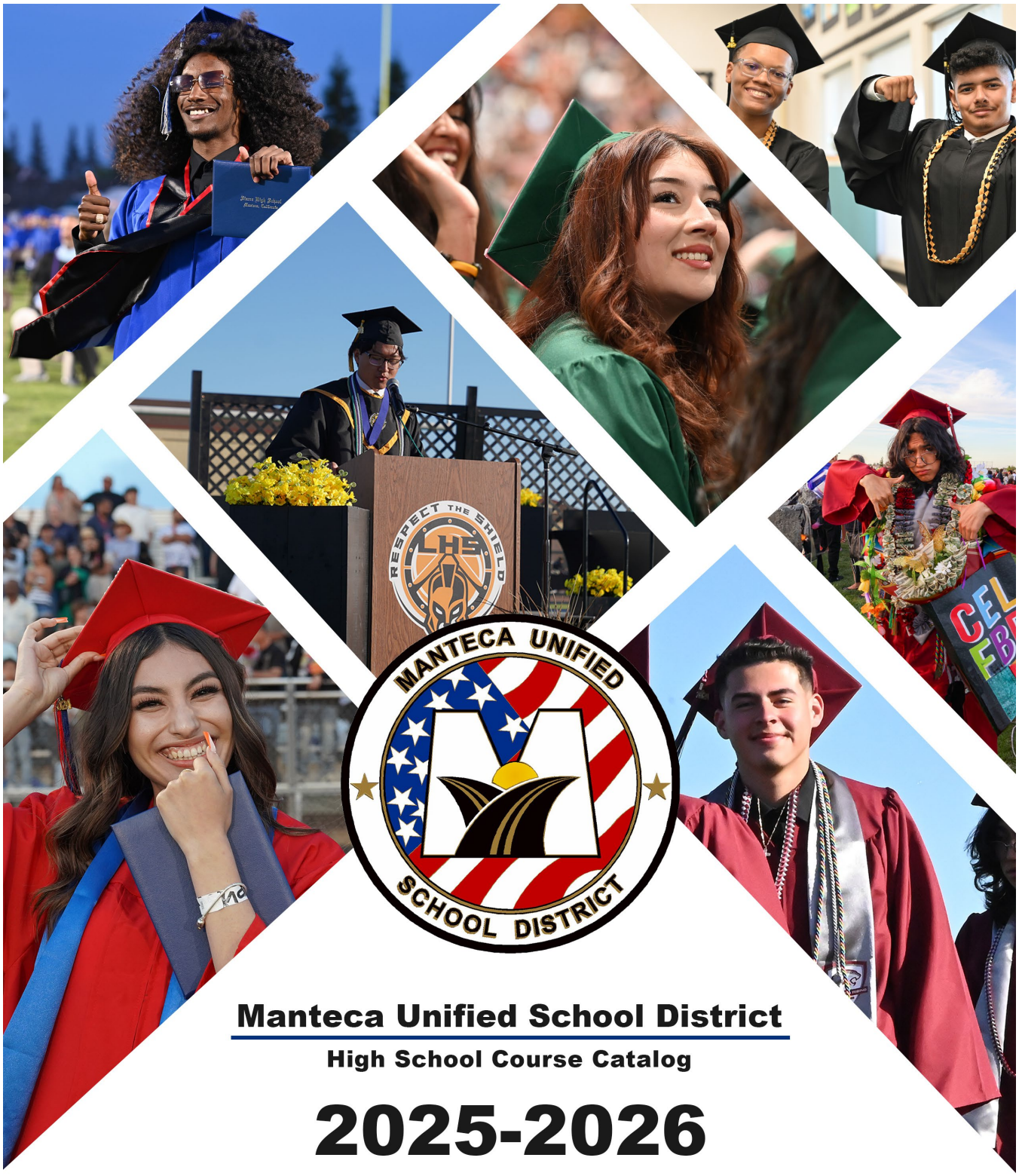


Manteca Unified School District

High School Course Catalog

2025-2026

GRADE LEVEL STANDARDS

SAFETY

EMERGING STUDENTS

Calla High School
130 South Austin Road
Manteca, CA 95336
Principal, Michele Bryson
(209) 858-7230

East Union High School
1700 North Union Road
Manteca, CA 95336
Principal, Eric Simoni
(209) 858-7270

Lathrop High School
647 Spartan Way
Lathrop, CA 95330
Principal, Melissa Beattie
(209) 938-6350

Yosemite Community Day School
737 West Yosemite Avenue
Manteca, CA 95337
Principal, Brian Keeney
(209) 858-7240

Manteca High School
450 East Yosemite Avenue
Manteca, CA 95336
Principal, Megan Peterson
(209) 858-7340

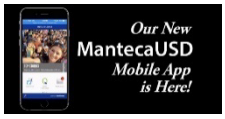
New Vision High School
4726 McCuen Avenue
Stockton, CA 95206
Principal, Lemuel Vergara
(209) 938-6225

Sierra High School
1700 Thomas Street
Manteca, CA 95337
Principal, Steve Clark
(209) 858-7410

Weston Ranch High School
4606 McCuen Avenue
Stockton, CA 95206
Principal, Troy Fast
(209) 938-6245

Manteca Unified School District Website: http://www.mantecausd.net

http://www.mantecausd.net/our-district/technology-at-musd/mobile-app



- **Stay Current** – the fastest way to see all the social media you are interested in from MUSD and your school site.
- **Notifications** – We will keep you up to date with important information.

ParentConnection

https://q.musd.net/parentportal
Keep up with assignments, attendance, grades, and upcoming school events in a secure environment.

StudentConnection

https://q.musd.net/student
Contact school site for more information

TABLE OF CONTENTS

WELCOME TO MANTECA UNIFIED SCHOOL DISTRICT

Manteca Unified School District (MUSD) is proud to present this complete and comprehensive secondary course selection guide. This catalog is a listing of courses taught within Manteca Unified School District at each of the high schools.

This selection guide is intended to assist students and parents in their preparation for planning their future coursework. The district has instituted a series of career and curricular pathways to guide students toward their future goals with planned sequences of courses over a four-year period. Counselors at each high school will meet with students and parents during the eighth-grade year to plan anticipated high school classes as well. Each year, counselors will meet with students to discuss academic coursework and postsecondary goals.

We live in a very complex and competitive world, and each high school would like to assist students in achieving their highest goals. The job market, colleges, and the military are looking for the most well-prepared students. The goal of MUSD is to assist students in meeting their individual academic, social, and career needs. Many of our courses are also tied into after school clubs and extracurricular activities. With support and participation, the students of MUSD will receive a well-balanced curriculum strong in academic knowledge, adept in social skills, and diverse in career pathway choices.

This course catalog contains descriptions of classes that are identified under departmental categories which are listed alphabetically. It also contains information on the Career Technical Education (CTE) pathways.

When using the course descriptions in this catalog, the following should be considered:

1. Course availability is based on student enrollment. Courses may not be offered each term.
2. Courses designated as term-long are comprised of two consecutive semesters.
3. Prerequisites for courses list the requirements which are recommended in order to take the course.
4. Some courses may have a materials donation to go towards enrichment fees.
5. Courses meeting University of California (UC) and California State University (CSU) requirements are identified.
6. Courses that may be taken for college credit are identified as being articulated with San Joaquin Delta College, Modesto Junior College, or FIDM.

Board Policy 0410 - Non Discrimination in District Programs and Activities: Manteca Unified School District policies prohibit discrimination, harassment, intimidation, and bullying at all school sites and school activities based on actual or perceived characteristics: race, color, ancestry, nationality, national origin, ethnicity, ethnic group identification, age, religion, marital or parental status, physical or mental disability, sex, sexual orientation, gender, gender identity, gender expression, or association with a person or group with one or more of these actual or perceived characteristics at any school sponsored activity.

The following employees have been designated to handle questions and complaints of alleged discrimination:
Title IX Coordinator: Francine Baird, Ed.D – Director of Equity and Access; 2271 W. Louise Avenue, Manteca, CA 95337; 209-825-3200; fbaird@musd.net
Title II Coordinator: Jody Burriss, Ed.D – Director of Special Education; 2271 W. Louise Avenue, Manteca, CA 95337; 209-825-3200
504 Coordinator: Jessica Red, MSN, RN, PHN, RCSN; Coordinator: Certificated Administrator of Student Services; 2271 W. Louise Avenue, Manteca, CA 95337; 209-858-0788

HIGH SCHOOL INFORMATION

Manteca Unified School District is proud to have established block scheduling within all of our comprehensive high schools. By the end of their 12th grade year, students must complete 275 credits in order to graduate from Manteca Unified School District (Board Policy 6146.1). Students transferring in to MUSD from a traditional school schedule will have their credits adjusted on a sliding scale to meet MUSD's credit requirements (Admin Regulation 6146.3). Manteca offers robust academic courses of study for students who are college- and career-bound.

Block Schedule: The Block Schedule is made up of two terms in a single, academic calendar year. Each term consists of two semesters. A student will take four classes per term for a total of eight classes in each academic calendar year. This equates to 32 academic classes over the course of four years of high school. *Once the term begins in August or January, class changes are not permitted unless there is administrative approval*.

TERM 1 **August - December**		**TERM 2** **January - May**	
Semester 1	**Semester 2**	**Semester 1**	**Semester 2**
August – October	October – December	January – March	March – May
Period 1	Period 1	Period 1	Period 1
Period 2	Period 2	Period 2	Period 2
Period 3	Period 3	Period 3	Period 3
Period 4	Period 4	Period 4	Period 4
20 credits per Semester	20 credits per Semester	20 credits per Semester	20 credits per Semester
40 credits per Term		40 credits per Term	
80 credits per School Year			

Grading Notification Timelines: Progress Reports are given to students at school. Report Cards are mailed home. Semester grades go on the transcript, progress report grades do not.

	TERM 1	**TERM 2**
PROGRESS REPORTS	Mid-September	Mid-February
SEMESTER 1 GRADES	End of October	End of March
PROGRESS REPORTS	Mid-November	End of April
SEMESTER 2 GRADES	Mid-January	Beginning of June

Credit Recovery/Remediation Information: MUSD offers credit recovery/remediation programs for students. Programs may include Night School, Summer School, and Continuation School. Please see a high school counselor for more information.

Electives: There are a variety of electives available for students to choose. Most electives are one term in length; however, some electives require student enrollment for the full academic year (i.e. CTE Capstone, Student Leadership, Yearbook, etc.). Check with your counselor to make sure your selected coursework will fit in your schedule.

Athletic Clearance Instructions: Students interested in playing a team sport should check with their high school's Athletic Director to obtain a copy of the required athletic clearance form and the procedures/due dates for consideration of participating in team sports.

GRADUATION / COLLEGE ENTRANCE REQUIREMENTS

A minimum of 275 credits is required for students to earn a high school diploma (Board Policy 6146.1).

Students must earn a "C" or better in all A-G classes. If you plan to attend a specific college or university, check with your counselor to make sure that you will meet the necessary requirements for admission to that institution. It is required that all students planning to attend a four-year college or university complete, at minimum, the following courses on the table below (under UC/CSU Minimum Requirements for Admission):

	Manteca USD Minimum Requirements for Graduation	***UC/CSU Minimum Requirements for Admission***
Social Science (A)	**30 credits / 3 terms:** • 10 credits in World History/AP European History • 10 credits in U.S. History • 5 credits in American Government • 5 credits in Economics	**20 credits / 2 terms** • Must include 1 term of U.S. history OR 1 semester of U.S. History AND 1 semester of Civics OR American Government • 1 term World History, cultures, or historical geography
English (B)	**40 credits / 4 terms:** • 10 credits for English I • 10 credits for English II • 10 credits for English III • 10 credits for English IV	**40 credits / 4 terms**
Math (C)	**30 credits / 3 terms:** • 20 credits in Math department (including Algebra I) • 10 elective credits of math in either the Math department or approved elective courses that *must* be taken junior or senior year	**30 credits / 3 terms** • Must include Algebra I, Geometry, Algebra II ***40 credits / 4 Terms recommended***
Science (D)	**20 credits / 2 terms:** • 10 credits in Life Science • 10 credits in Physical Science	**20 credits / 2 terms** • 10 credits Biological/Life Science • 10 credits Physical Science ***30 credits / 3 Terms recommended***
World Language (E)	**10 credits / 1 term:** World Language (Language Other Than English / LOTE)	**20 credits / 2 terms of LOTE** Must be in the same language ***30 credits / 3 Terms recommended***
Visual & Performing Arts (F)	OR Visual & Performing Arts	**10 credits / 1 term**
Career Technical Education (CTE)	OR Career Technical Education (CTE)	---
Physical Education	**40 credits / 4 terms:**	---
Health	**5 credits / 1 semester**	---
Electives	**100 credits**	***Should be A-G approved courses***
Total	**275 credits**	

4 YEAR PLAN WORKSHEET

Fill out this worksheet with courses you plan to take while enrolled in Manteca Unified School District.

