activities.

## ATHLETICS

Pre-Requisites: UIL Standards

Grades 9-12

Classes are restricted to those students accepted into specific programs. Students interested in a particular program should contact the coaching staff for enrollment information. Students may be required to practice on fields or in gyms on other campuses. It is the student's responsibility to provide transportation to and from practices and home games. All students must have a physical on file to be in athletics. Sports without a course code listed below do not have a class built during the day and only practice before or after school. See chart below:

SPORT	9TH	10TH	11TH	12TH
FOOTBALL	ATH100	ATH101	ATH102	ATH103
VOLLEYBALL	ATH110	ATH111	ATH112	ATH113
GIRLS' SOCCER	ATH210	ATH211	ATH212	ATH213
BOYS' SOCCER	ATH200	ATH201	ATH202	ATH203
GIRLS' BASKETBALL	ATH310	ATH311	ATH312	ATH313
BOYS' BASKETBALL	ATH300	ATH301	ATH302	ATH303
BASEBALL	ATH400	ATH401	ATH402	ATH403
SOFTBALL	ATH450	ATH452	ATH453	ATH454
GOLF	ATH610	ATH611	ATH612	ATH613
TENNIS	ATH620	ATH621	ATH622	ATH623
SWIMMING	ATH640	ATH641	ATH642	ATH643



#### JROTC 1

Prerequisite: None

Grades 9-10

This course provides the student with a basic introduction to ROTC (Reserve Officer Training Corps) and the United States Army. The topics include hygiene, first aid, map reading, air rifles, safety and marksmanship, leadership and drill, and methods of instruction

JROTC 2		PEL 712
Prerequisite: JROTC 1	Grades 10-11	1 Credit

This course provides the student with the basic knowledge of intermediate map reading, air rifles, intermediate marksmanship, methods of instruction, leadership development and drill, battalion organization, introduction to leadership theory, acting as a small unit leader, and standard operating procedures. Students may serve as a small unit leader at squad through platoon levels.

## JROTC 3

Prerequisite: JROTC 2

This course provides the student with the basic knowledge of psychology of leadership, leadership and small unit leader problems, leadership development and drill, applied marksmanship, service opportunities, applied methods of instruction, applied map reading, and US military history. Students may serve in unit leader roles at platoon through company levels.

Grades 11-12

#### JROTC 4

Prerequisite: JROTC 3

Grade 12

This course provides the student with the knowledge of advanced leadership development and drill, advanced instructional methods, staff functions procedures, organization actions and inter-staff responsibilities, and command and staff relationships. Students will serve in a unit leader role.

JROTC OFFICER		PEL 715/716
Prerequisite: Tryout	Grades 11-12	1 Credit

This course is designed to grow JROTC members in their leadership role as a JROTC officer. All JROTC officers are required to be enrolled in this course.

> A student may choose JROTC 1 to fulfill the PE requirement for graduation

**PEL 711** 1 Credit

PEL 714

1 Credit

**PEL 713** 

1 Credit

## LANGUAGES OTHER THAN ENGLISH

## **CHINESE**

## CHINESE 1

Prereauisite: None

Chinese 1 introduces oral language communication. Emphasis is placed on speaking and listening comprehension. Basic grammar usage is introduced. A project each semester is required.

Grades 9-12

## **CHINESE 2 HONORS**

Prerequisite: Chinese 1

This course emphasizes speaking and understanding of the spoken word. Grammar usage and reading for comprehension is expanded. Vocabulary and writing skills are also increased.

Grades 9-12

Grades 9-12

## CHINESE 3 HONORS

Prerequisite: Chinese 2 Honors

An accelerated Chinese 3 course. This course expands basic skills previously learned and increases writing, speaking and listening skills. It also develops more extensive comprehension through reading literature and increase awareness of the Chinese world and cultures.

## CHINESE 4 HONORS

Prerequisite: Chinese 3 Honors

This course will improve a student's ability in language proficiency in terms of listening, speaking, writing, and reading in a variety of personal, social, and cultural course lessons.

Grades 9-12

## FRENCH

FRENCH 1		LNG 201
Prerequisite: None	Grades 9-12	1 Credit
	language communication and It introduces basic grammar	

#### FRENCH 2 HONORS

Prerequisite: French 1

This course emphasizes speaking and listening proficiency. It expands usage and reading for comprehension and develops a deeper appreciation of Francophone civilization. Vocabulary is increased and writing skills from previous course are further developed.

#### FRENCH 3 HONORS Prerequisite: French 2 Honors

This course expands on the basic skills and develops more sophisticated communication proficiency in speaking, listening and writing. It also develops a more extensive reading vocabulary through the study of a modern novelette and through the translation of excerpts from contemporary literature. The course increases vocabulary and develops a deeper understanding and appreciation of the Francophone civilization and culture.

Grades 10-12

LNG 401 1 Credit

LNG 402

1 Credit

1 Credit

LNG 404

1 Credit

LNG 403

LNG 202

1 Credit

LNG 203

1 Credit

Grades 9-12

#### 48

#### FRENCH 4 HONORS

Prerequisite: French 3 Honors

French 4 increases reading and writing and further develops those skills through a selection of modern prose and poetry. The finer points of grammar and translation from English to French are practiced and vocabulary skills are increased. Speaking and listening skills are refined. A project is required.

Grades 11-12

## SPANISH

## PLACEMENT GUIDELINES

An assessment will be given to students to determine if placement in a Spanish native speakers class is appropriate.

#### SPANISH 1

Prerequisite: None

Spanish 1 introduces oral language communication. Emphasis is placed on speaking and listening comprehension. Basic grammar usage is introduced. A project each semester is required.

Grades 9-12

<b>SPANISH 1 &amp; 2 FOR NATIVE</b>	SPEAKERS HONORS	LNG 102/142
Prerequisite: Fluent in Spanish	Grades 9-12	2 Credits

This one-year accelerated course is designed for bilingual students with a native-like knowledge or experience in oral Spanish. The focus is to increase vocabulary, transfer reading comprehension skills, and develop functional language development and usage. Students are provided a well-structured curriculum that meets needs. Each semester a project is required.

SPANISH 2		LNG 103
Prerequisite: Spanish 1	Grades 9-12	1 Credit

This course emphasizes speaking and understanding of the spoken word. Grammar usage and reading for comprehension is expanded. An appreciation of Hispanic culture and civilization is developed. Vocabulary and writing skills are also increased. A project each semester is required.

SPANISH 2 FOR NATIVE SPEAKERS HONORS		LNG 142
Prerequisite: Fluent in Spanish	Grades 9-12	1 Credit

This course is specifically designed for those Spanish-speaking students that have taken Spanish at the middle school level and passed with a 75 or above. The focus is to increase the writing skills.

#### SPANISH 2 HONORS

Prerequisite: Spanish 1

This is an accelerated college preparatory Spanish 2 course. Speaking and understanding the spoken word is stressed as are grammar usage and reading for comprehension. An appreciation of Hispanic culture and civilization is developed. Vocabulary and writing skills are increased. A project each semester is required.

Grades 9-12

LNG 101

1 Credit

LNG 104

1 Credit

## **SPANISH 3 HONORS**

Prerequisite: Spanish 2

Grades 10-12

<u>LNG 106</u>

1 Credit

This course emphasizes oral communication and expands on the basic skills learned in Spanish 1 and 2 Honors. The course increases writing skills in addition to speaking and listening skills. It also develops more extensive reading comprehension and a deeper appreciation of Hispanic culture. The students' vocabulary will grow through reading short stories and dialogues. A project each semester is required. This course continues preparation skills for the Spanish AP exam.

SPANISH 3 FOR NATIVE SPEAKERS H	ONORS	LNG 152
Prerequisite: Spanish 2 NATIVE SPEAKERS	Grades 10-12	1 Credit

This course emphasizes oral communication and expands on the basic skills learned in the Spanish 1 and 2 Native Speaker course. The course increases writing skills in addition to speaking and listening skills. It also develops more extensive reading comprehension and a deeper appreciation of Hispanic culture. The students' vocabulary will grow through reading short stories and dialogues. A project each semester is required. This course continues preparation skills for the Spanish AP exam.

SPANISH 4 LANGUAGE AN	D CULTURE AP	LNG 108
Prerequisite: Spanish 3 Honors	Grades 10-12	1 Credit

Concentration is on writing, speaking and reading modern Spanish. Class discussion in Spanish increases vocabulary, fluency and develops cultural understanding through selections. Students are prepared for the language AP exam in May. The short story and the novel are introduced as literary genres.

<b>SPANISH 5 LITERATURE A</b>	ND CULTURE AP	LNG 109
Prerequisite: Spanish 4 AP	Grades 11-12	1 Credit

Native speakers who took Spanish for Native Speakers 3 AP and who passed the Language Exam may also take this course. This course is a continuation of Spanish 4 AP with emphasis on reading and a variety of Hispanic literature, and is designed to prepare students for the AP Literature Exam. Reporting of complete, original texts including several novels and complete plays, and detailed literary analysis are the basis of the activities in this class.

Special Topics in Language in Culture: The study of world languages is an essential part of education. In the 21st century language classroom, students gain an understanding of two basic aspects of human existence: the nature of communication and the complexity of culture. Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community. This course may only be taken if, after completing the first credit of LOTE, a student demonstrates that they are unlikely to successfully complete the second credit in the same language and MUST be agreed upon by the student and counselor. This course will satisfy the LOTE requirements for the FHSP; however, WILL NOT meet the requirements of the Arts & Humanities "Foreign Language (LOTE) Option" Endorsement Pathway.