9th GRADE (Term 1) 4 classes / 40 credits	9th GRADE (Term 2) 4 classes / 40 credits	10th GRADE (Term 1) 4 classes / 40 credits	10th GRADE (Term 2) 4 classes / 40 credits
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Science	Social Science	Social Science	Social Science
PE (must be taken only one term)		PE (must be taken only one term)	
Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other
11th GRADE (Term 1) **4 classes / 40 credits**	**11th GRADE (Term 2)** **4 classes / 40 credits**	**12th GRADE (Term 1)** **3-4 classes / 30-40 credits**	**12th GRADE (Term 2)** **3-4 classes / 30-40 credits**
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Science	Social Science	Social Science	Social Science
PE (must be taken only one term)		PE (must be taken only one term)	
Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other	Elective(s) LOTE, VAPA, CTE, other

STUDENT ATHLETES AND NCAA / NAIA REQUIREMENTS

The NCAA: Student athletes who are interested in playing NCAA Division I or Division II sports in college must register with the National Collegiate Athletic Association (NCAA) Eligibility Center. Students who would like to play Division III sports do not need to register. The Eligibility Center determines of prospective college athletes are eligible to play Division I and Division II sports at participating institutions of higher education. Meeting NCAA requirements does not guarantee admission to college, nor does it guarantee students placement on a Division I or II athletic team.

Registration with the NCAA: It is recommended that student athletes register online at the beginning of their junior year of high school. However, students may opt to register before their junior year. Students must be cleared by the Eligibility Center before they can compete at a Division I or II institution or receive athletic scholarships.

Students must create an account online with the NCAA Eligibility Center. Students will create a personal profile and pay a registration fee. Students who have received a waiver for the SAT or ACT are eligible for a registration fee waiver. The student's counselor must submit confirmation of the test fee waiver. Submission of final transcripts, SAT and/or ACT scores and proof of graduation at the end of senior year is the student's responsibility.

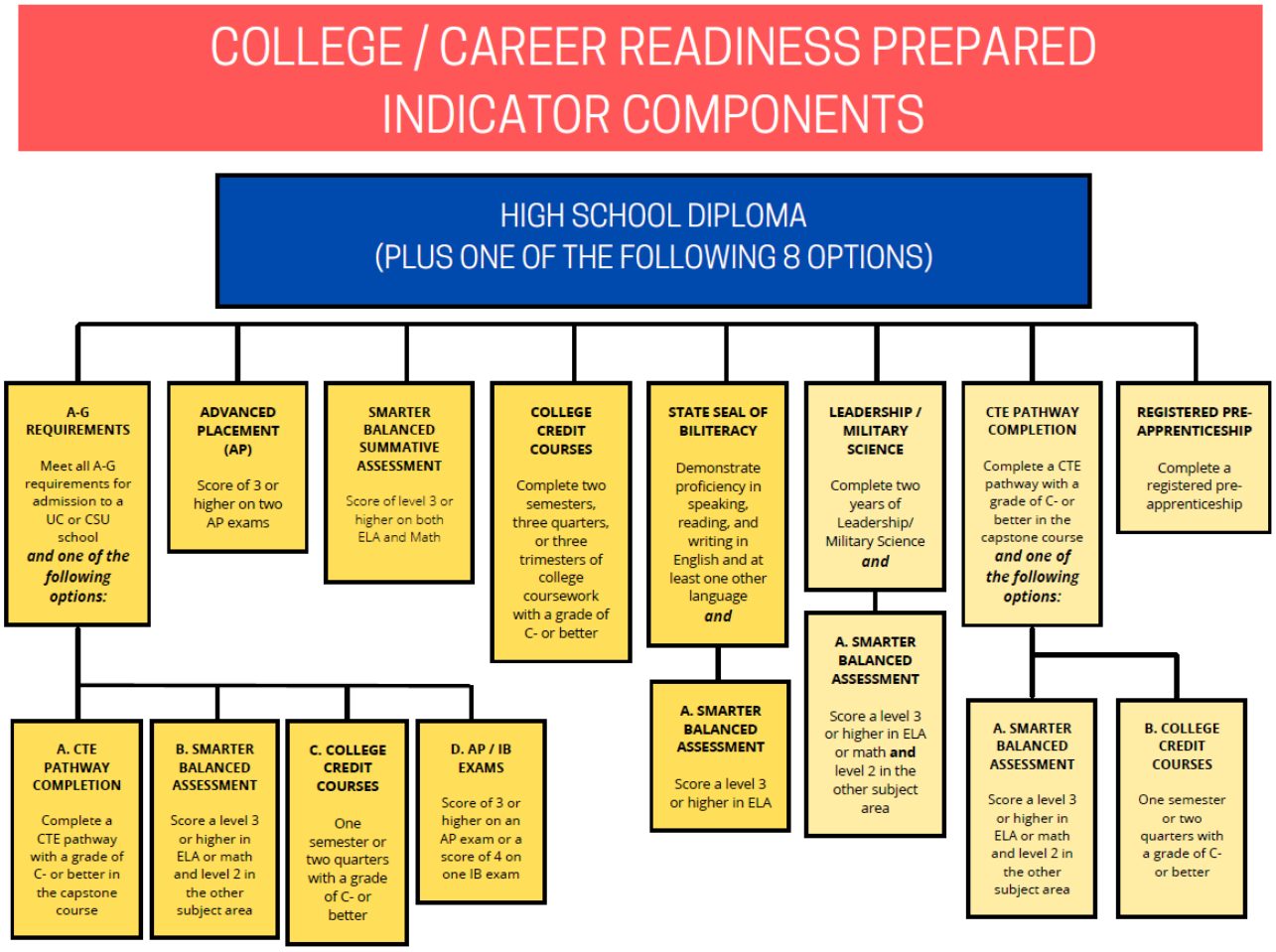
Coursework Requirements: To play Division I or II sports, students must meet the following requirements:

- Complete 16 high school core courses, 10 of which must be completed prior to senior year
- Earn a certain minimum grade point average (GPA) in core courses (see list below)– visit www.eligibilitycenter.org
- Graduate from high school

Division I – 16 Core Courses	Division II – 16 Core Courses
• 4 years of English • 3 years of Math (Algebra I or higher) • 2 years of Science (Physical, Life, including 1 year of lab science) • 2 years of Social Science • 1 extra year of English, Math or Science • 4 years of additional core courses (from any category above, foreign language)	• 3 years of English • 2 years of Math (Algebra I or higher) • 2 years of Science (Physical, Life, including 1 year of lab science) • 2 years of Social Science • 3 extra years of English, Math or Science • 4 years of additional core courses (from any category above, foreign language)

The NAIA: The National Association of Intercollegiate Athletics (NAIA) is an association that partners with smaller athletics programs that are "dedicated to character-driven intercollegiate athletics." Registration with the NAIA Eligibility Center (https://www.playNAIA.org) is required for any student who plans to attend an NAIA school.

COLLEGE / CAREER PREPAREDNESS INDICATOR COMPONENTS



The California Department of Education (CDE) has defined multiple means that students may earn the designation of being College and Career Prepared upon graduation. Students must earn their high school diploma and satisfy at least one of the additional criteria above to be considered college and career prepared. The CCI consists of both college-readiness and career-readiness measures. Career readiness means completing rigorous coursework and engaging in learning experiences that are designed to prepare students for the workforce. College readiness means completing rigorous coursework, passing challenging exams, or receiving a state seal.

The chart above reflects the College/Career Indicator components – essentially, the various pathways a student may meet the requirements to be considered "prepared" for college and career.

The darker yellow boxes indicate measures of College Preparedness while the lighter yellow boxes reflect measures of Career Readiness. Some components have additional criteria students must meet in order to be prepared for college and career.

MANTECA USD UC / CSU APPROVED A-G COURSES

The University of California (UC) and California State University (CSU) systems require that students complete at least 15 courses in the areas listed below to be considered for admissions. Courses must be completed with a grade of "C" or better. Additional coursework beyond the minimum requirements is strongly recommended.

See your counselor often to help you with your course selections each term so you stay on the A-G path.

Note: high schools in Manteca Unified operate on a block schedule, one term is equivalent to 1 year of coursework. Example: one term of United States History (A) satisfies one of the years required for History/Social Science (A).

Accelerated U.S. History
American Government
AP European History
AP Government and Politics United States
AP Government and Politics Comparative
AP Human Geography
World History
U.S. History

Advanced Communications and Media
Analytic and Persuasive Communications
AP English Language and Composition
AP English Literature and Composition
AP Seminar
Creative Writing
English I
English Honors I
English Language Development I (ELD I)
English II
English Honors II
English Language Development II (ELD II)
English III
English Language Development III (ELD III)
English IV
English Language Development IV (ELD IV)
Expository Reading & Writing
Film Composition and Literature
Multicultural Literature

Algebra 1 with Computing and Robotics
Algebra A
Algebra B
Algebra I
Algebra II
AP Calculus AB
AP Calculus BC
AP Precalculus
AP Statistics
Business & Financial Literacy
Finite Mathematics
Geometry
Geometry with Computing and Robotics
Pre-Calculus
Probability and Statistics

MANTECA USD UC / CSU APPROVED A-G COURSES

Advanced Emergency Medical Response
Ag Chemistry and Soil Science
Agriscience Systems Management
Anatomy & Physiology
Animal Care
Animal Science
AP Biology
AP Chemistry
AP Computer Science Principles
AP Environmental Science
AP Physics 1
AP Physics 2
Astronomy
Chemistry in the Earth System
Computing with Robotics (C-STEM)
Electricity Fundamentals
Environmental Science
Farm to Table
Food & Nutrition Science
Honors Chemistry in the Earth Systems
Honors - The Living Earth
Intermediate Health Careers
Intermediate Kinesiology
Introductory Physical Earth & Space Systems
Medical Biology
Medical Chemistry
Ornamental Horticulture
Physics in the Universe
Physiology
Pneumatics
Principles and Design of Cyber-Physical Systems C-STEM
Sports Medicine
Sustainable Agricultural Biology
The Living Earth
Veterinary Science
Zoology

Advanced Spanish Honors
AP French Language and Culture
AP Spanish Language and Culture
AP Spanish Literature and Culture
Spanish for Spanish Speakers
Spanish for Spanish Speakers 2
Spanish 1
Spanish 2
Spanish 3
Spanish 4
French 1
French 2
French 3
French 4

Advanced Ag Wood
Advanced Art
Advanced Band
Advanced Ceramics
Advanced Choir
Adv. Fashion Design & Construction
Advanced Floral
Advanced Digital 3D Art
Advanced Digital Comm. and Design
Advanced Digital Photography
Advanced Digital Photo & Design
Advanced Fashion Merchandising
Advanced Graphic Design
Advanced Interior Design
Advanced Orchestra
Advanced Photography
Advanced Piano
Advanced Theatre
Advanced Video Game Art & Design
Ag Wood
AP 2D Art and Design
AP Art History
AP Music Theory
AP 3-D Art & Design
Art & History of Floriculture
Band
Beginning Band
Beginning Dance
Ceramics
Choir
Color & Design
Computer Animation Production
Computer Graphics & Animation

MANTECA USD UC / CSU APPROVED A-G COURSES

Concert Band
Digital Photography
Guitar
Interior Design and Fashion
Intermediate Choir
Intermediate Theatre
Introduction to Art
Intro to Digital Comm. and Design
Intro to Digital Photography & Design
Introduction to Theatre
Jazz Band
Mariachi
Music Theory & Composition
Musical Theatre I, II
Orchestra
Percussion Ensemble
Piano
Photography
Technical Theatre & Design
Three-Dimensional Art
Video Production & Broadcasting
Yearbook
Wood I, II, III

Academic Decathlon
Accounting (Automated)
Adv. Machining and Metal Forming
Adv. Ag Welding
Adv. Automotive Technology
Adv. Business: Entrepreneurship
Adv. Child Development
Adv. Emerg. Medical and Fire Response
Adv. Health Careers
Adv. Industrial Manufacturing
Adv. Kinesiology
Adv. Public Safety
Ag Mechanics
Ag Science
Ag Welding
Agriculture Construction
Agriculture Leadership
AP Macroeconomics
AP Microeconomics
AP Psychology
AP Research
Automotive Technology
AVID 9, 10, 11, 12
Broadcast Journalism 1, 2
Business Applications
Careers with Children
Computer Science
Culinary Arts
Economics
Ethnic Studies
Food Service & Hospitality
Health Education
Health Science Nutrition
History & Film
History of American Sports
Human Rights & Contemporary Society
Intermediate Machining: CAD/CNC
Intro. to Ag Mechanics
Intro. to Education and Child Dev.
Intro. to Yoga
Intro. to Engineering
Intro. to Health Science
Intro. to Industrial Manufacturing
Intro. to Medical Terminology
Intro. to Public Services
Journalism
JROTC 1, 2, 3, 4
Landscape Design and Maintenance
Life Management
Link Crew Leadership
Makerspace 1, 2
Peer Resource
Popular Media
Power Ag Mechanics
Principles of Business
Psychology
Robotics 1, 2
Small Animal Care & Management
Speech
Sports & Entertainment Marketing
Structural Welding
Student Leadership
Success 101
TIG Welding
Video Editing
Video Game Design & 3D Digital Art
Women's Studies
Work Experience Education
World Geography

COLLEGE CREDITS FOR MANTECA USD COURSES

Manteca Unified School District is committed to comprehensive articulation of instructional programs between secondary and post-secondary institutions, usually referred to as "2+2" articulation. The "2+2" articulation links the high school and CTE programs with the post-secondary institution. These articulation programs lead to an Associates Degree or program specific certificates. This articulation process is a system designed to help students to advance from one course, program, or educational level to the next without unnecessary repetition of essentially similar courses for which credit has been received. Students who have completed articulated courses in high school may receive college credit.

ARTICULATED COURSES

High School Course Title and Course #	San Joaquin Delta College Course #
Accounting (Automated) - 4725	BUS 010A
Advanced Digital Photography – 6220	GRART 1A (Weston Ranch HS Only)
Advanced Public Safety – 1800	AJ 051, AJ 021
Automotive Technology – 5015	AUTO MECH 072
Advanced Automotive Technology – 5025	AUTO MECH 073/074
Careers with Children (Year 1) – 5865	CDEV 77
Careers with Children (Year 2) – 5865	CDEV 71, 72, 73
Business Applications – 4630	BIM001A, BIM001B (SHS Only)
Food Service & Hospitality – 4985 or Culinary Arts – 5600	CUL ART 003
Advanced Fashion Design & Construction – 5520 (term 1)	FASHION 030
Advanced Fashion Merchandising – 5855	FASHION 002
Advanced Health Careers – 5875, 5875-2	HS 036/HS084
Advanced Industrial Tech Manufacturing - 9101	Welding 82
Introduction to Health Science – 3050, 3050-2	HS 39
Intermediate Health Careers – 5876	HS 036

High School Course Title and Course #	Modesto Junior College Course #
Art & History of Floriculture – 6740	EHS 280
Animal Science – 6580	ANSC 50/ANSC 200

Students will receive college credits after completing articulated courses with grade B or above and completion of appropriate paperwork. See Instructor of articulated course or counselor for more information.

CREDIT FROM OTHER COURSES

ENGLISH CREDIT FROM OTHER COURSES

The following classes also help meet the fourth-year English graduation requirement if taken during their senior year.

Course	Credits
AP English Language & Composition	10 credits
Creative Writing	10 credits
Journalism	10 credits

MATH CREDIT FROM OTHER COURSES

The following classes also help meet the third-year math graduation requirement if taken during junior or senior year and with prior approval of the principal.

Course	Credits
Accounting (Automated) (4725)	10 credits
Advanced Drafting (5140)	10 credits
Ag Welding (6610)	5 credits
Advanced Ag Welding (6620)	5 credits
Ag Wood (6765)	5 credits
Advanced Ag Wood (6775)	5 credits
Architectural Drafting	5 credits
Automotive Technology (5015)	10 credits
Business & Personal Finance (4700)	10 credits
Advanced Computer Programming & Game Design (4907)	10 credits
Cyber Physical Systems (2340)	10 credits
Drafting I (5110)	5 credits
Drafting II (5120)	5 credits
Metal I	5 credits
Metal II	5 credits
Metal Fabrication	10 credits
Robotics I (2127)	10 credits
Wood I (5310)	5 credits
Wood II (5320)	5 credits
Wood III (5330)	5 credits

AP EXAMS

Advanced Placement (AP) courses are offered both terms. Students in AP courses are expected to take the AP exam associated with that course each May. The purpose of the AP class is to prepare students for the AP exam. Certain AP scores (3 or better) allow students to fulfill college graduation requirements. See your counselor for specific AP offerings at your school site as well as to determine the scores needed for specific exams to earn colleges credits.

CRITERIA FOR DETERMINING VALEDICTORIAN / SALUTATORIAN

1. Students must complete entire senior year at a MUSD high school.
2. Students must have at least eight classes during senior year.
3. Students in accelerated programs (graduating in less than four years) will not be considered for selection.
4. Valedictorian(s) and Salutatorian(s) will be identified at the third quarter grading period of senior year.
5. When calculating a student's GPA for the purposes of determining the Valedictorian and Salutatorian status it is necessary to establish a common number of credits, since mathematical GPA lowers with the greater number of courses taken.
   A student's GPA will still be calculated by normalizing the extra grade points as directed below:

1. Figure non-weighted GPA throughout the 1st semester of the second term of the senior year.
2. Calculate weighted GPA portion throughout the 1st semester of the second term of the senior year.
3. Add step one and step two and round to the nearest hundredths.

6. Highest calculated GPA will be valedictorian and the second highest GPA will be salutatorian. The principal can determine a co-valedictorian or co-salutatorian in the event of a tie, with authorization of the Secondary Education.
7. It is crucial that all high schools follow this procedure so that all students have an equal opportunity throughout the district. High Schools may not deviate from this formula for any reason.

CRITERIA FOR CTE PATHWAY COMPLETERS & SUPERCOMPLETERS

To be considered a Career Technical Education Pathway Completer, students must meet the minimum criteria below:

1. Completion of a CTE sequence of courses (in the same pathway) of 300 hours or more
2. Passed the Capstone course with a C- or better

Students earning the "Completer" distinction shall be recognized by being issued a CTE Pathway Completer certificate.

Any student shall be considered a Career Technical Education Pathway Supercompleter so long as they have met the above requirements AND:

1. Pass the Capstone course with a grade of B or better
2. Complete at least 50 hours of work in the community directly related to their CTE pathway course of study (i.e. volunteering, community classroom hours, competitions, and/or employment).

Hours shall be tracked by the student and community partner, and verified by the instructor of record.

Students earning the "Supercompleter" distinction shall be recognized by being issued a seal on their diploma and a CTE Pathway Completer certificate, wear a CTE Pathway Completer cord at their respective high school graduation ceremony, and be invited to a ceremony to recognize their accomplishments and postsecondary plans.

CAREER TECHNICAL EDUCATION (CTE) COURSES

(applies towards 100 elective credits requirement for graduation)

Manteca Unified boasts a robust offering of Career Technical Education (CTE) courses. CTE courses are designed to give students access to high paying careers and provide students with opportunities to earn industry-approved certification.

CTE prepares students for the world of work by providing students opportunities for hands-on, experiential learning. CTE programs are integrated with academics via rigorous and relevant curriculum. Partnerships have been established between Manteca Unified high schools, business, postsecondary institutions, and other community partners. Students have access to pathways to employment and/or associate, bachelor's and advanced degrees. Throughout these programs, students develop career-relevant, real-world 21st Century skills.

Introductory courses are meant to provide a breadth of knowledge to students, ideally allowing them multiple entry points into the pathway. Concentrator courses hone students' knowledge within the pathway, allowing them to deepen their expertise. Capstone courses focus on community-based instruction; students may be placed in jobsites that align with their pathway standards. Class time at the campus location is reduced and the community training site becomes the "classroom." The community training provides a valuable education experience to the real world of work. Students are considered pathway completers if they complete 300 hours of classroom instruction within a single pathway.

Students will be required to provide their own transportation to the jobsite. In some instances, Manteca USD bus transportation is provided for courses meeting at East Union High School, Lathrop High School, Manteca High School, Sierra High School, Weston Ranch High School.

MUSD offers courses in 11 industry sectors:

Agriculture and Natural Resources

Arts, Media, and Entertainment

Building and Construction Trades

Business and Finance

Education, Child Development and Family Services

Fashion and Interior Design

Health Science and Medical Technology

Hospitality, Tourism and Recreation

Manufacturing and Product Development

Public Services

Transportation

CAREER TECHNICAL EDUCATION (CTE) COURSES

AGRICULTURE & NATURAL RESOURCES SECTOR

Agricultural education prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber, and natural resource systems. All agriculture classes have hands-on labs as part of the curriculum. Students enrolled in agriculture classes are also members of the FFA and may attend various events at Community Colleges, California State Universities, and University of California campuses. Students can compete in career development events, livestock shows and/or leadership training conferences.

Across all courses in the Agriculture and Natural Resources sector, all students will be required to participate in FFA activities, maintain an FFA record book, and be members of the State and National FFA organizations.

Throughout each course, students will be graded on participation in intra-curricular FFA activities as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.

AGRICULTURE & NATURAL RESOURCES PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Ag Mechanics	*Intro to Ag Mechanics (G) Course #6702*	*Ag Mechanics (G) Course #6700*	*Power Ag Mechanics (G) Course #6760*
			Ag Construction (G) Course #6720
		Ag Welding (G) Course #6610	*Advanced Ag Welding (G) Course #6620*
		Ag Wood (F) Course #6765	*Advanced Ag Wood (F) Course #6775*
Agriscience	*Ag Science (G) Course #6500*	*Sustainable Ag Bio (D) Course #6770*	*Ag Chemistry and Soil Science (D) Course #6555*
			Agriscience Systems Management (D) Course #6790
Animal Science	*Ag Science (G) Course #6500*	*Small Animal Care and Management (G) Course #6595*	*Careers in Small Companion Animal Care Course #6596*
		Animal Science (D) Course #6580	*Vet Science (D) Course #6590*
		X	*Animal Care (D) (LHS ONLY) Course #6565*
Ornamental Horticulture	*X*	*Ornamental Horticulture (D) Course #6650*	*Landscape Design and Maintenance (G) Course #6648*
Floral Design	*X*	*Art and History of Floriculture (F) Course #6740*	*Advanced Floral (F) Course #6750*

CAREER TECHNICAL EDUCATION (CTE) COURSES
AGRICULTURE & NATURAL RESOURCES SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Intro to Ag Mechanics **6702** **Term** **G** **10** **9-11**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This is an introductory class which will cover topics to introduce students to the Ag Mechanics pathway. Emphasis will be placed on shop safety, materials and equipment identification, and material measurement. This class is a prerequisite for Ag Mechanics, Ag Wood or Ag Welding. A passing grade will be required to move to the next course in the pathway.

Ag Mechanics **6700** **Term** **G** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Intro to Ag Mechanics

In this beginning course, the basic skills of ag mechanics will be stressed. Included are operation and safety of hand tools, power tools, hot and cold metal work, sharpening and fitting tools, concrete, plumbing and electrical work, arc and gas welding, recordkeeping, and farm accounting. This class is an introduction to a wide variety of skills which will serve as a foundation for further development of mechanical abilities related to agriculture.

Ag Welding **6610** **Term** **G** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Intro to Ag Mechanics

Fulfills: 5 credits towards third year of math graduation requirement if taken in junior or senior year.

A basic classroom lab course employing skills in welding and shop math. Emphasis will be on safety, hand tools, gas and arc welding, sheet metal, fabrication, machine operations, recordkeeping, and farm accounting.

Ag Wood **6765** **Term** **F** **10** **9-12**

Prerequisite: Intro to Ag Mechanics

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Fulfills: 5 credits toward third year of math graduation requirement if taken in junior or senior year.

Introduction to hand tools, FFA leadership, wood identification, basic joints, layout method, bill of material, board feet, costs configuration, purposes of drawing the project, basic power machines, fasteners and glues, preparation of stains and finishes, and safety. Course will also include recordkeeping and farm accounting.