# **SPEECH & DEBATE COURSES**

#### Professional Communications and Business & Professional Communications course fulfill SB 30 Community Safety Education

# PROFESSIONAL COMMUNICATIONSCOM 600Prerequisite: NoneGrades 10-121/2 Credit

The major focus of this course will be communication skills that are essential for successful participation in social and professional life. Increasing technology and changing social and corporate systems demand that students be effective in sending clear verbal messages, choosing appropriate nonverbal behaviors, listening for desired results and applying critical thinking and problem solving processes to real world experiences.

This course is required for graduation.

<b>BUSINESS &amp; PROFESSIONAL COM</b>	MUNICATION DC	COM 605
Prerequisite: Meet College Requirements	Grades 10-12	1/2 Credit

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats. This course is a dual-credit course; students will meet speech graduation requirements for high school through this course. **This course is required for graduation.** 

DEBATE 1		COM 531
Prereguisite: None	Grades 10	1 Credit

Debate focuses on the theories of Team Debate, Cross-Examination Debate, and Lincoln -Douglas Debate with specific emphasis on the state adopted resolution for high school competition, including: affirmation and negative case construction, team and individual research and practice rounds, and tournament competition. Weekend traveling is involved to compete in TFA & UIL debate tournaments. The course requires the student to use actual practical application as a member of the Ball High Debate Team.

DEBATE 2 & 3		COM 532 & 533
Prerequisite: Instructor Approval	Grades 11—12	1 Credit each

These courses concentrate on national resolution analysis, affirmative and negative case construction, brief preparation and argument evaluation. Students prepare arguments and briefs used in tournament debates. Students are required to attend TFA tournaments and UIL activities assigned by the instructor.



#### CHEERLEADER

#### **PEL 311**

VOL 775

<sup>1</sup>/<sub>2</sub> Credit

VOL 770

JRN 100

Credit

<sup>1</sup>/<sub>2</sub> -1Credit (State)

Prerequisite: Try-outs Grades 9-12

1 State Credit P.E.,local credits thereafter

Cheerleaders must be able to attend summer camp, summer practice and after-school practice. Additional fees are required. They also must attend all football and basketball games. A cheerleader is responsible for uniforms, shoes, and assigned clothes for summer camp.

Grades 10-12

Prerequisite: None TSI not required

PSYC 1300/EDUC 1300-A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned.

#### STUDENT LEADERSHIP

Prerequisite: None

This course provides an opportunity to study, practice, and develop group and individual leadership and organizational skills. These skills include, but are not limited to, decision-making skills, problem-solving techniques, communication skills, leadership roles, human relation skills, understanding the need for civic responsibility, working in the school store and recycling. Students who take this course will apply these skills in dealing with peers, school staff, administrators, and the community.

Grades 9-12

#### JOURNALISM

Prerequisite: None

Grades 10-12

Beginning course for students who like to write. The course teaches journalistic writing, lay out, and headline writing . This serves as a preparation for newspaper/ yearbook.

NEWSPAPER PRODUCTION 1-3		JRN 101-103
Prerequisite: Application & interview required	Grades 10-12	1 Credit each

The actual production of a periodic newspaper is accomplished in this course. Computer generated work and lay outs are completed in this class. This course is designed for students who like to write.

YEARBOOK PRODUCTION 1-3		JRN 201-203
Prerequisite: Journalism or Teacher recommendation	Grades10 –12	1 Credit each

This course is for students who wish to learn about magazine journalism by actually producing a yearbook, Students must complete a layout design and sell advertisements to the community.

## ACT or SAT PREP COURSE (online)

Prerequisite: None

Grade 10-12

1/2 Credit

This elective course will provide students with comprehensive preparation for the ACT or SAT exam.

LOCAL ELECTIVES



Local electives are not counted in GPA (a full list of courses not counting for GPA are listed on page 5). Local credits are not recognized on the recommended or distinguished graduation plans.

	V DE	LEASE	
EARL	I KE	LEAJE	

LOC 900, 901, 902

LOC 100

1 Local Credit

Prerequisite: Passed all portions of STAAR and Earned CCMR Grade 12 No Credit

Seniors must have earned 1 CCMR point to qualify for Early Release.

## STUDENT AIDE

Prerequisite: Application Required Grade 12

Seniors must apply for this through the counseling office. All students must be approved. A student may not be a student aide more than one period during senior year.

STUDENT COUNCIL		LOC 711
Prerequisite: Approval—from Sponsor	Grades 10-12	1 Local Credit

Student council members represent the Ball High student body through service projects held throughout the school year. Students are expected to represent the school by following school rules and promoting unity among the students. Leaders are elected from the membership. All executive board and class officers are required to take this course.

HISPANIC I	DANCE (BALLET FOLKLORICO DA	ANCE 1-4)	LOC 660
Prerequisite:	Application, Tryout, Instructor approval	Grades 9-12	1 Local Credit

This course is designed for students who are willing and prepared to perform for the community in a disciplined atmosphere. Students will be expected to dress and participate every day. Students will be graded on their ability to learn the steps of each dance as well as their knowledge of Latin American dance history and participation in class as well as outside performances. At least three choreography test grades are required each nine weeks. This class is limited to 30 students.

TORNETTE OFFICER		LOC 600
Prerequisite: Tryout	Grade 11-12	1 Local Credit

This course is designed to grow dancers in their leadership role as a Tornette officer. All Tornette social and dance officers are required to be enrolled in this course.

## CHEERLEADER Prerequisite: Try-outs

Grades 9-12

1 credit

Cheerleaders must be able to attend summer camp, summer practice and after-school practice. Additional fees are required. They also must attend all football and basketball games. A cheerleader is responsible for uniforms, shoes, and assigned clothes for summer camp.

Galveston ISD



# Career & Technical Education Handbook Ball High School

# Certifications, Articulated Credit and Dual Credit in the CTE Department

<u>Articulated Credit (AC)</u>—the CTE Department has Articulation Agreements with various junior colleges in this area. Articulated College Credit is college hours awarded to students who successfully meet the criteria required in the Articulation Agreement.

**Dual College Credit (DC)**—these college hours can be earned in some CTE classes where students are enrolled in a college course that also offers high school credit. This tuition, building fees and supply costs that can be paid by the student or in some cases, by the CTE Department. Teachers, who offer this type of class, give the details and handle the arrangements required by the college.

<u>Continuing Education Credit (CE)</u>-these non-credited college courses can be earned through enrollment in college classes that lead to industry certification.

<u>Certifications</u>—many certificates are offered to students in CTE classes. All students enrolled in shop classes must pass safety courses before being allowed to work in a lab. Certificates are awarded to students who pass these courses. Students in most classes earn certificates that can be presented when applying for jobs. Teachers discuss the various certificate options during the orientation for each class where these are offered.

**IAE 200** 

1 Credit

## **Business & Industry Endorsement**

## Transportation, Distribution, and Logistics Career Cluster

9th Grade: Automotive Basics (Level 2)	
1 credit *ASE Certifications	
10th Grade: Automotive Technology 1 (Level 3)	
2 credits *ASE Certifications	
11th Grade: Automotive Technology 2 (Level 4)	
2 credits *ASE Certifications	
12th Grade:	
Diesel Equipment Technology 1 CE (Level 2)	
Diesel Technology 2 CE (Level 3)	
4 credits	

## AUTOMOTIVE BASICS

Prerequisite: None

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

Grades 9-12

AUTOMOTIVE TECHNOLOGY 1		IAE 210
Prerequisite: Automotive Basics	Grades 10-12	2 Credits

Automotive services include knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

AUTOMOTIVE TECHNOLOGY 2		IAE 220
Prerequisite: Automotive Technology 1	Grades 11-12	2 Credits

Services include advanced knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. Students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices. Students who excel in this course will have the opportunity to earn multiple automotive certifications and will also have the opportunity for placement at a General Motors dealership auto shop or employment.

<b>DIESEL EQUIPMENT TECHNOLOGY</b>	1 CE (FALL)	IAE 230
Prerequisite: Automotive Technology 2	Grades 12	2 Credits

AUMT 1041 – Theory of automotive climate control systems. Emphasis on the refrigeration cycle and diagnosis of system malfunctions. Includes manual and electronic climate control systems.

DEMR 1010 – An introduction to testing and repairing diesel engines including related systems and specialized tools.

DIESEL EQUIPMENT TECHNOLOG	Y 2 CE (SPRING)	IAE 240
Prerequisite: Automotive Technology 2	Grades 12	2 Credits

AUMT 1045 – diagnosis and repair of manual/electronic climate control systems. Includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.

DEMR 2012 – Continuation of Diesel Equipment Technology I. Coverage of testing and repairing diesel engines including related systems and specialized tools.

## **Public Service Endorsement**

## Science, Technology, Engineering, & Mathematics (STEM) Career Cluster

9th Grade: Principle of Biomedical Science (PLTW) (Level 1)		
1 credit		
10th Grade: Human Body Systems (PLTW) (Level 2)		
1 credit		
11th Grade: Medical Interventions (PLTW) (Level 3)		
1 credit		
11th—12th Grade: Quality Assurance of Biosciences (Level 3)		
1 credit * UTMB Research Opportunity		
12th Grade: Biomedical Innovation (PLTW) (Level 4)		
1 credit		

## PRINCIPLES OF BIOMEDICAL SCIENCES (PLTW-PBS)

#### BIO 100 1 Credit

Prerequisite: None

Grades 9-10

The course provides an introduction and serves as an overview to the biomedical sciences through exciting "hands on" projects and problems. Student work involves the study of human medicine, research processes and an introduction to bio-informatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle cell disease, hypercholesterolemia, and infectious diseases.

HUMAN BODY SYSTEMS (PLTW-HBS)		BIO 110
Prereguisite: PBS	Grades 10 -11	1 Credit

Students examine the interactions of body systems as they explore identity, communication, power, movement, protection and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries

MEDICAL INTERVENTIONS	(PLTW-MI)	BIO 120
Prerequisites: HBS	Grades 11-12	1 Credit
Students investigate the variety of interventions involved in the prevention, diagnosis, and		

Students investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Through these scenarios students will be exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions; reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions will be showcased across the generations of the family and will provide a look at the past, present, and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future.

#### BIOMEDICAL INNOVATIONS (PLTW)

Prerequisite: MI

Grades 11-12

Students will be asked to apply what they have learned in the previous three courses to solve unique problems in science, medicine, and healthcare. Students will work systematically through required problems before completing optional directed problems or independent work.

Each problem is staged as a mission – a unique set of tasks to work through to achieve their desired objective. Students are presented with a Mission File – a case brief, a list of completion tasks, links to available resources, as well as a reflection section. Working through the missions not only exposes students to current issues in biomedical science, but it also provides skills-based instruction in research and experimentation – tools students will use to design innovative solutions to real-world problems. Students will use what they learn in these missions as they develop and implement their independent project at the end of the year.

#### QUALITY ASSURANCE FOR BIOSCIENCES

**BIO 140** 

Prerequisite: Chemistry and completion of at least one course within Biomedical pathway \*This is a research-based opportunity at UTMB, 4 hrs per wk Grades: 11-12 1 Credit

This is a research-based opportunity at UTMB, 4 Hours a week Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply and transfer their knowledge and skills in a variety of settings.

1	aradit	*NCCEP	Core	Certification	
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**Business & Industry Endorsement** 

Architecture and Construction Career Cluster

10th Grade: Construction Technology 1 (Level 2)

2 credits

11th Grade: Construction Technology 2 CE (Level 3)

2 credits \*Occupational Skills Award-Electrical

12th Grade: Practicum in Construction Technology CE (Level 4) 2 credits \*Occupational Skills Award-HVAC + Refrigerant Handling

(EPA 608) Certification

PRINCIPLES OF CONSTRUCTION	
Prerequisite: None	Grades 9-12

Prerequisite: None

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. For safety and liability considerations, limiting course enrollment to 15 students is recommended. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

CONSTRUCTION TECHNOLOGY 1		IAE 810
Prerequisite: Principles of Construction	Grades 10-12	2 Credits

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

CONSTRUCTION TECHNOLOGY 2 CE		IAE 820
Prerequisite: Construction Technology	Grades 11-12	2 Credits

Galveston College's Electrical/Electronics Technology program is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities. Training will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, National Electric Code and other subjects as local needs require.

(ELPT 1021/ELPT 1011 & ELPT 1025/CETT 1002/ELPT 1045 & OSHT 1003 & BUSG 1012)

#### **IAE 800** 1 Credit

PRACTICUM IN CONSTRUCTION	<b>FECHNOLOGY</b>	CE I	AE 830
Prerequisite: Construction Technology 2	Grades	12 2	2 Credits

The Heating, Ventilation, Air Conditioning and Refrigeration Technology, or HVAC/R program, at Galveston College, is designed to provide a combination of classroom theory, simulated troubleshooting, and hands-on training on the same equipment used by business and industry. Galveston College's HVAC/R program uses the ESCO Group for examinations and certifications. Students will have the opportunity to obtain their EPA license, as well as credentialing that will allow them to demonstrate competence in the vital skills needed for entry-level employment into the HVAC industry. (HART 1010/HART 1007 & HART 1001/HART 1003 & OSHT 1003 & BUSG 1012)

Program of Study: Cosmetology and Personal Care Services

## **Public Service Endorsement**

## Human Services Career Cluster

9th Grade: Business Information Management (Level 1)

1 credit \*Microsoft Certifications

10th Grade: Entrepreneurship (Level 2)

1 credit \*Entrepreneurship and Small Business

11th Grade: Introduction to Cosmetology DC (Level 2)

and Cosmetology 1 + Lab DC (Level 3)

4 credits

12th Grade: Cosmetology 2 DC (Level 4) and Esthetics DC (Level 2)

4 credits \*Cosmetology Operator License

#### **BUSINESS INFORMATION MANAGEMENT (BIM)** Grades 9-12

Prereguisite: None

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet,

formulate a database, and make an electronic presentation using appropriate software. ENTREPRENEURSHIP **IAE 410** 

Prerequisite: None

Grades 10-12

Students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity. preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired. and the notential for profit

and the potential for profit		
INTRO TO COSMETOLOGY	& COSMETOLOGY 1 +LAB DC	IAE 900/910
Prerequisite: Entrepreneurship	Grades 11	4 Credits

CSME 1501 - An overview of the skills and knowledge necessary for the field of cosmetology.

CSME 1410 - Introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning and finishing techniques.

CSME 1354 - Introduction to hair design. Topics include the theory and applications of wet styling, thermal hair styling, and finishing techniques.

CSME 1543 - Presentation of the theory and practice of nail services. Topics include terminology, application, and workplace competencies related to nail services.

COSMETOLOGY 2 & ESTHETICS	C
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Grades 12

4 Credits

Prerequisite: Cosmetology 1

CSME 1453 - Presentation of the theory and practice of chemical reformation including terminology, application, and workplace competencies.

CSME 2401 - Presentation of the theory, practice, and chemistry of hair color. Topics include terminology, application, and workplace competencies related to hair color. CSME 1547 - In-depth coverage of the theory and practice of skin care, facials, and cosmetics

CSME 2541 - Preparation for the state licensing examination.

IAE 920/930

**IAE 400** 1 Credit

1 Credit

**IAE 640** 

## **Business & Industry Endorsement**

## Hospitality & Tourism Career Cluster

9th Grade: Principles of Hospitality and Tourism AC (Level 1)

1 credit \*ServeSafe Handler Certification

10th Grade: Introduction to Culinary Arts DC (Level 1)

1 credit \*ServeSafe Manager Certification

11th Grade: Culinary Arts DC (Level 2)

2 credits

12th Grade: Advanced Culinary Arts DC (Level 3)

2 credits

PRINCIPLES OF HOSPITALIT	Y & TOURISM AC	IAE 600
Prerequisites: None	Grades 9-10	1 Credit

HAMG 1321 - An exploration of the elements and career opportunities within the multiple segments of the hospitality industry.

#### INTRODUCTION TO CULINARY ARTS DC

Prerequisites: Principles of Hospitality & Tourism Grades 10-11 1 Credit

IFWA 1217 - Skill development in basic mathematical operations and study of their applications in the food service industry. Topics include percentages, weights and measures, ratio and proportion, weights and measures conversions, determination of portion costs for menu items and complete menus, portion control, and the increase and decrease of standard recipes.

CHEF 1205 - A study of personal cleanliness; sanitary practices in food preparation, causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards.

CULINARY ARTS DC		IAE 650
Prerequisites: Introduction to Culinary Arts	Grades 11-12	2 Credits

CHEF 1301 - A study of the fundamental principles of food preparation and cookery to include brigade system, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism.

CHEF 2302 - Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods.

## **Program of Study: Culinary Arts**

#### ADVANCED CULINARY ARTS DC

Prerequisites: Culinary Arts

Grades 11-12

2 Credits

CHEF 1302 – Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style. Modify recipes and substitute ingredients to reduce calories, sugar, fat, and sodium; create recipes using healthy techniques; identify common food allergies and special dietary needs; relate nutritional guidelines to diets and recipe production.

PSTR 1301 - Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products.

FOOD SCIENCE (suggested 3rd o	or 4th Science)	SCI 900
Prerequisites: Chemistry and at least on	ne credit from a level 2 c	ourse or higher in the
Hospitality & Tourism Career Cluster	Grades 11- 12	1 Credit

In Food Science, students examine the nature and properties of foods, food microbiology, and the principles of science in food production, processing, preparation, and preservation; use scientific methods to conduct laboratory and field investigations; and make informed decisions using critical thinking and scientific problem solving. This course provides students a foundation for further study that leads to occupations in food and beverage services; the health sciences; agriculture, food, and natural resources; and human services. <u>This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.</u>

## Program of Study: Cybersecurity

## **Business & Industry Endorsement**

## **Information Technology Career Cluster**

9th Grade: AP Computer Science Principles (Level 2)

1 credit

10th Grade: AP Computer Science A (Level 3)

2 credits (1 credit for MATH and 1 credit for LOTE)

\*Oracle Certified Associate Java SE 8 Programmer

11th Grade: Networking + Lab DC (Level 3)

2 credits \*CompTIA Networking+

12th Grade: Cybersecurity DC (Practicum in STEM) (Level 4)

Grades 9-12

2 credits \*CompTIA A+ Certification

## COMPUTER SCIENCE PRNCIPLES AP

Prereguisite: Algebra 1

Students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. This course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.

## COMPUTER SCIENCE A AP

Prerequisite: AP Computer Science Principles Grades 10-12

Students are introduced to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

#### NETWORKING DC

Prerequisite: AP Comp Sci Prin or AP Comp Sci A 2 Credits ITSC 1425 - Current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting.

ITNW 1425 - Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

CYBERSECURITY DC		STM 410
Prerequisite: Networking DC	Grades 12	2 Credits

ITSC 1405 – Introduction to personal computer operating systems including installation, configuration, file management, memory and storage.

ITMT 1457 - A study of administrative tasks needed to maintain a Windows Server operating system including user and group management, network access and data security. Topics include how to implement, configure and manage Group Policy infrastructure, Group Policy objects (GPOs) using links, security groups, WMI filters, loopback processing, preference targeting and troubleshooting policy application.