Power Ag Mechanics **6760** **Term** **G** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Ag Mechanics

Fulfills: Physical Science graduation requirement

This course is composed of topics relating to power and energy, recordkeeping, farm accounting, mechanical power, fluid power, electrical power, the use of small engines for power, and basic welding. Emphasis will be directed towards “hands-on” lab activities.

Agricultural Construction **6720** **Term** **G** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Power Ag Mechanics or Advanced Ag Welding or approval of the instructor

Individual planning and designing of projects as well as actual construction, recordkeeping and farm accounting will be stressed.

CAREER TECHNICAL EDUCATION (CTE) COURSES
AGRICULTURE & NATURAL RESOURCES SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Advanced Ag Welding **6620** **Term** **G** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Ag Welding

Fulfills: 5 credits towards third year math graduation requirement if taken in junior or senior year.

This course is a continuation of Ag Welding I. Advanced projects will be required in all areas. New areas of study include MIG and TIG welding, flame cutting, plasma cutting, machine operation, shop maintenance and blue-print reading. Basic shop drawings for personal projects are required.

Advanced Ag Wood **6775** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Ag Wood

Fulfills: 5 credits towards third year math graduation requirement if taken in junior or senior year.

This course provides students the opportunity to work on advanced projects according to their abilities. Topics covered are machine set-up, wood identification, cutting joints, fastening methods, cabinet doors and drawers.

Ag Science **6500** **Term** **G** **10** **9-11**

This course includes introduction to FFA, recordkeeping and farm accounting, opportunities in agriculture, basic animal husbandry, parliamentary procedure, and plant science. Each student shall have a project plan as a first-year Ag student. The school farm is available for students who do not have a space at home for animal and crop projects.

Sustainable Agriculture Biology **6770** **Term** **D** **10** **9-12**

Fulfills: Life Science

Prerequisite: Ag Science

This course is a laboratory science course. Using agriculture as the learning vehicle, the course emphasizes the principles, central concepts, and interrelationships among biological topics. This course follows the Next Generation Science Standards (NGSS) and the UCCI Model. Students will learn recordkeeping and farm accounting.

Ag Chemistry & Soil Science **6555** **Term** **D** **10** **10-12**

Fulfills: Physical Science

Prerequisite: Sustainable Ag Bio

This course explores the physical and chemical nature of soil as well as the relationships between soil, plants, animals, and agricultural practices using the Next Generation Science Standards (NGSS) and following the UCCI Model. Students will examine properties of soil and land and their connections to plant and animal production.

Agriscience Systems Management **6790** **Term** **D** **10** **11-12**

Fulfills: Physical Science

Prerequisite: Ag Chemistry & Soil Science

This integrated class combines an interdisciplinary approach to laboratory science and research with agricultural management principles. Using skills and principles learned in the course, students design systems and experiments to solve agricultural management issues currently facing the industry. Additionally, students will connect the products created in this class with industry activities to link real world encounters and implement skills demanded by both colleges and careers.

CAREER TECHNICAL EDUCATION (CTE) COURSES

AGRICULTURE & NATURAL RESOURCES SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Animal Science **6580** **Term** **D** **10** **9-12**

Articulated with Modesto Jr. College

Recommended: Ag Science

Prerequisite at Lathrop HS: Ag Science

This course will provide the student with principles in Animal Science focusing on the areas of livestock production, anatomy, physiology, reproduction, nutrition, respiration, and genetics. Frequent opportunities are also given to develop and apply hands on learning opportunities through direct applications on the MUSD school farm. Also, there is an emphasis on developing values, aspirations, and attitudes that promote the student's understanding of livestock industry. These hands-on science experiences are designed to enhance the student's understanding of agriculture, the environment and, society.

Small Animal Care & Management **6595** **Term** **G** **10** **10-12**

Recommended: Animal Science or Ag Science

This course includes instruction in companion animal care to include health and safety, sanitation, anatomy, physiology, animal behavior, animal nutrition, medical terminology, infectious diseases, diagnostic and therapeutic procedures. Animals to be focused on include dogs, cats, birds, reptiles, amphibians, rodents, and lagomorphs (chinchillas, guinea pigs, hamsters, ferrets, rabbits, mice, and rats).

Careers in Small Companion Animal Care **6596** **Term** **10** **11-12**

Prerequisite: Small Animal Care and Management or Vet Science (with a C or higher)

Students will gain skills in animal handling and safety. Animal behavior and training applications through practical lab experiences, develop basic dog grooming skills and kennel management. In addition, students will receive instruction in pet first aid and CPR with the option to certify. Students will explore industry-related fields in the companion animal care industry, equipping them with entry-level knowledge and skills that apply to a variety of occupations.

Veterinary Science **6590** **Term** **D** **10** **11-12**

Prerequisite: Large Animal Science and Care

This course provides students with the opportunity to investigate different aspects of the animal health and care occupations, or to continue in post-secondary education in the animal science field. The content of this course will include: job-search skills, comparative anatomy and physiology, animal reproduction, animal inheritance and selection principles, basic pet grooming skills, animal restraint, nutrition and housing, medical terminology, animal welfare concerns, production practices for large and small animals, production of small animals, how animal products and by-products are processed and marketed, species and breed identification and disease control/management.

Animal Care (LHS Only) **6565** **Term** **D** **10** **10-12**

Prerequisite: Animal Science

This course includes instruction in animal care, including health and safety, sanitation, anatomy, physiology, animal behavior, animal nutrition, medical terminology, infectious diseases, diagnostic and therapeutic procedures. Animals to include dogs, cats, birds, reptiles, amphibians, rodents, and lagomorphs (chinchillas, guinea pigs, hamsters, ferrets, rabbits, mice, and rats). In addition, students will receive instruction in the business/financial aspects of the companion animal enterprise.

CAREER TECHNICAL EDUCATION (CTE) COURSES

AGRICULTURE & NATURAL RESOURCES SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Ornamental Horticulture **6650** **Term** **D** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course is designed to develop an interest and awareness in horticulture and related industries. Class activities will include; studying and designing an irrigation system, pruning and training ornamental plants, selection, planting and care of ornamentals, and landscape design. This course will contain numerous lab sections on propagating leaf cuttings, applications of fertilizers to nursery stock, soil mixing, transplanting plants, maintenance of tools and equipment, plant identification, and designing a landscape plan.

Landscape Design and Maintenance **6648** **Term** **G** **10** **10-12**

Prerequisite: Ornamental Horticulture

This course is the capstone course for the CTE pathway for Ornamental Horticulture. Students from the year one introductory course will apply and expand their knowledge to address current trends and practices in the landscaping and nurseries industry in California. Topics will include plant selection for low water, low maintenance landscapes; landscape design basic criteria; landscape installation from plan to establishment; sustainable landscape maintenance; major aspects of nursery production from propagation to saleable product; and current and future opportunities in environmental horticulture business. Approximately fifty percent of this class involves field work which is conducted outdoors.

Art & History of Floriculture **6740** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Fulfills: Fine Arts graduation requirement

This course is designed to develop an interest and awareness in Floriculture and related industries. Class activities will include corsage and floral design construction, plant identification, principles of design, history, wedding and funeral arrangements, seasonal and holiday arrangement, introduction to greenhouse skills, recordkeeping, and farm accounting. The course will contain numerous lab sections on constructing corsages and arrangements used both around the home and commercially.

Advanced Floral **6750** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Art & History of Floriculture

This course is designed for advanced students interested in floral design and related industries. Class activities will include: more emphasis on floral design, plant identification, purchasing and handling fresh flowers and foliage, greenhouse production, harvesting, distribution and shipping of flowers and foliage. The course will contain numerous lab sections on advanced floral arranging, wedding consulting, post-harvest of flowers and florist shop management skills, recordkeeping, and farm accounting. The class will participate in a field trip to a floriculture industry business.

Agriculture Leadership **6785** **Term** **G** **10** **9-12**

Prerequisite: Instructor approval required

This course is designed to allow agriculture students the opportunity to learn public speaking skills, develop leadership skills, plan and implement FFA activities, explore various career development events, and plan and organize agriculture awareness for elementary students. Students will be required to participate in FFA activities, maintain an FFA record book, and all students will be members of the State and National FFA organizations. This class may be repeated for credit.

CAREER TECHNICAL EDUCATION (CTE) COURSES
ARTS, MEDIA, & ENTERTAINMENT SECTOR

ARTS, MEDIA, & ENTERTAINMENT PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Multimedia Production	*X*	*Introduction to Digital Communication & Design (F) Course #6215CTE*	*Advanced Digital Communication & Design (F) Course #4960*
Graphic Design	*X*	*Introduction to Digital Photography & Design (F) Course #6218*	*Advanced Digital Photo & Design (F) Course #6230* *Advanced Graphic Design (F) Course #6231*
Game Design & Integration	*Video Game Design & Digital 3D Art (G) Course #4905*	*3D Digital Animation (F) Course #4906*	*Advanced Video Game Art & Design (F) Course #4907* *Advanced Digital 3D Art (F) Course #4968*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Intro to Digital Communication and Design	**6215CTE**	**Term**	**F**	**10**	**9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course builds competencies in film, video, computer and live production, as well as foundational knowledge in design to introduce students to a variety of jobs in the multimedia workforce. Students will develop skills in computer design, film and video production.

Advanced Digital Communication and Design **4960** **Year** **F** **20** **10-12**

Prerequisite: Introduction to Digital Communication and Design

This competency-based course enables students to develop the necessary skills and competencies for creating multimedia and video productions for use in school-wide broadcasts, video classroom presentations, video commercial productions, newscasting, and social media outlets. Students learn proper video camera techniques, digital video editing, script writing, effective lighting, audio, directing, production responsibilities, computer generated graphics, animation, as well as social media etiquette and marketing techniques. This class is for students exploring the possibility of a career in the professional world of electronic media.

Intro to Digital Photography & Design **6218** **Term** **F** **10** **9-12**

This course introduces students to the fundamentals of digital photography and graphic design. Students will learn to work with digital cameras, studio lights, and the Adobe Creative Cloud to create digital and printed artwork while working to create their personal portfolios. Students will increase their visual awareness and their ability to read images using the elements of arts and principals of design.

CAREER TECHNICAL EDUCATION (CTE) COURSES
ARTS, MEDIA, & ENTERTAINMENT SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Advanced Digital Photo & Design **6230** **Term** **F** **10** **10-12**

Prerequisite: Intro to Digital Photo & Design

This digital arts course is designed to give students a thorough understanding of digital photographic techniques and equipment. Emphasis is on composition, communication, tonality, and image manipulation. Students will increase their visual awareness and their ability to read images using the elements of arts and principals of design. Historical and contemporary photographers and art movements will be analyzed and discussed. Students will work with digital cameras, studio lights, the Adobe Creative Cloud, and other tools to develop their personal portfolios. This course may be repeated for credit with instructor approval.

Advanced Graphic Design **6231** **Term** **F** **10** **10-12**

Prerequisite: Intro to Digital Photo & Design

This is an in-depth digital arts course focusing on explorations in principles of advertising, digital art, and video production. Topics include branding, digital illustration, video editing, and multi-page publication design. Students will explore and combine various software programs (Adobe Photoshop, Illustrator, inDesign, and video editors) to create real world items like logos, t-shirt designs, board and card games, magazines, & student news videos, as they work to create an individual portfolio of their work.

Video Game Design & 3D Digital Art **4905** **Term** **G** **10** **9-12**

Recommended: completion of or concurrent enrollment in Algebra I

Fulfills: 10 credits toward third year of math graduation requirement

This course introduces and refines student skills and expands student knowledge in current technologies, media and art applications, and emerging technological advances that impact the game design field. Students will combine foundations in design, 3d art, and level design to make a simple playable game level using 3d creatures as well as environments they built themselves.

3D Digital Animation **4906** **Term** **F** **10** **9-12**

Prerequisite: Video Game Design & 3D Digital Art

This course will cover the fundamentals of 3D animation using Blender to animate a simple vehicle and character. Topics in the course will include the basics of rigging and key frame animation in the digital space using 3D animation tools. Students will explore creating animation rigs for mechanical and organic models, then proceed to animate those models using key frame animation and blend shapes.

Advanced Video Game Art & Design **4907** **Term** **F** **10** **10-12**

Prerequisite: 3D Digital Animation

Fulfills: 10 credits toward third year of math graduation requirement

This course builds on skills learned in Computer Programming and Game Design, examining the fundamental and advanced technologies behind computer games as well as hand-on experience in the design and development of a computer game and simulation. Each student team will create their own games, spanning multiple genres and platforms, from mobile to PC. This course will provide a rigorous introduction to the technologies used in the design and development of computer games such as advanced 3D graphics, game programming, 3D physics engines, character animation, level design, terrain modeling, simulation design, and AI path finding. Students will learn how to use state-of-art software tools.