#### **STM 505**

**STM 515** 

2 Credits

STM 400

Grades 11-12

## 1 Credit

## **Business & Industry Endorsement**

## Arts, A/V Technology & Communications Career Cluster

9th Grade: Principles of Arts, A/V Technology & Communications (Level 1) 1 credit \*Adobe Certified Professional in Photoshop

10th Grade: Audio/Visual Production 1 Projected DC 2024-2025 (Level 2)

1 credit

11th Grade: Audio/Visual Production 2 + Lab (Level 3)

2 credits

12th Grade: Practicum in Audio/Visual Production (Level 4)

2 credits

PRINCIPLES OF ARTS, AU	JDIO/VIDEO TECHNOLOGY	MDT 500
Prerequisite: none	Grades 9-12	1 Credit

Prerequisite: none

This course is for the student to understand arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

AUDIO/VIDEO PRODUCTION	1 PROJECTED DC 2024-2025	MDT 610
Prerequisite: Principles of A/V	Grade 9-12	1 Credit

ARTC 1302 - Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.

IMED 1301 - Theories, elements, and hardware/software components of digital media. Emphasis on conceptualizing and producing digital media presentations.

AUDIO/VIDEO PRODUCTION 2 + L	AB	MDT 620
Prerequisite: Audio/Video Production	Grade 10-12	2 Credits

Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post production products. This course may be implemented in an audio format or a format with both audio and video

PRACTICUM IN AUDIO/VIDEO PRODUCTI	MDT 630	
Prerequisite: Audio/Video Production 2 with Lab	Grade 11-12	2 Credits

Careers in audio/video production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production II + Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video products in a professional environment. This course may be implemented in an advanced audio/video format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

## **STEM Endorsement**

## Science, Technology, Engineering, & Mathematics (STEM) Career Cluster

9th Grade: Introduction to Engineering (PLTW) (Level 1)

1 credit \*Autodesk Associate (Certified User) Fusion 360

10th Grade: Principles of Engineering (PLTW) (Level 3)

1 credit

11th Grade: Engineering Design and Presentation 1 (Level 3) 1 credit

12th Grade: Engineering Design and Development (PLTW) (Level 3)

1 credit

INTRODUCTION TO ENGINEERING (PLTW-IED)		STM 110
Prerequisite: None	Grades 9-12	1 Credit

This course provides students with opportunities to be creative and to apply decisionmaking and problem-solving skills to design problems. Students use powerful computer hardware and software (Inventor) to develop 3-D models or solid renderings of objects. Using a Computer Aided Design System, students learn the product design process through creating, analyzing, rendering and producing a model. Students will learn elementary engineering concepts and will explore career opportunities in design engineering as they develop portfolios to display and present their designs.

PRINCIPLES OF ENGINEERING	i (PLTW-POE)	STM 120
Prerequisite: IED	Grades 10-12	1 Credit

This course provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple-software applications to prepare and present course assignments.

<b>ENGINEERING DESIGN A</b>	ND PRESENTATION 1	STM 140
Prerequisite: POE	Grades 11-12	1 Credit

Students enrolled in Engineering Design and Presentation I will demonstrate knowledge and skills of the design process as it applies to engineering fields and project management using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students will explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

## **Program of Study: Engineering Foundations**

ENGINEERING DESIGN AND DEVELOPME	NT (PLTW)	STM 160
Prerequisite: Engineering Design & Presentation	Grades 12	1 Credit

Engineering Design and Development (EDD) is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process using the knowledge and skills they developed in previous courses. EDD is appropriate for 11th and 12th-grade students. Students will perform research to select, define, and justify a problem. After carefully defining the design requirements and creating multiple solution approaches, teams of students select an approach, create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. This course prepares students for college, a career, or the military by helping them become better problem-solvers. Students learn how to manage projects and further develop their transferable skills, such as communication and ethical reasoning.

69

## **Business & Industry Endorsement**

## **Business, Marketing & Finance Career Cluster**

## BUSINESS INFORMATION MANAGEMENT (BIM)

Prerequisite: None

Grades 9-12

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

#### ENTREPRENEURSHIP Prereguisite: None

Grades 9-12

In Entrepreneurship, students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

ENTREPRENEURSHIP 2		IAE 420
Prerequisite: Entrepreneurship 1	Grade 11-12	1 Credit

The purpose of the course is to prepare students with the knowledge and skills needed to become a successful entrepreneur within an innovative marketplace. The goal and outcome of the course is for students to have their business launched by the end of the course or have the tools necessary to launch and operate their business. Students are encouraged to work in close cooperation with local industry leaders, community members, and educators to develop ideas and objectives, complete a business model canvas, pitch to potential investors, register with governmental agencies, develop their brand identity, and participate in local chamber of commerce meetings and events. The recommended participants are students in the CTE Entrepreneurship program of study, students in grades 11-12, and those interested in starting a business.

9th Grade: Business Information Management (Level 1	1)
1 credit *Microsoft Certifications	
10th Grade: Entrepreneurship (Level 2)	
1 credit *Entrepreneurship & Small Business Certificati	on
11th Grade: Entrepreneurship 2 (Level 3)	
1 credit	
12th Grade: Practicum in Entrepreneurship (Level 4)	
2 credits	
2 credits	

**IAE 410** 

IAE 400

Credit

1 Credit

## Program of Study: Entrepreneurship

PRACTICUM OF ENTREPREM	IEURSHIP	IAE 430
Prerequisite: Entrepreneurship	Grade 12	2 Credits

The Practicum in Entrepreneurship provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships as a real or simulated business owner versus the experience one would have as an employee. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. It is recommended that students are paired with local business owners or employers in their specific industry program of study.

Program of Study: Commercial Photography

## **Business & Industry Endorsement**

## Arts, A/V Technology & Communications Career Cluster

9th Grade: Principles of Arts, A/V Technology & Communications (Level 1)

1 credit \*Adobe Certified Professional in Photoshop

10th Grade: Commercial Photography 1 (Level 2)

1 credit

11th Grade: Commercial Photography 2 (Level 3)

1 credits

12th Grade: Practicum in Commercial Photography (Level 4)

2 credits \*Adobe Premier Pro

PRINCIPLES OF ARTS, AUD	IO/VIDEO TECHNOLOGY	MDT 500
Prerequisite: none	Grades 9-12	1 Credit

Prerequisite: none

This course is for the student to understand arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

**COMMERCIAL PHOTOGRAPHY 1** 

Prerequisite: Principles of Audio/Video Production Grade 10-12 1 Credit

Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

COMMERCIAL PHOTOGRAPHY 2		MDT 110
Prerequisite: Commercial Photography 1	Grade 10 -12	1 Credit

Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional guality photographs.

PRACTICUM IN COMMERCIAL PHOTO	GRAPHY	MDT 120
Prerequisite: Commercial Photography 2	Grade 11-12	2 Credits

Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts. Audio/Video Technology. and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

1 Credit

**MDT 100** 

**Program of Study: Graphic Design & Illustration** 

## **Business & Industry Endorsement**

## Arts, A/V Technology & Communications Career Cluster

9th Grade: Principles of Arts, A/V Technology & Communications (Level 1)

1 credit \*Adobe Certified Professional in Photoshop

10th Grade: Graphic Design and Illustration 1 (Level 2)

1 credit

11th Grade: Graphic Design and Illustration 2 (Level 3)

1 credit \*Adobe Certified Professional in Illustrator

12th Grade: Practicum in Graphic Design and Illustration (Level 4)

2 credits

## PRINCIPLES OF ARTS, AUDIO/VIDEO TECHNOLOGY

Prereguisite: none

Grades 9-12

**MDT 500** 1 Credit

This course is for the student to understand arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

## **GRAPHIC DESIGN & ILLUSTRATION 1**

**MDT 515** Prerequisite: Principles of Audio/Video Production Grades 9-12 1 Credit

Students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. Students will use personal information management, email, internet, writing and publishing, presentation, and spreadsheet or database applications for art and design projects.

<b>GRAPHIC DESIGN &amp; ILLUSTRATION 2</b>		MDT 520
Prerequisite: Graphic Design & Illustration 1	Grades 10-12	1 Credit

Students will use the enhancement of the Adobe Creative Suite software, which includes Photoshop, InDesign and Illustrator to create advanced graphic documents. Advanced style and techniques will be used throughout the layout and design process. The design process will be explored further, and students will be given more challenging graphic tasks and assignments, which will include logo design. Activities call for students to apply problem-solving methodology to analyze and formulate real world solutions. Career options will be explored in the fields of Marketing. Advertising. and Graphic Design.

PRACTICUM IN GRAPHIC DESIGN & ILL	USTRATION	MDT 525
Prerequisite: Graphic Design and Illustration 2	Grades 12	2 Credits

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

### Program of Study: Health Informatics (Healthcare Administration)

# **Public Service Endorsement**

#### Health Science Career Cluster

9th Grade: Principles of Health Science (Level 1)

1 credit

10th Grade: Medical Terminology DC (Level 2)

1 credit

11th Grade: Medical Intervention Evaluation and Research DC (Level 2)

1 credit

12th Grade: Healthcare Administration and Management DC (Level 3)

1 credit \*Medical Coding and Billing Specialist

#### PRINCIPLES OF HEALTH SCIENCE Grades 9-12

Prereguisite: None

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

MEDICAL TERMINOLOGY DC		BIO 310
Prerequisite: Principles of Health Science	Grades 10 -12	1 Credit

HITT 1305 - Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures.

HITT 1353 – Concepts of privacy, security, confidentiality, ethics, healthcare legislation, and regulations relating to the maintenance and use of health information.

MEDICAL INTERVENTION EVALU	ATION AND RESEARCH DC	<b>BIO 320</b>
Prerequisite: Medical Terminology DC	Grades 11 -12	1 Credit

HITT 2330 – Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages.

HITT 1341 – Basic coding rules, conventions, and guidelines using clinical classification systems.

#### HEALTHCARE ADMINISTRATION AND MANAGEMENT DC **BIO 330** Prerequisite: Medical Intervention Evaluation and Research DC Grades 12 1 Credit

POFM 1327 – Survey of medical insurance including the life cycle of various claim forms, terminology, litigation, patient relations, and ethical issues.

HITT 1353 – Concepts of privacy, security, confidentiality, ethics, healthcare legislation, and regulations relating to the maintenance and use of health information.

**BIO 200** 

1 Credit

#### Program of Study: Health Informatics (Healthcare Administration

<b>ANATOMY &amp; PHYSIOLOGY</b>	(suggested 3rd or 4th Science)	SCI 501
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit

In this course, students will study the human body. Students will learn about the twelve systems of the body and how they all work together. These twelve systems are: integumentary, circulatory, respiratory, muscular, skeletal, nervous, digestive, excretory, reproductive, endocrine, immune, and lymphatic. Students will explore these systems by conducting laboratory investigations with dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

ANATOMY & PHYSIOLOGY DC	
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and selected practical applications.

SCI 505

BIOL 2401-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The first of a twosemester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the integumentary, skeletal, muscular and nervous systems.

BIOL 2402-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The second of a two -semester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the endocrine, circulatory, respiratory, digestive, excretory and reproductive systems.

MEDICAL MICROBIOLOGY	(suggested 3rd or 4th Science)	SCI 830
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit
man and the environment. Top	microbiology and the impact these orga ics include the various groups of microo nicrobial pathogenicity, infectious disease	organisms, their

PATHOPHYSIOLOGY (suggested 4th or	r 5th Science)	SCI 840
Prerequisite: Chemistry and at least one credit Health Science Career Cluster or the Biomedica		
Physiology)	Grades 11-12	1 Credit
This course focuses on the changes in collular	and systematic physiology that c	occur in

This course focuses on the changes in cellular and systematic physiology that occur in prevalent or important medical conditions like osteoporosis and cancer. At the cellular level, students will cover the responses to tissue injury, abnormal cell growth, and the immune system. Students will investigate the physiological basis of problems associated with most of the major organ systems. The course will be laboratory based including dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

# **Program of Study: Healthcare Therapeutic (EMT)**

# **Public Service Endorsement**

#### Health Science Career Cluster

9th Grade: Principles of Health Science (Level 1)

1 credit

10th Grade: Medical Terminology DC (Level 2)

1 credit

11th Grade: Health Science Clinical CE (Level 3)

2 credits \*CPR/Certified Nurse Aide (CAN)

12th Grade: EMT (Practicum in Health Science) DC & CE (Level 3)

2 credits \*Emergency Medical Technician-Basic

#### PRINCIPLES OF HEALTH SCIENCE Grades 9-12

Prerequisite: None

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

#### MEDICAL TERMINOLOGY DC

Prerequisite: Principles of Health Science Grades 10 - 12

HITT 1305 – Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures.

HITT 1353 – Concepts of privacy, security, confidentiality, ethics, healthcare legislation, and regulations relating to the maintenance and use of health information.

#### HEALTH SCIENCE CLINCIAL

Prerequisites: Medical Terminology DC + Complete Galveston College Health Requirements/Background Check Grades 11-12 2 Credits

Corequisite: Health Science Theory. This course must be taken concurrently with Health Science Theory and may not be taken as a stand-alone course.

The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

NURA 1001 – Train to become a Certified Nurse Aid (CNA) in a long-term care facility. Course topics include residents' rights, communication, safety observation, reporting and basic comfort and care. Clinical hours are scheduled at various times by the instructor and may need to be simulated due to COVID-19 restrictions.

NURA 2005 – Clinical Lab for NURA 1001

**BIO 200** 1 Credit

**BIO 210** 

1 Credit

**BIO 220** 

#### Program of Study: Healthcare Therapeutic (EMT) EMT (PRACTICUM IN HEALTH SCIENCE) DC & CE BIO 250

Prerequisites: Health Science Clinical + Complete Galveston College Health Requirements/Background Check Grades 12

2 Credits

SCI 505

1 Credit

EMSP 1501 – Preparation for certification as an Emergency Medical Technician (EMT) -Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an emergency service or other specialized services.

EMSP 1160 – A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts.

EMSP 1001 – Preparation for certification as an Emergency Medical Technician (EMT).

EMSP 1091 - Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

ANATOMY & PHYSIOLOGY	(suggested 3rd or 4th Science)	SCI 501
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit

In this course, students will study the human body. Students will learn about the twelve systems of the body and how they all work together. These twelve systems are: integumentary, circulatory, respiratory, muscular, skeletal, nervous, digestive, excretory, reproductive, endocrine, immune, and lymphatic. Students will explore these systems by conducting laboratory investigations with dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

#### ANATOMY & PHYSIOLOGY DC

Prerequisite: BIOL 1406 DC

Grades 10-12

BIOL 2401-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The first of a twosemester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the integumentary, skeletal, muscular and nervous systems.

BIOL 2402-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The second of a two -semester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the endocrine, circulatory, respiratory, digestive, excretory and reproductive systems.

MEDICAL MICROBIOLOGY (s	suggested 3rd or 4th Science)	SCI 830
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit
The Medical Mierebielers, equires is	a designed to evaluate the microbial world	d atuduina

The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug-resistant organisms, and emerging diseases.

PATHOPHYSIOLOGY (suggested 4th or 5th Science)	SCI 840	
Prerequisite: Chemistry and at least one credit from a level 2 course withi	n either the	
Health Science Career Cluster or the Biomedical pathway (preferably, Anatomy and		
Physiology) Grades 11-12	1 Credit	

This course focuses on the changes in cellular and systematic physiology that occur in prevalent or important medical conditions like osteoporosis and cancer. At the cellular level, students will cover the responses to tissue injury, abnormal cell growth, and the immune system. Students will investigate the physiological basis of problems associated with most of the major organ systems. The course will be laboratory based including dissection and microscopic histology.

77

### Program of Study: Healthcare Therapeutic (PCT)

### **Public Service Endorsement**

#### Health Science Career Cluster

9th Grade: Principles of Health Science (Level 1)
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1 credit

10th Grade: Medical Terminology DC (Level 2)

1 credit

11th Grade: Health Science Clinical CE (Level 3)

2 credits \*CPR/Certified Nurse Aide (CAN)

12th Grade: PCT (Practicum in Health Science) CE (Level 4)

2 credits \*Patient Care Technician (PCT)/Phlebotomy Technician

#### PRINCIPLES OF HEALTH SCIENCE Grades 9-12

Prereguisite: None

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

#### MEDICAL TERMINOLOGY DC

Prerequisite: Principles of Health Science Grades 10 -11

HITT 1305 – Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures.

HITT 1353 – Concepts of privacy, security, confidentiality, ethics, healthcare legislation, and regulations relating to the maintenance and use of health information.

#### HEALTH SCIENCE CLINCIAL CE

Prerequisites: Medical Terminology DC + Complete Galveston College Health Requirements/Background Check Grades 11-12 2 Credits

Corequisite: Health Science Theory. This course must be taken concurrently with Health Science Theory and may not be taken as a stand-alone course.

The Health Science Clinical course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

NURA 1001 – Train to become a Certified Nurse Aid (CNA) in a long-term care facility. Course topics include residents' rights, communication, safety observation, reporting and basic comfort and care. Clinical hours are scheduled at various times by the instructor and may need to be simulated due to COVID-19 restrictions.

NURA 2005 – Clinical Lab for NURA 1001

# **BIO 200**

1 Credit

**BIO 210** 

1 Credit

**BIO 220** 

#### Program of Study: Healthcare Therapeutic (PCT) PCT (PRACTICUM IN HEALTH SCIENCE) CE BIO 240

Prerequisites: Health Science Clinical + Complete Galveston College Health Requirements/Background Check Grades 12

2 Credits

SCI 505

PLAB 1023 – Get started as an entry-level phlebotomist and prepare for your certification exam with the National Healthcare Association (NHA). Study the skills used in the performance of a variety of blood collection methods. Clinical hours are scheduled at various times by the instructor and may need to be simulated due to COVID-19 restrictions.

NUPC 1020 – This course is a capstone course that encompasses and reviews the skills needed for aides, EKG techs, and phlebotomists. Students will have the opportunity to earn the credentials needed to work as a Patient care Technician (PCT) in most major medical facilities.

ANATOMY & PHYSIOLOGY	(suggested 3rd or 4th Science)	SCI 501
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit

In this course, students will study the human body. Students will learn about the twelve systems of the body and how they all work together. These twelve systems are: integumentary, circulatory, respiratory, muscular, skeletal, nervous, digestive, excretory, reproductive, endocrine, immune, and lymphatic. Students will explore these systems by conducting laboratory investigations with dissection and microscopic histology. This course satisfies a high school science graduation requirement and students shall be awarded one credit for successful completion of this course.

#### ANATOMY & PHYSIOLOGY DC

Prerequisite: BIOL 1406 DC	Grades 10-12	1 Credit
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BIOL 2401-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The first of a twosemester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the integumentary, skeletal, muscular and nervous systems.

BIOL 2402-Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. The second of a twosemester course sequence introducing the normal structure and function of the human body, its cells, tissues, organs and organ systems. Major body systems to be studied in this course include the endocrine, circulatory, respiratory, digestive, excretory and reproductive systems.