CAREER TECHNICAL EDUCATION (CTE) COURSES

ARTS, MEDIA, & ENTERTAINMENT SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Advanced Digital 3D Art	**4968**	**Term**	**F**	**10**	**10-12**

Prerequisite: Video Game Design & 3D Digital Art

This course will cover more advanced 3d modeling and texturing by having students build a full bipedal character and spaceship. We will cover how to build and add many different types of texture maps as well as high resolution sculpting to add details. Students will explore advanced edge loop, UV unwrapping, sculpting details to bake into normal maps, as well as painting many types of texture maps to control different material properties.

BUILDING & CONSTRUCTION TRADES SECTOR

BUILDING & CONSTRUCTION TRADES PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Cabinetry, Millwork and Woodworking	*Wood I (F) Course #5310*	*Wood II (F) Course #5320*	*Wood III (F) Course #5330*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Wood I	**5310**	**Term**	**F**	**10**	**9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Fulfills: 5 credits toward third year of math graduation requirement if taken during junior or senior year.

Introduction to hand tools, woods, basic joints, layout methods, bill of material, board feet, figuring costs, purposes of drawing projects, power machines, fasteners, glues, preparation of stains and finishes, safety habits.

Wood II **5320** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Wood I or approval of the instructor

Fulfills: 5 credits toward third year of math graduation requirement if taken during junior or senior year.

Course includes a review of Wood I fundamentals, addresses the intermediate study of power machines (including portable equipment), advanced joint constructions, hardwood and sheet goods, safety, stains and finishes including sprayed finishes, and information related to wood technology occupations. The successful completion of both a furniture project and a cabinet project as selected by the instructor is required.

Wood III **5330** **Term** **F** **10** **11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Wood II, Open to new students at the semester with successful completion of Wood I and Wood II or instructor's approval.

Fulfills: 5 credits toward third year of math graduation requirement if taken during junior or senior year.

Continuation of the advanced study of wood construction allowing the student to select a concentration in furniture making or cabinet making. The course enables the student to study in-depth an area of personal interest as related to wood construction. The successful completion of one project of significant size and complexity as selected by the student and approved by the instructor is required. Students shall be responsible to purchase project materials outside of school. This class may be repeated for credit.

CAREER TECHNICAL EDUCATION (CTE) COURSES

BUSINESS & FINANCE SECTOR

BUSINESS PATHWAYS IN MANTECA USD

<table>
<tr><th>PATHWAY(S)</th><th>INTRODUCTORY COURSE</th><th>CONCENTRATOR COURSE</th><th>CAPSTONE COURSE</th></tr>
<tr><td rowspan="3">Business Management</td><td rowspan="4">Business Applications (G)
Course #4630</td><td rowspan="3">Principles of Business (G)
Course #4505</td><td>Advanced Business: Entrepreneurship (G)
Course #4760</td></tr>
<tr><td>Sports & Entertainment Marketing (G)
Course #4755</td></tr>
<tr><td>Student Store
Course #4750</td></tr>
<tr><td rowspan="2">Financial Services</td><td rowspan="2">X</td><td>Accounting (Automated) (G)
Course #4725</td></tr>
<tr><td>Business & Financial Literacy (C)
Course #4700</td></tr>
</table>

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Business Applications	**4630**	**Term**	**G**	**10**	**9-12**

Recommended Prerequisite: Principles of Business

Designed to prepare students with an introduction to business applications and Digital Literacy necessary to live and work in a technological society. Students will problem solve and create documents using Microsoft Word, Excel, and PowerPoint. Students will use appropriate technology skills to conduct research and complete core curriculum projects including flyers, newsletters, announcements, advertisements, invitations, etc. Students learn to import graphics, use styles, create templates, import documents, and more. Students learn formatting skills and develop keyboarding competency. Keyboarding skills (proper keystrokes, posture, speed & accuracy) are also introduced and developed to type by touch. This course will prepare students for a position that utilizes computer skills as well as enable college-bound students to utilize their computer skills attained by producing the necessary papers and reports needed in college.

Principles of Business **4505** **Term** **G** **10** **9-12**

This course enables students to learn about the "Free Enterprise System" and a global economy. Emphasis is on how consumers live and work in our economic world. Course includes study in economic risks, owning your own business, insurance, banking services, consumer rights, use of credit, savings and investing, using income wisely, applying for jobs, career planning, current trends in business, and more.

CAREER TECHNICAL EDUCATION (CTE) COURSES
BUSINESS & FINANCE SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Advanced Business: Entrepreneurship **4760** **Term** **G** **10** **11-12**

Prerequisite: Principles of Business

This course is open to students who have an interest in exploring how a small business operates and an opportunity to gain work experience. Students will be exposed to many of the everyday procedures that must be carried out for a business to be a successful enterprise. The following is a partial listing of topics that will be covered during the year: the parts of a business plan, making change, employee/employer relations, employee/customer relations, sales techniques, merchandise ordering and pricing, merchandise display, store image, and job initiative. Students will also have an opportunity to create a business plan.

Sports & Entertainment Marketing **4755** **Term** **G** **10** **11-12**

Prerequisite: Principles of Business

This course is designed to provide students with an understanding of marketing concepts, foundations, and functions as they relate to career opportunities in the growing area of sports and entertainment. Instruction will focus on marketing and sports entertainment, sports marketing, and entertainment marketing. Real world, current companies and careers are highlighted which will make the material applicable and understandable for the students. Economic and entrepreneurial concepts, including the law of supply and the law of demand, business ownership, leadership, legal issues will also be infused into the course work.

Student Store **4750** **Term** **10** **10-12**

Recommended Prerequisite: Principles of Business

Must be in 10, 11, or 12th grade. Cannot be on a MUSD attendance tardy contract or have been on a contract during the previous semester. This course provides students with hands-on retail experience. Duties include cashiering, inventory, ordering merchandise, marketing, cash reconciliation, customer accounts and janitorial duties. Students must apply with the instructor and complete an application process prior to enrollment.

Business & Financial Literacy **4700** **Term** **C** **10** **10-12**

Recommended Prerequisite: Business Applications

Fulfills: Third year of math graduation requirement if taken during junior or senior year.

Business and finance are foundational skills for students considering a wide variety of career options. Whether they are planning to pursue careers in the financial sector, start their own company, or simply manage household expenses, the skills students learn in this course will help them achieve their career and personal financial goals. The increasing complexity of the global financial market has made financial literacy an essential skill set for all adults. A sound business and finance curriculum guides students to increased levels of sophistication in financial and business decision making. This, in turn, helps students prepare for success in the ever-changing global economy. By providing a strong foundation for money management and decision-making skills, this curriculum gives students the tools they need to make effective business and consumer decisions.

CAREER TECHNICAL EDUCATION (CTE) COURSES
BUSINESS & FINANCE SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Accounting (Automated)	**4725**	**Term**	**G**	**10**	**10-12**

Articulated with Delta College
Prerequisite: Business Applications
Fulfills: Third year of math graduation requirement if taken during junior or senior year.
This course is designed to educate students on the fundamentals of the Generally Accepted Account Principles (GAAP). It develops academic and analytical skills that will enable students to succeed in entry level bookkeeping careers and college level accounting courses. This course is highly recommended for students majoring in Business at the collegiate level. This course provides students with valuable skills that can be translated into employment in bookkeeping and the accounting field. All course curriculum is presented using an automated accounting program. Special projects include stock market evaluation, accounting simulations, and career exploration.

EDUCATION SECTOR

EDUCATION, CHILD DEVELOPMENT AND FAMILY SERVICES PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Child Development	*Introduction to Education and Child Development (G) Course #5860*	*X*	*Advanced Child Development (G) Course #5866*
Education		*X*	*Careers with Children (G) Course #5865*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Intro to Education and Child Development	**5860**	**Term**	**G**	**10**	**9-12**

This introductory course for the Child Development, Education and Family Services pathway helps students to establish foundational knowledge and skills to progress within the pathway courses. Specifically, students will develop knowledge and skills related to the well-being, child growth, and healthy development from prenatal through school-age children. Students will investigate careers related to the care and education of children.

Careers with Children	**5865**	**Year**	**G**	**20**	**11-12**

Articulated with Delta College
Recommended Prerequisite: Introduction to Education and Child Development
A yearlong course, with the option of a second year, where students will participate in the theory classroom covering such topics as: child growth and development, communication skills, discipline, curriculum planning and formal Lesson writing, nutrition, health and safety, art, circle time activities, storytelling, child behavior, and C.P.S. mandated reporting. Students will be placed on a job site for on-the-job training, to apply their knowledge in a variety of early childhood programs such as: public and private schools, preschools, day cares and recreational facilities. Students will build a lesson plan portfolio and will receive a Certificate at the completion of the course. T.B. clearance is required. Students will be placed at jobsites, in the community, to access experiential learning.

CAREER TECHNICAL EDUCATION (CTE) COURSES

EDUCATION SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Advanced Child Development	**5866**	**Term**	**G**	**10**	**11-12**

Prerequisite: Introduction to Education and Child Development

This advanced course, with the option of a second term, is designed to study the scope of developmental theories addressing physical, intellectual, moral, social, and emotional development of children. Periods of development from prenatal through adolescence are presented in a chronological sequence. Research methodologies are discussed as students are expected to think critically about theory and research. Interaction of heredity, environment and maturation is explored. Students will observe children, evaluate individual differences, and analyze characteristics of development using inclusive viewpoints. Students will engage in work-based learning to conduct these observations and evaluations.

FASHION AND INTERIOR DESIGN SECTOR

These courses meet the Consumer and Family Studies content area standards in Fashion and Interior Design established by the California Department of Education in Family and Consumer Science Education. It is recommended that all students participate in FCCLA. Through FCCLA, students will gain leadership and career skills, participate in school and community projects, and earn recognition and scholarships.

FASHION AND INTERIOR DESIGN PATHWAYS IN MANTECA USD

<table>
<tr><th>PATHWAY(S)</th><th></th><th>CONCENTRATOR COURSE</th><th>CAPSTONE COURSE</th></tr>
<tr><td rowspan="2">Fashion Design & Merchandising</td><td rowspan="3">Life Management (G)
Course #5500

Note: this course is not required for the Fashion and Interior Design pathway, but it is recommended students enroll in this course prior to Interior Design and Fashion (#5510)</td><td>Fashion Construction
Course #5515</td><td>Advanced Fashion Construction (F)
Course #5520</td></tr>
<tr><td rowspan="2">Interior Design & Fashion (F)
Course #5510</td><td>Advanced Fashion Merchandising (F)
Course #5855</td></tr>
<tr><td>Interior Design</td><td>Advanced Interior Design (F)
Course #5540</td></tr>
</table>

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Life Management	**5500**	**Term**	**G**	**10**	**9-10**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course will teach students how to take charge of their lives, how to relate to others, and how to communicate with family and friends. Topics will include nutrition and food choices: parenting and child guidance; using living space effectively; awareness of home economics-related careers; care and maintenance of a wardrobe; consumer decision making; and family conflicts and crises. Students will learn to look their best, to be their best, and to have a better future.

CAREER TECHNICAL EDUCATION (CTE) COURSES
FASHION AND INTERIOR DESIGN SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Fashion Construction	**5515**	**Term**		**10**	**9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)
Recommended Prerequisite: Life Management
Learn more about the exciting world of fashion, textiles, and apparel in their fast-paced course! If you are interested in being part of one of California's largest and most diverse industries, this is the course for you. Students will learn clothing construction skills through a sample technique book and several projects. Skills for garment alteration will be taught.

Interior Design and Fashion	**5510**	**Term**	**F**	**10**	**9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)
Recommended Prerequisite: Life Management
This is an introductory course to the Interior Design and Fashion industries and will prepare students to understand the social, psychological, and physiological aspects of fashion and home interiors. Instruction includes elements & principles of design, color theory, history of apparel and housing styles, textiles and care, sustainable practices, technology in both fields, space planning, wardrobe planning, repurposing apparel and interior items and careers related to interior design and fashion.