MEDICAL MICROBIOLOGY	(suggested 3rd or 4th Science)	SCI 830
Prerequisite: IPC or Chemistry	Grades 10-12	1 Credit

The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug-resistant organisms, and emerging diseases.

PATHOPHYSIOLOGY (suggested 4th or 5th Science)	SCI 840
Prerequisite: Chemistry and at least one credit from a level 2 course within	either the
Health Science Career Cluster or the Biomedical pathway (preferably, Anat	omy and
Physiology) Grades 11-12	1 Credit

This course focuses on the changes in cellular and systematic physiology that occur in prevalent or important medical conditions like osteoporosis and cancer. At the cellular level, students will cover the responses to tissue injury, abnormal cell growth, and the immune system. Students will investigate the physiological basis of problems associated with most of the major organ systems. The course will be laboratory based including dissection and microscopic histology.

79

Program of Study: Lodging & Resort Management

# **Business & Industry Endorsement**

#### Hospitality & Tourism Career Cluster

9th Grade: Principles of Hospitality and Tourism AC (Level 1) 1 credit \*ServeSafe Handler Certification

10th Grade: Introduction to Event and Meeting Planning DC (Level 3)

1 credit

11th Grade: Hospitality Services DC (Level 3)

2 credits

12th Grade: Practicum in Hospitality Services DC (Level 4)

2 credits \*Hospitality & Tourism Management Professional

PRINCIPLES OF HOSP	ITALITY & TOURISM AC
Prerequisites: None	Grades 9-12

Prerequisites: None

HAMG 1321 - An exploration of the elements and career opportunities within the multiple segments of the hospitality industry.

<b>INTRODUCTION TO EVENT &amp; MEETING PLAN</b>	INING DC	IAE 610
Prerequisites: Principles of Hospitality & Tourism AC	Grades 10-12	1 Credit

HAMG 1313 - Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operations.

HAMG 2330 - Analyze the economic impact of the conventions industry; describe and compare the various types of conventions, exhibitions, conferences, and the marketing tools used for pre-planning strategies; and assess requirements for food and beverage service, meeting room set-ups, and post-meeting evaluations.

HOSPITALITY SERVICES DC Prerequisites: Introduction to Event & Meeting Planning DC Grades 11-12

HAMG 1324 - Principles and procedures of human resource management in the hospitality industry.

HAMG 2188 - Principles and procedures of human resource management in the hospitality industry.

**IAE 600** 1 Credit

**IAE 620** 2 Credits

#### Program of Study: Lodging & Resort Management

#### PRACTICUM IN HOSPITALITY SERVICES DC **IAE 630** Grades 11-12

Prerequisites: Hospitality Services DC

1 Credit

HAMG 2305 - Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student applies specialized occupational theory, skills and concepts, including specialized materials, tools, equipment, procedures, regulations, law, and interactions within and among political, economic, environmental, social and legal systems associated with the industry. Students will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the hospitality industry.

HAMG 2189 - Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student applies specialized occupational theory, skills and concepts, including specialized materials, tools, equipment, procedures, regulations, law, and interactions within and among political, economic, environmental, social and legal systems associated with the industry. Students will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the hospitality industry.

**Program of Study: Maritime, Distribution & Logistics** 

## **Business & Industry Endorsement**

#### **Transportation, Distribution, and Logistics Career Cluster**

9th Grade: Principles of Distributio 1 credit	8
10th Grade: Concepts of Distribution 1 credit	8
11th Grade: Occupational Safety and Enviro 1 credit	
12th Grade: Practicum of Distribution 2 credits *Certified Logistic	ε

# PRINCIPLES OF DISTRIBUTION & LOGISTICS DC

Prerequisite: None

Grades 9-12

**IAE 300** 1 Credit

LMGT 1319 – A systems approach to managing activities associated with traffic, transportation, inventory management, warehousing, packaging, order processing, and materials handling.

IBUS 1341 - International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total coast approach, exchange fluctuations, customs procedures, and related topics.

<b>CONCEPTS OF DIST &amp; LOGISTICS</b>	TECH DC (PROJ 25-26)	IAE 310
Prerequisite: Principles of Distribution	Grades 10-12	1 Credit

LMGT 1321 – Introduces the concepts and principles of materials management to include inventory control and forecasting activities.

NAUT 1305 - Presentation of the maritime industry and ships used in the transportation of goods and services. Maritime nomenclature, and types, missions, and construction of vessels.

OCCUPATIONAL SAFETY AND ENVIRO	ECH DC (PROJ 26-27)	IAE 320
Prerequisite: Concepts of Distribution & Logistics	Grades 11-12	1 Credit

OSHT 1301 - An introduction to the basic concepts of safety and health.

NAUT 1255 – An in-depth coverage of the laws and regulations surrounding the maritime transportation industry, and how the industry responds and manages.

PRACTICUM OF DISTRIBUT	ION & LOGISTIC	S DC (PROJ 27-28)	IAE 330
Prerequisite: Occupational Safety	y & Enviro Tech	Grades 11-12	1 Credit

LMGT 1425 – Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just in time, and continuous replenishment.

NAUT 2310 – An introduction to vessel handling characteristics.

NAUT 1230 - A course for entry-level mariners to perform basic maintenance and minor repairs aboard vessels.

### **STEM Endorsement**

#### Science, Technology, Engineering, & Mathematics (STEM) Career Cluster

9th Grade: Introduction to Engineering (PLTW) (Level 1)	
1 credit	
*Autodesk Associate (Certified User) Fusion 360	
10th Grade: Aerospace Engineering (PLTW) -Rockets 1 (Level 3)	
1 credit	
11th Grade: Engineering Design and Problem Solving-Rockets 2 (Level 4)	
1 credit	
12th Grade: Practicum in Engineering—Rockets 3 (Level 4)	
TBD (added in future)	

INTRODUCTION TO ENGINEERING (PLTW-IED)		STM 110
Prerequisite: None	Grades 9-10	1 Credit

This course provides students with opportunities to be creative and to apply decisionmaking and problem-solving skills to design problems. Students use powerful computer hardware and software (Inventor) to develop 3-D models or solid renderings of objects. Using a Computer Aided Design System, students learn the product design process through creating, analyzing, rendering and producing a model. Students will learn elementary engineering concepts and will explore career opportunities in design engineering as they develop portfolios to display and present their designs.

<b>AEROSPACE ENGINEERING</b>	(PLTW-AE)-ROCKETS 1	STM 130
Prerequisite: IED	Grades 10-11	1 Credit

The major focus of this course is to expose students to the world of aeronautics, flight and engineering through the fields of aeronautics, aerospace engineering and related areas of study. Lessons engage students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, and systems engineering.

<b>ENGINEERING DESIGN A</b>	ND PROBLEM SOLVING-ROCKETS 2	STM 150
Prerequisite: AE	Grades 12	1 Credit

The Engineering Design and Problem Solving course is the creative process of solving problems by identifying needs and 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.

#### PRACTICUM IN ENGINEERING-ROCKETS 3

#### STM 170

Prerequisite: Engineering Desi & Problem Solving-Rockets 2 Grades 12 TBD

Developed at a later date.	NOT AVAILABLE FOR THE 2024-20	25 SCHOOL YEAR.
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Program of Study: Programming & Software Development

### **STEM Endorsement**

#### Science, Technology, Engineering, & Mathematics (STEM) Career Cluster

9th Grade: Computer Science 1 (Level 2) and/or AP Computer Science Principles (Level 2)

1 credit each

10th Grade: Computer Science 2 (Level 3)

1 credit and/or AP Computer Science A 2 credits (1 credit for MATH and 1 credit for LOTE)

\*Oracle Certified Associate Java SE 8 Programmer

11th Grade: Computer Science 3 (Level 4) 1 credit \*Certified Entry-Level Python Programmer and/or

12th Grade: Software Development (Practicum in STEM) (Level 4)

2 credits

Grades 9-12

#### COMPUTER SCIENCE 1

Prerequisites: none

This course is designed to 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 with various electronic communities to solve the problems presented throughout the course. This course teaches the foundations of computer science and basic programming in JavaScript, with an emphasis on helping students develop logical thinking and problem solving skills. The course is visual, dynamic, and interactive making it engaging for new coders and those interested in careers in the computer industry.

COMPUTER SCIENCE PRNCIPLES AP		STM 505
Prerequisite: Algebra 1	Grades 9-12	1 Credit

Students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. This course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.

COMPUTER SCIENCE 2		STM 320
Prerequisites: Computer Science 1 or AP Comp Sci Prin	Grades 10-12	1 Credit

This course 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

STM 310

1 Credit

#### Program of Study: Programming & Software Development

COMPUTER SCIENCE A AP			STM 515
Prerequisite: AP Computer Science Principle	es Preferred	Grades 10-12	2 Credits
In this course, students will learn to design a computer science to solve problems through grams. They will incorporate abstraction into knowledge. Students will also explain how creater systems, including the Internet, work, explor computing culture that is collaborative and e designated programming language. Teacher programming language(s) that is most appro- classroom.	the developm programs and omputing inno e their potentia thical. This co s have the flex	ent of algorithms a d use data to discov vations and compu al impacts, and con urse does not have kibility to choose a	nd pro- ver new ting tribute to a a
COMPUTER SCIENCE 3			STM 330
Prerequisites: Computer Science 2	Grades	s 11-12	1 Credit

This course utilizes tools and writing programs for acquiring, cleaning, analyzing, exploring, and visualizing data; making data driven inferences and decisions; and effectively communicating results. Learning data manipulation, data analysis with statistics and machine learning, data communication with information visualization, working with big data using scalable techniques.

SOFTWARE DEVELOPMENT(	PRACTICUM IN STEM	/)	STM 340
Prerequisite: Computer Science 3 of	r AP Comp Sci A 🤍	Grades 12	2 Credits

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

# **Program of Study: Robotics and Automation Technology**

# **Business & Industry Endorsement**

### Manufacturing Career Cluster

9th Grade: Robotics (Level 2)

1 credit

10th Grade: Robotics 2 (Level 3)

1 credit

11th Grade: Robotics 3 (Engineering Design & Presentation) (Level 3) 1 credit

12th Grade: Robotics 4 (Practicum in Manufacturing) (Level 4)

2 credits

ROBOTICS I Prerequisite: Preferred Fundamentals of Computer Science Grades 9-12 1 Credit

Students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.

#### **ROBOTICS 2**

Prerequisite: Robotics

Students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academics skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.

ROBUTICS 3 (ENGINEERING DESIGN & PRESE		51 WI 230
Prerequisite: Robotics II	Grades 11-12	1 Credit
Students enrolled in Engineering Design and Presentatio and skills of the design process as it applies to engineerin management using multiple software applications and too present working drawings, solid model renderings, and p implementation of the design process, students will trans component designs. Additionally, students will explore ca engineering, technology, and drafting and what is require employment in these areas.	ng fields and project ols necessary to proc rototypes. Through sfer advanced acader areer opportunities in	luce and nic skills to

#### ROBOTICS 4 (PRACTICUM IN MANUFACTURING)

DODOTICS & (ENCINEEDING DESIGN & DESCRITATION

Prerequisite: Robotics III

This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Students in this course are on the competitive robotics team through VEX and are obligated to compete in designated weekend events and travel to state, national and world championship events around Texas and the United States. extracting data, and basis of 3D.

STM 210

STM 220

TNA 000

Grades 10-12 1 Credit

> STM 240 2 Credits

Grades 12

### **Public Service Endorsement**

#### Teaching & Training Career Cluster

9th Grade: Principles of Education and Training (Level 1)

1 credit

10th Grade: Communication and Technology in Education (Level 2)

1 credit

11th Grade: Instructional Practices (Level 3)

2 credits \*CPR

12th Grade: BESTT (Practicum in Education) Projected DC 2024-2025 (Level 4)

2 credits \*Educational Aide 1 Certification & CPR

#### PRINCIPLES IN EDUCATION & TRAINING

Prerequisite: None

Grades 9-10

1 Credit

This course covers a variety of topics including learning processes, education theory, classroom management, child development and lesson planning. Students will research careers and topics in education including teacher training, interview processes and ethics in the workplace. Students will experience field-based teaching observation opportunities and create a portfolio that will serve as a foundation for future education courses.

COMMUNICATION AND TECHNOLOGY IN EDUCATION		IAE 510
Prerequisite: Principles in Education & Training	Grades 10-11	1 Credit

Communication and Technology in Education is an extended course of study designed to provide students with the fundamentals of planning, managing and training services needed to provide learning support services in K-12 classrooms. Students will develop knowledge and skills regarding the professional, ethical, and legal responsibilities in teaching related to educational technology; as well as, understand laws and pedagogical justifications regarding classroom technology use. This course provides an opportunity for students to participate in training related to Google for Education, Microsoft Office Fundamentals, Common Sense Media and Digital Citizenship as they relate to standards set by the International Society for Technology in Education (ISTE).

INSTRUCTIONAL PRACTICES		IAE 520
Prerequisite: Communication & Tech in Education	Grades 11-12	2 Credits

This course is a field-based internship in which students work under the joint direction of their course instructor and a mentor teacher on a GISD Child Care Facility, Early Childhood Center, Elementary, or Middle School campus. Students learn to plan and direct instruction, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, and other educational personnel.

<b>BESTT (PRACTICUM IN EDUCATIO</b>	N & TRAINING)	IAE 530
Prerequisites: Instructional Practices	Grades 12	2 Credits

This course is a field-based internship in which students work under the joint direction of their course instructor and a mentor teacher on a GISD Child Care Facility, Early Childhood Center, Elementary, or Middle School campus. Students learn to plan and direct instruction, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, and other educational personnel.

EDUC 1301 –An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields; provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations; provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms; course content is aligned and applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; includes a minimum of 16 contact hours of field experience in P-12 classrooms.

EDUC 2301 – An enriched integrated re-service course and content experience that provides an overview of schooling and classrooms from the perspective of language, gender, socioeconomic status, ethnic and academic diversity, and equity, with an emphasis on factors that facilitate learning.

88

# **Business & Industry Endorsement**

#### Manufacturing Career Cluster

9th Grade: Introduction to	Welding AC (Level 1)
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1 credit

10th Grade: Welding 1 DC (Level 2)

2 credits \*AWS Certifications

11th Grade: Welding 2 + Lab DC (Level 3)

33 credits \*AWS Certifications

12th Grade: Practicum in Welding (Manufacturing) (Level 4)

3 credits \*Additional AWS Certifications

Grades 9-10

INTRODUCTION TO	O WELDING AC

Prerequisites: none

WLDG 1313 - A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.

WLDG 1407 - Basic welding techniques using some of the following processes: Oxy-fuel welding (OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), and flux cored arc welding (FCAW).

WELDING 1 DC		IAE 110
Prerequisite: Introduction to Welding AC	Grades 10-11	2 Credits

WLDG 1428 – An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.

WLDG 1434 – An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs.

WELDING 2 + LAB DC		IAE 120
Prerequisites: Welding 1 DC	Grades 11-12	3 Credits

WLDG 2443 – Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open v-groove joints in all positions.

WLDG 1435 - An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes.

IAE 100

1 Credit

PRACTICUM IN WELDING (MAN	UFACTURING) DC	IAE 130
Prerequisites: Welding 2 + Lab DC	Grades 12	3 Credits

WLDG 2413 – Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process.

WLDG 1317 - A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

Students with disabilities are provided an individualized educational program with various opportunities to succeed. Annual meeting are held for students with disabilities and their parents in which an Individualized Educational Plan is developed and appropriate educational placement is determined. Students are then placed in classes in the least restrictive environment appropriate to meet their educational needs. Information regarding program planning is available from counselors and special education personnel on campus. Students with special needs should consult with their counselors as certain modifications may be appropriate for the tests listed in the previous section.

# ENGLISH

BASIC ENGLISH 1-4		ENG 105, 205, 305, 405
Prerequisite: ARD Committee Placement	Grade 9—12	1 Credit

The subject content of this course matches the grade level general education English curriculum as determined by an IEP. Topics include grammar, composition, vocabulary, reading comprehension, spelling, literature, and study skills,

APPLIED ENGLISH 1-4		APP 201-204
Prerequisite: ARD Committee Placement	Grade 9—12	1 Credit

Communications will assist students in developing skills in the areas of expressive, receptive, written and/or Symbolic representations of language. Attention is given to the ability to communicate effectively within the range of the student's abilities (direct or through assistive devices). Students will integrate language in order to understand oral, written and/or inquiries. Communication will be examined in terms of social appropriateness, environmental Cues and prompts, understanding generalizations in real life contexts, the responsibilities of independent living and participation in the community. The subject content of this course matches the grade level general education English curriculum as determined by an IEP.

**BASIC READING 1—3** 

Prerequisite: ARD Committee Placement

Designed to meet individual student reading levels as determined by an IEP

#### APPLIED READING 1—4

Prerequisite: ARD Committee Placement Grades 9-12

Designed to meet individual student reading levels as determined by an IEP

RDG 201, 202, 203

1 Credit

1 Credit

Grades 9-12

APP 601, 602, 603, 604

# MATHEMATICS

BASIC ALGEBRA 1		MTH 105
Prerequisite: ARD Committee Placement	Grades 9—12	1 Credit

Students learn mathematical content related to numerical operations and the place—value system, measurement, patterns and relations, probability and statistics, and problem solving. Investigative units will provide opportunities For applying mathematical understanding to real world situations. The subject content of this course matches the grade level general education Algebra curriculum as determined by an IEP.

APPLIED ALGEBRA		APP 401
Prerequisite: ARD Committee Placement	Grades 9—12	1 Credit

These courses are designed to reinforce math operations using a variety of practical, real life situations that facilitate the understanding of using mathematics in daily living exercises. Emphasis is on applying mathematics in the use of money, personal financial situations and solving home and work problems by using the concepts of fundamental mathematics. Students practice these strategies within the context of simulations designed to reinforce the understanding of basic operations, as well as the application of these operations within technological tools that enhance understanding and accuracy.

BASIC GEOMETRY		MTH 305
Prerequisite: ARD Committee Placement	Grades 9-12	1 Credit

Students practice problem– solving skills using basic operation, relations, functions, Measurement, and geometric and algebraic concepts. Manipulative or other electronic devices will be used to explore mathematical solutions to practical situations in daily living and employment. The subject content of this course matches the grade level General education Geometry curriculum as determined by an IEP.

APPLIED GEOMETRY		APP 402
Prerequisite: ARD Committee Placement	Grades 9—12	1 Credit

These courses are designed to reinforce math operations using a variety of practical, real life situations that facilitate the understanding of using mathematics in daily living exercises. Emphasis is on applying mathematics in the use of money, personal financial situations and solving home and work problems by using the concepts of fundamental mathematics. Students practice these strategies within the context of simulations designed to reinforce the understanding of basic operations, as well as the application of these operations within technological tools that enhance understanding and accuracy.