Advanced Fashion Construction	**5520**	**Term**	**F**	**10**	**10-12**

Articulated with San Joaquin Delta College and The Fashion Institute of Design & Merchandising (FIDM)
A cost may be associated for enrichment activities; to be determined by the instructor(s)
Prerequisite: Fashion Construction
This course focuses on the application and evaluation of advanced clothing construction techniques, pattern alteration, and fitting. Students will learn and demonstrate skills through an advanced sample technique book and several projects.

Advanced Fashion Merchandising	**5855**	**Year**	**F**	**20**	**11-12**

Articulated with Delta College
This is a capstone course covering topics in the fashion industry, providing an overview of how the business of fashion works, from raw materials to the production and retail distribution of fashion goods. The areas of fashion design, production, methods of predicting consumer demand, buying, pricing, retailing, and promoting fashion products are analyzed. Students will learn about a variety of fashion trends, designers, fashion brands, and influences that impact the fashion industry. In addition, this course is designed for students interested in obtaining employable skills in the fashion industry and offers them the opportunity to gain career training through a combination of classroom instruction and on-the-job training. Students must provide transportation to and from their jobsites. Student will gain an understanding of corporate and small business retailing, an understanding of the influence of fashion and clothing on present day society, the history of past trends, the relationship of retailers, producers, and consumers as well as career opportunities available in one of America's largest industries. Students will produce the annual district fashion show allowing them to collaborate with peers and community leaders while casting models, styling clothes, choosing music, choreographing a runway show, and providing all marketing materials. Students will have the opportunity to tour FIDM Los Angeles campus and visit Santa Monica retail establishments. This class will prepare students for an entry level sales associate position in the fashion industry. This course is a must for those interested in fashion.

CAREER TECHNICAL EDUCATION (CTE) COURSES
FASHION AND INTERIOR DESIGN SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Advanced Interior Design	**5540**	**Year**	**F**	**20**	**11-12**

This is a capstone course covering topics in the creative industry of interior design. This course is an upper division course where students will collaborate with their peers in completing interior design projects within school campuses, the community, and partner with fashion students on the annual fashion show's VIP event. Topics of functional and aesthetic elements for residential and commercial interiors are covered. Emphasis is placed on principles and elements of design and the selection and organization of furnishings, floor and wall coverings, window treatments, lighting, accessories, and color schemes. Students will learn about a variety of design styles, interior designers, and architects who impact the interior design industry. While completing several design projects throughout the year, students will understand the design process, create mood boards and elevation drawings, produce digital floorplans, organize presentation boards, and present designs to potential clients. Students will have the opportunity to visit interior design sectors and post-secondary campuses through field trips to San Francisco and Southern California areas. Students will prepare a career portfolio that includes resume building, interview, and presentation skills.

HEALTH SCIENCE AND MEDICAL TECHNOLOGY SECTOR

HEALTH SCIENCE & MEDICAL TECHNOLOGY PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Patient Care	*Introduction Health Science (G) Course #3050*	*Intermediate Health Careers (D) Course #5876*	*Advanced Health Careers (G) Course #5875*
		Intermediate Kinesiology (D) Course #5877	*Advanced Kinesiology (G) Course #5879*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Introduction to Health Science	**3050**	**Term**	**G**	**10**	**9-12**

Introduction to Health Careers is the introductory course designed for students participating in the Health Science Program. This course is designed to expose students to the health care industry by surveying the wide spectrum of health care occupations and equipping them with entry-level knowledge and skills that apply to a variety of health occupations. Students who successfully complete this course will acquire the necessary core knowledge and skills that will allow them to pursue an education and career in the health career industry. Preference will be given to students in Health Science Program.

CAREER TECHNICAL EDUCATION (CTE) COURSES
HEALTH SCIENCE AND MEDICAL TECHNOLOGY SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Intermediate Health Careers **5876** **Term** **D** **10** **11-12**

Prerequisite: Introduction to Health Science

This course focuses on the language of healthcare through the study of anatomy and physiology. Emphasis is on providing students with a thorough understanding of body systems and their interrelationships. The course includes advanced medical terminology as applied to diseases, disorders, and medical interventions. This course includes the language of healthcare; role playing and medical translation for patient education are key themes.

Advanced Health Careers **5875** **Year** **G** **20** **11-12**

Articulated with Delta College

Prerequisite: Intermediate Health Careers OR Intermediate Kinesiology

This course is designed for the students interested in pursuing a career in the health/medical field/fire science & pharmacy/veterinary science. The beginning part of the course will be spent in the classroom, with a patient-centered team approach toward disease prevention and health wellness. Reading and written assignments will be given during the classroom centered phase where basic medical science and current medical topics will be covered. Students will also learn basic nursing skills, medical law, and work ethics. Students must pass the medical terminology test with an 85% or better to be placed in a clinical site. Clinical experience may occur in different departments within the hospital or other facilities throughout Manteca, Lathrop, and French Camp. Some of the departments may include but not be limited to administration, emergency room, food service, surgery, laboratory, medical transcriptionist, patient services, pharmacy, and radiology. Students who meet the requirements may be eligible to receive three units of Medical Terminology at Delta College. Students must provide a current physical, immunization record, a flu shot and complete a two-step TB before they are placed in the clinical setting. **Students must have their own transportation.**

Intermediate Kinesiology **5877** **Term** **D** **10** **10-12**

Prerequisite: Introduction to Health Science

This course is designed to provide a well-rounded and challenging academic experience for students interested in general kinesiology, physical therapy, exercise science, athletic training, sports medicine, and other domains that fall under the kinesiology area of study. Students will learn fundamental skills related to professional conduct, risks related to the field of study, biophysical changes and adaptations during physical activity to various body systems, injury and emergency recognition, treatment of common sudden illness and sports related injuries. Additionally, students will learn how to support athletes during practices and competitions for injury reduction and optimal performance. Students will participate in a minimal work experience role to gain enriching experiences in the field of kinesiology and will be required to engage in a minimum of 9 hours outside of school assisting in a medical capacity within their scope of practice.

Advanced Kinesiology **5879** **Year** **G** **20** **11-12**

Prerequisite: Intermediate Kinesiology OR Intermediate Health Careers

This year-long course will further develop students' fundamental knowledge in kinesiology-specific content. Students will develop and apply communication skills, observation skills, problem-solving skills, and career specific skills in the first term. Students will acquire First Aid/CPR/AED training and receive CPR certification. In the second term, students will participate in work experience opportunities that will require them to spend additional time outside of school hours and/or travel offsite to occupational industry sites. Students must provide a current physical, immunization record, a flu shot and complete a two-step TB before they are placed in the clinical setting. **Students must have their own transportation.**

CAREER TECHNICAL EDUCATION (CTE) COURSES
HOSPITALITY, TOURISM, AND RECREATION SECTOR

These courses meet the Consumer and Family Studies content area standards in Food and Nutrition established by the California Department of Education in Family and Consumer Science Education. It is required that all students participate in FCCLA. Through FCCLA, students will gain leadership and career skills, participate in school and community projects, and earn recognition and scholarships.

HOSPITALITY, TOURISM, & RECREATION PATHWAYS IN MANTECA USD

PATHWAY(S)	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Food Service & Hospitality	*Life Management (G) Course #5500*	*Culinary Arts (G) Course #5600*	*Food Service & Hospitality (G) Course #4985*
		Pro-Start: Culinary Arts Course #4989	*Advanced Pro-Start: Culinary Arts Course #4990*
Food Science, Dietetics, & Nutrition		*Farm to Table (D) Course #6735*	*Food & Nutrition Science (D) Course #5610*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Life Management	**5500**	**Term**	**G**	**10**	**9-10**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Get your life together! Seize the opportunity to learn "real life lessons," relate to family and friends, and face the future with confidence and security. Learn critical skills and knowledge in food and nutrition, family living, child development, fashion, interiors, and consumer education. This exciting class will provide you with many tools to make the road to adulthood easier.

Culinary Arts **5600** **Term** **G** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Recommended Prerequisite: Life Management

This course is designed for students who are interested in understanding the principles of food and nutrition and in maintaining a healthy lifestyle. The study and application of food preparation, planning, service, nutrition, and storage is addressed in the course. Students use equipment, supplies, products, and procedures in an interdisciplinary approach. Safety and sanitation are paramount and applied in a classroom laboratory setting. Students develop laboratory writing and reasoning skills through accurate planning, recordkeeping, measuring, and use of culinary techniques.

CAREER TECHNICAL EDUCATION (CTE) COURSES
HOSPITALITY, TOURISM, AND RECREATION SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Food Service & Hospitality **4985** **Year** **G** **20** **11-12**

Articulated with Delta College

Prerequisite: Pro-Start: Culinary Arts OR Culinary Arts

A cost may be associated for enrichment activities; to be determined by the instructor(s)

The course will provide students with career awareness and employability skills in the culinary arts/food service and hospitality industry. Students will be able to prepare and present a variety of foods using appropriate prep techniques, equipment, tools and supplies as required in the industry. National Restaurant Association, ProStart Certification, and ServSafe Certification in safe food handling and sanitation procedures will lay the groundwork as students cover career awareness, employability skills, communication skills, practical application of math and science principles, critical thinking in the workplace setting. Catering opportunities and job site assignments will provide practical application of student skills.

Pro-Start: Culinary Arts **4989** **Term** **10** **9-12**

Recommended Prerequisite: Life Management

Students will be introduced to careers in the food service and hospitality industry with a focus on fundamental culinary skills. Students will gain the skills required for entry level employment in a full-service restaurant setting including knife skills, cooking methods, workplace safety and sanitation. Students will earn their California Food Handlers Card.

Advanced Pro-Start: Culinary Arts **4990** **Term** **20** **9-12**

Prerequisite: Pro-Start: Culinary Arts OR Culinary Arts

** this is a double period class **

Students will be introduced to careers in the food service and hospitality industry with a focus on fundamental culinary skills. Students will gain the skills required for entry level employment in a full-service restaurant setting including knife skills, cooking methods, workplace safety and sanitation. Students will earn their California Food Handlers Card.

Farm to Table **6735** **Term** **D** **10** **10-12**

Recommended Prerequisite: Life Management or Culinary Arts

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course is designed to help students learn about relationships between agriculture, food, science, nutrition, environmental and farm management, food system economics, and entrepreneurship. Students will also have the opportunity to discuss and become involved in the process of growing their own food to learn how to integrate healthy foods into their daily lives. This course is for students with an interest in growing their own food, nutrition and/or culinary arts, with the primary focus being the study and practice of Vegetable Crop Production and Food Safety.

Food & Nutrition Science **5610** **Term** **D** **10** **11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Biology or Chemistry and recommended Life management, Culinary Arts, or Farm to Table

This course studies production, processing, preparation, evaluation, and utilization of food (for human consumption). Students will understand the principles of science related to food preparation production, preservation, and nutrition. Students will explain chemical reactions in foods and metabolism of nutrients. Students will present research projects to the class.

CAREER TECHNICAL EDUCATION (CTE) COURSES
MANUFACTURING AND PRODUCT DEVELOPMENT SECTOR

Industrial Technology courses can prepare you for college or for employment with job entry skills. You can acquire a saleable skill with hands-on applications with the technology of tomorrow.

MANUFACTURING & PRODUCT DEVELOPMENT PATHWAYS IN MANTECA USD

<table>
<tr><th>PATHWAY(S)</th><th>INTRODUCTORY COURSE</th><th>CONCENTRATOR COURSE</th><th>CAPSTONE COURSE</th></tr>
<tr><td rowspan="2">Product Innovation & Design</td><td rowspan="2">X</td><td>MakerSpace 1 (G)
Course #4956</td><td>MakerSpace 2 (G)
Course #4957</td></tr>
<tr><td>Electricity Fundamentals (D)
Course #6610AS</td><td rowspan="2">Pneumatics (D)
Course #6620AS</td></tr>
<tr><td>Machining & Forming Technologies</td><td rowspan="3">Intro to Industrial Manufacturing (G)
Course #4951</td><td>Intermediate Machining CAD/CNC (G)
Course #5211AS</td><td>Advanced Machining & Metal Forming (G)
Course #4958</td></tr>
<tr><td rowspan="2">Welding & Materials Joining</td><td>Structural Welding (G)
Course #5210AS</td><td rowspan="2">Advanced Industrial Manufacturing (G)
Course #9101</td></tr>
<tr><td>TIG Welding (G)
Course #5230AS</td></tr>
</table>

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Introduction to Industrial Manufacturing **4951** **Term** **G** **10** **9-12**

This introductory course will familiarize students with the working of the shop. From shop safety, measurement and layout skills, cutting, bending, drilling and joining various metal parts to make various projects. The basic layout will incorporate student use of squares, rulers, scribes, protractors, metal snips, drills and punches. This is the introductory course that will prepare students for the Machining and Forming Technologies and Welding and Materials Joining pathways.

Makerspace 1 **4956** **Term** **G** **10** **11-12**

Prerequisite: Intro to Ag Mechanics or Wood 1 or Introduction to Industrial manufacturing (note: Intro to Ag Mechanics and Wood 1 do not count towards pathway completion)

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course introduces students to basic (CAD) computer-aided design and (CAM) computer-aided manufacturing programs that can be used to design projects utilizing laser cutters and 3D printers. This class helps students become familiar with the specific CNC (computer Numeric control) equipment and corresponding software used by each machine. Once students become proficient with the equipment, they are challenged to create STEM based projects and explore new ideas and ways to create and discover through collaborative projects. This class will instill confidence and fun into the process of creating and making while developing their minds through the engineering process.

CAREER TECHNICAL EDUCATION (CTE) COURSES
MANUFACTURING AND PRODUCT DEVELOPMENT SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Electricity Fundamentals **6610AS** **Term** **D** **10** **9-12**

Recommended Prerequisite: concurrent enrollment or successful completion of Algebra A/B or Algebra I

This course will provide 3 Amatrol industry-recognized certifications in electricity. The electrical courses will introduce students to basic electrical circuits, electrical measurement, circuit analysis, inductance and capacitance, combination circuits, transformers, electric relay controls, timers and advanced systems, and electrical wiring.

Intermediate Machining: CAD/CNC **5211AS** **Term** **G** **10** **9-12**

Prerequisite: Intro to Ag Mechanics or Introduction to Industrial manufacturing (note: Intro to Ag Mechanics does count towards pathway completion)

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course will allow students to use two-dimensional drafting techniques to design basic shapes using drafting commands, lines, arcs, circles, trim, extend, offset, copy/paste and save data to a DXF file. Students will utilize laser cutting and engraving on flat workpieces and rotary fixtures. Students will learn how to powdercoat their work using appropriate colors, guidelines, and curing techniques.

Structural Welding **5210AS** **Term** **G** **10** **9-12**

Prerequisite: Intro to Ag Mechanics or Introduction to Industrial manufacturing (note: Intro to Ag Mechanics does count towards pathway completion)

A cost may be associated for enrichment activities; to be determined by the instructor(s)

The basic welding class will allow students to understand the history of welding with the use of forges and fire welding, flame and plasma cutting, and arc welding, The class will utilize shielded metal arc welding, basic puddle control, welding joints and positions, electrodes and classifications, and AWS structural steel welding code. Students will also learn MIG and FLUX Arc welding, constant voltage welding theory with the different types of machines, components, wire types, and shielding gases used om the welding application and the limitations of the equipment.

TIG Welding **5230AS** **Term** **G** **10** **9-12**

Prerequisite: Intro to Ag Mechanics or Introduction to Industrial manufacturing (note: Intro to Ag Mechanics does count towards pathway completion)

A cost may be associated for enrichment activities; to be determined by the instructor(s)

The TIG welding course will allow students to gain basic TIG welding techniques which can be incorporated on mild steel, stainless steel, and aluminum applications. Students will be able to find common uses, benefits, drawbacks of the equipment and components needed for the application of TIG welds. The class will allow students to properly prepare material, use basic joints and positions, while using best practices to TIG weld material.

Pneumatics **6620AS** **Term** **D** **10** **9-12**

Prerequisite: Electricity Fundamentals

This course will provide 2 Amatrol industry-recognized certifications in pneumatics. This course will build on content learned in Electricity Fundamentals; students will deepen their understanding of pneumatics, circuits, pressure and flow, speed control circuits, air logic, maintenance, and pneumatic troubleshooting.

CAREER TECHNICAL EDUCATION (CTE) COURSES
MANUFACTURING AND PRODUCT DEVELOPMENT SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Makerspace 2	**4957**	**Term**	**G**	**10**	**11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)
Prerequisite: Makerspace I
This course will continue to reinforce student's skills learned in Makerspace I and add on additional CAD and CAM programs that will control CNC wood routers and metal plasma cutting tables. Once students become proficient with the equipment, they are challenged to create STEM based projects and explore new ideas and ways to create and discover through collaborative projects. Students will also learn basic welding skills, painting with an airbrush, and powder coating. They will learn how to bend and manipulate metal utilizing various shop equipment. This class will instill and expand student's abilities to create and make but also give them valuable vocational skills.

Advanced Machining and Metal Forming	**4958**	**Term**	**G**	**10**	**10-12**

Prerequisite: Intermediate Machining: CAD/CNC
This capstone course will apply measurement and dimensions, orthographic drawings and details. This machine shop-based course will take concept to working parts. Students will utilize skills learned in CAD and other shop skills to create multi-component finish-machined products using metal lathes, milling machines, heat treating equipment, and surface grinders.

Advanced Industrial Manufacturing	**9101**	**Term**	**G**	**10**	**10-12**

Prerequisite: Structural Welding or TIG Welding
This course provides students the opportunity to develop their skills related to metal fabrication. Students will be selecting a thematic based project that changes by quarter. Once selected students will draft, budget, and build their selected design and present it as a finished product to a panel of peer and faculty judges. Class participation grade is based on attendance and productivity of time spent in class.

CAREER TECHNICAL EDUCATION (CTE) COURSES
PUBLIC SERVICES SECTOR

PUBLIC SERVICES PATHWAYS IN MANTECA USD

<table>
<tr><th>PATHWAY(S)</th><th>INTRODUCTORY COURSE</th><th>CONCENTRATOR COURSE</th><th>CAPSTONE COURSE</th></tr>
<tr><td>Public Safety</td><td rowspan="3">Introduction to Public Services (G)
Course #1780</td><td>X</td><td>Advanced Public Safety (G)
Course #1800</td></tr>
<tr><td rowspan="2">Emergency Response</td><td rowspan="2">X</td><td>Advanced Emergency Medical Response (D)
Course #9011</td></tr>
<tr><td>Advanced Emergency Medical and Fire Response (G)
Course #9015</td></tr>
</table>

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Introduction to Public Services	**1780**	**Term**	**G**	**10**	**9-12**

Students will be given a broad overview of Emergency Medical Response, Fire Essentials, and Law Enforcement. Student will rotate through the career pathways. At the conclusion of this course, students will be certified in First Aid/CPR and advanced life saving techniques. Students will be preparing for Intermediate Public Safety or Intermediate Emergency Medical Response courses.

Advanced Public Safety	**1800**	**Year**	**G**	**20**	**11-12**

Articulated with Delta College

Prerequisite: Introduction to Public Services

This course is designed for students who are interested in pursuing a career within the Administration of Justice field. Students will receive a brief overview of the Criminal Justice System as well as its origin and growth in America. Students will be made aware of the impact that the U.S. Constitution and its amendments have on the Criminal Justice System. The students will receive an introduction to the three components of the Criminal Justice System: police, courts, and corrections. Training will be reinforced through demonstrations and practical exercises including a mock trial. During the second semester the training will be conducted by law enforcement agencies from the local, state, and federal levels in an academy like atmosphere. The training will include field trips to add realism. Students successfully completing this course can receive six units of college credit.

CAREER TECHNICAL EDUCATION (CTE) COURSES
PUBLIC SERVICES SECTOR

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Advanced Emergency Medical Response	**9011**	**Year**	**D**	**20**	**11-12**

Prerequisite: Introduction to Public Services

The Emergency Medical Technician course prepares the EMT student to provide prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of EMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the prehospital setting, and providing patient transportation. This course requires students to have completed and passed the Introduction to Emergency Responder course and the Intermediate Emergency Responder Course. Other requirements include, uniform, physical training and lifting greater than 25 pounds, dress code based on industry standard, and transportation.

Advanced Emerg. Medical and Fire Response	**9015**	**Year**	**G**	**20**	**11-12**

Prerequisite: Introduction to Public Services

The Emergency Medical Technician course prepares the EMT student to provide prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of EMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the prehospital setting, and providing patient transportation. In addition, this course provides students with basic understanding of fire behavior, firefighter health and safety, firefighting equipment and apparatus, firefighting specialties, firefighting culture, career opportunities, and hiring process. This course is designed for students seeking employment or seeking a greater understanding of the role and duties of an EMT or Firefighter. This course requires students to have completed and passed the Introduction to Emergency Responder course and the Intermediate Emergency Responder Course. Other requirements include, uniform, physical training and lifting greater than 25 lbs, dress code based on industry standard, and transportation.

CAREER TECHNICAL EDUCATION (CTE) COURSES
TRANSPORTATION SECTOR

TRANSPORTATION PATHWAYS IN MANTECA USD

PATHWAYS	INTRODUCTORY COURSE	CONCENTRATOR COURSE	CAPSTONE COURSE
Systems, Diagnostics, Services and Repair	*X*	*Automotive Technology (G) Course #5015*	*Advanced Automotive Technology (G) Course #5025*

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Automotive Technology	**5015**	**Term**	**G**	**20**	**9-12**

Articulated with Delta College

The Automotive Technology course is designed to give students a strong foundation of knowledge and skills in the automotive-based industry. Theory instruction and hands-on performance of required tasks will provide initial training for entry level employment and/or continued post-secondary education in the automotive field. This course provides students with an entry-level knowledge of shop safety, proper tool identification and usage and basic vehicle service.

Advanced Automotive Technology	**5025**	**Year**	**G**	**20**	**10-12**

Articulated with Delta College

Prerequisite: Automotive Technology I or approval of the instructor

This class will train and reinforce ASE content areas A-4 Auto Suspension, A-5 Auto Brakes, A-6 Auto Electrical/ Electronic Systems, and A-8 Engine Performance. Students will use equipment and vehicles provided by the school. Students will also receive training in ASE area A-1 Engine Repair. Students who complete both Automotive Technology and Advanced Automotive Technology are prepared to take ASE certification tests A-1, A-4, A-5, A-6, and A-8. Students with proper experience, grades, and attendance may be placed at local dealerships for further work training.

ENGLISH

(40 credit graduation requirement)

The English Department offers a comprehensive program. Literature is explored through a variety of techniques using reading, writing, listening, and speaking skills. Writing assignments address many different types of audiences and purposes. Through speeches, group presentations, and class discussions, students are able to practice correct verbal expression. All English classes require outside reading to encourage the continuance of good reading habits.

Note: Students may take English Language Development I, II, III and IV courses; however, only one of these courses will satisfy the "A-G" requirement. Only ELD I will give English I credits towards graduation. ELD II, III, IV are electives.

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

CORE ENGLISH COURSES

English I **1110** **Term** **B** **10** **9**

This is a two-semester course required of 9th grade students which offers an introduction to literature through the study of the short story, the novel, non-fiction, and drama. Students also study writing as a process, vocabulary, speech, grammar, and research papers using the Modern Language Association (MLA) format.

English Language Development I (ELD I) **1370** **Term** **B** **10** **9-12**

Fulfills: One year of English I graduation requirement

Open to 9-12th grade students who are currently participating in the district bilingual educational program. Placement will be determined by student scores from the annual English Language Proficiency Assessment of California (ELPAC). This two-semester course offers activities and assignments that promote English language development. Materials are studied to increase the student's understanding of English. Students will study writing as a process, academic vocabulary, and speaking skills. This class may be repeated for credit.

English II **1120** **Term** **B** **10** **10**

This is a two-semester course required of 10th grade students which continues literature study of the short story, the novel, non-fiction, and drama. Students study writing as a process, vocabulary, speech, grammar, and research papers using the Modern Language Association (MLA) format.

English III **1130** **Term** **B** **10** **11**

This is a two-semester course required of 11th grade students. Emphasis of this course will be on American literature. Students will continue to study writing as a process, vocabulary, speech, grammar, and research papers using the Modern Language Association (MLA) format.

English IV **1140** **Term** **B** **10** **12**

This is a two-semester course required of 12th grade students. Language Arts is taught in an integrated fashion. Emphasis will be placed on British literature. Diverse writing styles from expressive and creative to expository prose will be taught. Students will learn standard research procedures and write a formal research paper using the Modern Language Association (MLA) format. Instruction will also be given in speaking skills.