BASIC MATH MODLES		MTH 205
Prerequisite: ARD Committee Placement	Grades 11-12	1 Credit

This course is designed to practice the concepts of mathematics within the context of our economic system focusing on the student as consumer in today's society. Particular attention is given to the consumer roles of banking, purchasing goods and services, credit benefits, abuses and responsibilities, taxes, interest rates and charges, consumer awareness, and the variety of financial institutions that assist consumers in the understanding and application of meeting individual financial needs. The basic mathematical operations, especially relating to money, are reinforced in this course of study by emphasizing personal decision making and responsibility. Attention is given to technological advances relating to the accountability of money, money access, and personal budgeting. The subject content of this course matches the grade level general education Mathematic models with applications curriculum as determined by an IEP.

APPLIED MATH MODELS

Prerequisite: ARD Committee Placement

These courses are designed to reinforce math operations using a variety of practical, real life situations that facilitate the understanding of using mathematics in daily living exercises. Emphasis is on applying mathematics in the use of money, personal financial situations and solving home and work problems by using the concepts fundamental mathematics. Students practice these strategies within the context of simulations designed to reinforce the understanding of basic operations, as well as the application of these operations.

Grades 9-12

# SCIENCE

APPLIED BIOLOGY		APP 501
Prerequisite: ARD Committee Placement	Grade 9	1 Credit

The Applied Science course studies science—based concepts related specifically to independent daily living and employment. Attention is given to relating science to home and job practices that foster the understanding of student's roles and responsibilities in the care and operation of both facilities. Activities are "hands-on" experiences with an emphasis on cooperative learning strategies. Instruction is individualized according to the IEP.

<b>APPLIED INTEGRATED PHYSICS &amp;</b>	CHEMITRY	APP 502
Prerequisite: ARD Committee Placement	Grade 10	1 Credit

The Applied Science course studies science—based concepts related specifically to independent daily living and employment. Attention is given to relating science to home and job practices that foster the understanding of student's roles and responsibilities in the care and operation of both facilities. Activities are "hand-on" experiences with an emphasis on cooperative learning strategies. Instruction is individualized according to the IEP.

ADDI IED CHEMISTRY

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Prerequisite: ARD Committee Placement	Grades 10-12	1 Credit

The Applied science course studies science-based concepts related specifically to independent daily living and employment. Attention is given to relating science to home and job practices that foster the understanding of student's roles and responsibilities in the care and operation of both facilities. Activities are "hand-on" experiences with an emphasis on cooperative learning strategies. Instruction is individualized according to the IEP.

APPLIED AQUATIC SCIENCE

Prerequisite: ARD Committee Placement Grade 12

Instruction is individualized according to the IEP.

ADD 502

APP 504

1 Credit

# SOCIAL STUDIES

APPLIED WORLD GEOGRAPHY		APP 301
Prerequisite: ARD Committee Placement	Grade 9	1 Credit

Community Citizenship is a course that defines the rights, privileges and responsibilities of students within their school, community and employment settings. Concepts include voting, laws, and consequences of unlawful behavior, honesty, integrity, community volunteerism, rules and regulations. Students are instructed on how to be productive and safe in a variety of community situations, including employment. Students will become familiar with basic concepts of personal responsibility related to employability and being a productive, contributing member of a business, community and/or organization. Instruction is individualized according to the IEP.

APPLIED WORLD HISTORY		APP 302
Prerequisite: ARD Committee Placement	Grade 10	1 Credit

Community Citizenship is a course that defines the rights, privileges and responsibilities of students within their school, community and employment settings. Concepts include voting, laws, and consequences of unlawful behavior, honesty, integrity, community volunteerism, rules and regulations. Students are instructed on how to be productive and safe in a variety of community situations, including employment. Students will become familiar with the basic concepts of personal responsibility related to employability and being a productive, contributing member of a business, community and/or organization. Instruction is individualized according to the IEP.

APPLIED US HISTORY		APP 303
Prerequisite: ARD Committee Placement	Grade 11	1 Credit

Survey course for students to help them understand national events. Topics include significant historic events, people and trends having an impact on our impact on our nation today. Instruction is individualized according to the IEP

APPLIED ECONOMICS		APP 305
Prerequisite: ARD Committee Placement	Grade 12	1/2 Credit

This course will assist students to gain insight into the basic survival principles involved with earning, spending, saving and investing. Students will develop A basic understanding of the United states monetary system and uses of money. Personal financial planning and management skills will be developed. Roles and responsibilities of consumers in the free enterprise system will also be addressed, as well as basic consumer awareness, consumer rights, and protection against fraud. Instruction is individualized according to the IEP.

APPLIED GOVERNMENT		APP 304
Prerequisite: ARD Committee Placement	Grade 12	1/2 Credit

This is a course that identifies purposes of having rules, Identifies authority figures in the home, school and community. Students will also be involved in the customs of citizenship and in celebrations that represent American beliefs and principles. Instruction is individualized according to the IEP. APPLIED - RECREATION/LEISURE ACTIVITIESAPP 135Prerequisite: ARD Committee PlacementGrades 9-121 Credit

In this course, students will participate in recreation and leisure activities such as board games, cards, dominoes, and social games. Students will learn appropriate social behavior and ways to utilize leisure time.

#### VOCATIONAL EXPERIENCE HALF DAY APP 185 Prerequisite: ARD Committee Placement Grades 10-12 1 Credit (Each semester)

Students attend classes for a half-day and the remaining half-day (4<sup>th</sup> and 8<sup>th</sup> periods) is spent in community employment or in-district training under the supervision of a vocational employment specialist. Evidence of successful employability and the mastery of the state mandated Exit Level exam are required for graduation.

VOCATIONAL EXPERIENCE WORKSKILLS		APP 175
Prerequisite: ARD Committee Placement	Grades 10-12	1 Credit

This course is a requirement for all special education students who are graduating under the Option 2 or Option 3 Plan. Emphasis is on acquiring employability and money management skills. The ARD committee, however, may recommend a different course, which is more applicable to the student's needs.

APPLIED COMMUNICATION APPLIC	ATIONS	APP 110
Prerequisite: ARD Committee Placement	Grades 9-12	1/2 Credit
APPLIED HEALTH		APP 100
Prerequisite: ARD Committee Placement	Grades 9-12	1/2 Credit
APPLIED WORK SKILLS		APP 165
Prerequisite: ARD Committee Placement	Grades 9-12	1 Credit
APPLIED SOCIAL SKILLS		APP 145
Prerequisite: ARD Committee Placement	Grades 9-12	1 Credit

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

Galveston Independent School District Division of Career and Technology Education 2023-2024

- The Galveston Independent School District offers Career and Technology Education programs in in Law & Criminal Justice, Architecture and Construction Technology, Operations and Emerging Technologies, Arts and A/V Technology, Animation and Gaming, Automotive Technology, Business Management and Administration, Cosmetology, Education and Training, Finance, Health Science and Biomedical Studies, Hospitality and Tourism, Human Services and Child Development, Information Technology, Welding and Manufacturing, Marketing and Entrepreneurship, Science-Technology-Engineering-Mathematics (STEM), and Transportation, Distribution, and Logistics. Admission to these programs is based on the interest of the student, and the age of the student in cooperative education programs.
- It is the policy of the GISD not to discriminate on the basis of race, color, national origin, sex, or handicap in its Career and Technology programs, services, or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.
- It is the policy of GISD not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.
- GISD will take steps to ensure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs. For information about your rights or grievance procedures, contact the Title IX Coordinator, Dyann Polzin, Executive Director of Human Resources, 504 Coordinator, and Student Services Assessment, at (409)766-5155.

Es la politicia de Galveston ISD a no discriminar en base de la raza, del color, del origen nacional, del sexo, o de la inhabilidad en sus programas servicos, o actividades vocacionales segun lod requisitos del titulo VI del acto de las derechas civiles de 1964, segun la enmienda prevista; Titulo IX de las eminendas de la educacion, de 1972; y seccion 504 del acto de la rehabilitacion de 1973, segun la enmienda prevista.

División independiente del districto de la escuela de Galveston de la educación 2023-2024 de la carrera y de la tecnología.

- El districto independiente de la escuela de Galveston ofrece programas de la educación de la carrera y de la tecnología en las ciencias de la tecnología automotora, del negocio, de la comercialización, de la ciencia de la salud, de la educación de la tecnología, de la hospitalidad, de la familia y del consumidor, tecnología de la construcción, así como cursos cooperativos de la educación de la preparación de la carrera en negocio, la comercialización, ciencias de la familia y del consumidor, e industrial. La admisión a estos programas se basa en el interés del estudiante, y la edad del estudiante en programas cooperativos de la educación.
- Es la política del GISD a no discriminar en base de la raza, color, origen nacional, sexo, o
  desventaja en sus programas de la carrera y de la tecnología, los servicios, o las
  actividades según los requisitos del título VI del acto de las derechas civiles de 1964,
  según la enmienda prevista; Título IX de las enmiendas de la educación de 1972; y
  sección 504 del acto de la rehabilitación de 1973, según la enmienda
  prevista.
- Es la política de GISD a no discriminar en base de la raza, del color, del origen nacional, del sexo, de la desventaja, o de la edad en sus prácticas del empleo según los requisitos del título VI del acto de las derechas civiles de 1964, según la enmienda prevista; Título IX de las enmiendas de la educación de 1972; el acto de la discriminación de edad de 1975, según la enmienda prevista; y sección 504 del acto de la rehabilitación de 1973, según la enmienda prevista.
- GISD tomará medidas para asegurarse de que la carencia de las habilidades de lengua inglesa no será una barrera a la admisión y participación en todos los programas educativos y vocacionales. Para la información sobre las sus derechas o procedimientos del agravio, entre en contacto con a coordinador del título IX, Dyann Polzin, director ejecutivo de recursos humanos y del gravamen de los servicios del estudiante, y 504 coordinator en (409) 766-5155.