ENGLISH

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

HONORS AND ADVANCED PLACEMENT (AP) ENGLISH COURSES

English Honors I **1010** **Term** **B** **10** **9**

This is the first course in the English Honors program and offers an in-depth study of vocabulary, grammar, composition, mythology, and the novel. This course includes units of speech, drama, the short story, nonfiction, poetry, and the research paper, using the Modern Language Association (MLA) format.

English Honors II **1020** **Term** **B** **10** **10**

This is the second course in the English Honors program and continues the in-depth study of vocabulary, grammar, composition, and the novel. Speech, drama, the short story, nonfiction, poetry, and the research paper will be included in this course, using the Modern Language Association (MLA) format.

AP English Language and Composition **1030** **Term** **B** **10** **10-12**

Prerequisite: English Honors II or recommendation from English II instructor

The literary focus shall be a survey of American literature emphasizing critical analysis. An in-depth study and application of literary terms and rhetorical devices shall accompany study of all literature. Composition, analytical and expository in nature, shall be taught throughout the year along with instruction in precise writing. All students enrolled in this class are encouraged to take the AP Exam. **Fee for all AP exams.**

AP English Literature and Composition **1040** **Term** **B** **10** **11-12**

Prerequisite: AP Language & Composition or recommendation of English III instructor

The literary focus shall be a survey of British and world literature emphasizing critical analysis. An in-depth study and application of literary terms shall accompany study of all literature. Composition, analytical and expository in nature, shall be taught throughout the year, and instruction in precise writing shall be given. All students enrolled in this class will be encouraged to take the AP Exam. **Fee for all AP exams.**

ELECTIVE ENGLISH COURSES

Advanced Communications and Media **1425** **Term** **B** **10** **11-12**

This course prepares students to be effective communicators about what they want to say and effective critical thinkers about what they see in texts. Students will focus on developing skills to communicate effectively in situations they'll encounter as they transition out of high school and into the next stage of their lives. Students will focus on students' own communication and how texts in the world communicate both personal and globally. Students will think critically about the media they encounter in their lives beyond the classroom.

ENGLISH

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Analytic and Persuasive Communications **1405** **Term** **B** **10** **11-12**

This course allows students to strengthen their analytical reading and writing skills. Students will practice reading with care and will hold meaningful discussion about the texts they study. Students will learn to incorporate critical though and textual analysis to produce complex essays. Students will also use specific tools to create thoughtful, concise, well-researched articles. They will learn to think like a journalist – from spotting ideas to identifying and interviewing sources to pitching articles to an editor. Students will learn to write different types of articles commonly published online and in print, work through revisions, participate in whole-class and small-group workshops, and produce final drafts that are ready for publication.

AP Seminar **7650** **Term** **B** **10** **10-12**

AP Seminar is the first of two courses that are part of the AP Capstone Program offered by College Board. This course allows students to work independently and collaboratively to build skills that are valued in colleges. AP Seminar requires students to investigate real-world issues to gather and analyze information from various credible sources to build sound arguments. Students will engage with college level texts, synthesize information, collect and analyze data, craft arguments, and communicate in both writing and oral formats. AP Seminar and AP Research are intended to be taken over a two-term period, and both require students to take the AP exam associated with each course. Successful completion of a 3 or higher on the AP Seminar and AP Research exams will give the student an AP Seminar and Research Certificate. Successful completion of a 3 or higher on the AP Seminar, AP Research and 4 other AP exams taken throughout high school will give the students an AP Capstone Diploma. Completion of both English Honors courses and AP European History is highly recommended. **Fee for all AP exams.**

AP Research **7655** **Term** **G** **10** **12**

This class is the second course in the AP capstone program. In this class, students deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a course-long research-based investigation to address a student developed research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address the student developed research question. The course culminates in an academic paper of approximated 4000-5000 words and a presentation with an oral defense. AP Research utilizes cross-curricular content areas while reinforcing content state standards. **Fee for all AP exams.**

Broadcast Journalism 1 **1490** **Term** **G** **10** **10-12**

Student must fill out an application, have two positive recommendations, and instructor approval.

In this course students will learn the ABC's of the business. Learning to write a script, storyboarding, interviews, and documentaries will be a major component of the class. After passing the vocabulary, equipment, and safety test, students will spend time learning the production component of Broadcast Journalism including televised media and podcasting. Students will participate in both pre-and post-production activities. In addition to journalistic techniques and media forms, students will learn to produce high quality, professional broadcasts made available to the school and community.

ENGLISH

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Broadcast Journalism 2 **1495** **Term** **G** **10** **10-12**

Prerequisite: Broadcast Journalism I

This course is designed for juniors and seniors who have previously taken Broadcast Journalism with a grade of "B" or better and instructor approval. Students will learn more advanced theories of journalism as well as journalistic writing for broadcast media. Advanced scriptwriting, advanced storyboarding, the history of broadcast journalism and future developments for the profession will also be taught. Public service announcements, live interviews, pre-recorded and live broadcasting, and the documentary form are a major component of the class. Students will participate in both pre-and post-production activities. In addition to learning to produce high quality, professional broadcast, students will focus on the history of the profession, types of journalistic writing used in the profession, and ethics of the profession. This class may be repeated for credit.

Creative Writing **1210** **Term** **B** **10** **11-12**

Fulfills: English IV graduation requirement for seniors only

Students will write short stories and poetry while learning about and experimenting with narrative techniques such as characterization, point of view, dialogue, setting, and plot. Through analysis of prose and poetry, students will learn how to best include form, imagery, figurative language, and other literary elements into their own writing. The class will help them develop good writing techniques, as well as find their own style and voice. Students will also be required to learn how to positively critique classmates' writings, as well as apply editing and revision techniques with their own pieces. Each semester, students will compile a portfolio of their complete writings for final credit. This class may be repeated for credit.

English Language Development II (ELD II) **1380** **Year** **B** **20** **9-12**

Open to students who are currently participating in the district bilingual educational program. Placement will be determined by student scores from the annual Language Proficiency Assessment of California (ELPAC). This two-semester course offers activities and assignments that promote English language development. Materials are studied in depth to increase the student's understanding of English. Students will study writing as a process, academic vocabulary, and speaking skills. This class may be repeated for credit.

English Language Development III (ELD III) **1390** **Year** **B** **20** **9-12**

Open to students who are currently participating in the district bilingual educational program. Placement will be determined by student scores from the annual Language Proficiency Assessment of California (ELPAC). This two-semester course offers activities and assignments that promote English language development. Materials are studied in depth to increase the student's understanding of English. Students will study writing as a process, academic vocabulary, and speaking skills. This class may be repeated for credit.

English Language Development IV (ELD IV) **1395** **Year** **B** **20** **9-12**

Open to students who are currently participating in the district bilingual educational program. Placement will be determined by student scores from the annual Language Proficiency Assessment of California (ELPAC). This two-semester course offers activities and assignments that promote English language development. Materials are studied to increase the student's understanding of English. Students will study writing as a process, academic vocabulary, and speaking skills. This class may be repeated for credit.

ENGLISH

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Expository Reading & Writing **1152** **Term** **B** **10** **12**

Fulfills: English IV graduation requirement for seniors only

This course is a CSU-designed English course that focuses on non-fiction (expository) reading and writing skills. This course is designed to better prepare students for the type of expository reading and writing skills that they need to be successful in college and career.

Film Composition and Literature **1215** **Term** **B** **10** **11-12**

This college preparatory elective allows students the opportunity to learn about the genres, structures, and visual elements of films. Students will be exposed to a wide variety of films and will acquire the skills needed to analyze each film's multisensory elements. Students will master many of the California State Standards for English and the Performing Arts.

Journalism **1480** **Term** **G** **10** **10-12**

Fulfills: English IV graduation requirement for seniors only

Students study the ethics of journalism and the basics of journalism writing, including reporting, researching, writing, and editing of stories. Students are required to brainstorm appropriate stories for the school newspaper, research stories utilizing available media, conduct interviews, and write stories in a variety of genres. They will write news, features, and editorials; coordinate photography assignments; layout stories according to accepted media standards and produce portfolios of their work. Students will be required to frequently complete assignments outside of class to meet deadlines.

Multicultural Literature **1150** **Term** **B** **10** **12**

This course is offered to 12th grade students. It integrates reading, writing, speaking, and listening skills. Students will read a wide range of culturally diverse texts to build an understanding of the texts, of themselves, and of the cultures of the United States and the world. A writing portfolio will be maintained throughout the course.

Popular Media **1450** **Term** **G** **10** **9-12**

This course provides students with the chance to examine the role and influence media has on society. It enhances the student's ability to objectively look at and distinguish between multiple sources. This class examines the way that news is perpetuated through social media. Students interact with a variety of news outlets to analyze and discuss current, popular, and relevant issues.

Reading Support **1360** **Term** **10** **9-12**

This course is designed to improve a student's reading skills. Students are placed in the class based on reading scores two years or more below grade level with Instructor recommendation. This class is not open to students who already received remediation support from ELD, RSP, SDC, or Language Art classes.

Speech **1470** **Term** **G** **10** **9-12**

Open to all grades. This course offers students an opportunity to develop advanced public speaking skills. The student will gain effectiveness in various speaking situations and will learn to be poised and articulate when speaking before an audience. Selective readings and written assignments will be given to prepare students to give persuasive and informative speeches, oral interpretation, debate, and parliamentary procedure.

ENGLISH

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Women's Studies	**1415**	**Term**	**G**	**10**	**11-12**

This class will provide students with the opportunity to use a feminist lens to critically analyze literature including novels, short stories, poetry, as well as nonfiction articles. It will enhance the student's ability to recognize and define issues in literature related to gender equality. This class will provide a different perspective than a typical English class, by using literature to analyze how genders are treated and how societal expectations are created and perpetuated through literature.

Yearbook **1440** **Term** **F** **10** **10-12**

Prerequisite: approval of instructor

This is a laboratory course designed to produce the school yearbook. Job assignments include typing, accounting, page design, section editing and photography. All students are responsible for selling yearbooks, fundraising, and advertising. Students are to use time out of class, if necessary, to meet deadlines. This class may be repeated for credit.

LIFE SKILLS

(5 credit graduation requirement for a Health course)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Get Focused Stay Focused Internship **5808** **Term** **10** **11-12**

This course provides students with an opportunity to gain career skills, while also supporting the GFSF efforts district wide. Students will provide skills training for freshmen, help facilitate the module 3 senior seminar, organize elective fairs, schedule lunch time guest speakers, present as student panelist, accompany counselors on feeder school visits, support junior high efforts with the implementation of the new *Bridge to Success* curriculum, and support many other GFSF efforts on campus. Students will develop leadership, counseling, instruction, public speaking, planning, project management, and organization skills throughout the course. The class is open to 11th and 12th grade students with the consent of the instructor.

Health Education **5902** **Semester** **G** **5** **9**

This course is designed to make students aware of how their physical and emotional environment affects their health. The course includes study of human physiology, sexuality, mental and physical health, and social institutions.

Health Science Nutrition **5620** **Semester** **G** **5** **9-12**

This class will provide students with an understanding of how food choice, preparation, and consumption support nutrition, overall health and ultimately a balanced sense of self. Students will examine the relationship of food and health to determine the impact foods have on the body and mental well-being. Students will plan nutritious meals, create a nutrition guide, engage in activities, conduct research, complete simulations and apply knowledge of food safety to understand the importance of preventing food-borne illnesses. Students will also learn about making healthy food choices and the science behind why some choices are superior to others, and why some are better suited for specific sports.

Next Step **5815** **Term** **10** **11-12**

This class is designed to focus on preparing students to leave high school. Students will determine who they are as a person and potential employee. They will look at their desired work environment, personality type, strengths, decision making style, and passions. Once these have been determined, students will look at the real-world numbers for the lifestyle that they desire. Students will determine the career that best meets both their desired lifestyle needs and fits their personality and skill set. Students will be focusing on 21st century skills such as: creative thinking, collaboration, communication, social skills, productivity, and leadership. Using online components available, students will also work on technological literacy. Students will also focus on the soft skills such as: positive work ethic, good attitude, desire to learn, and accountability. Students will also take part in a job shadow experience to gain an understanding of the daily routine of their desired career.

Success 101 **5810** **Semester** **G** **5** **9**

This course is designed to help students foster academic success in their high school careers and to aid in reaching life goals set by the individual student. Students will be introduced to strategies for identifying possible career interests, researching those interests, and end the term with a digital and paper career resource portfolio. The student's working portfolio will travel with him/her throughout his/her high school career, to build upon the foundational framework started as a freshman.

MATHEMATICS

(30 credit graduation requirement; 10 credits must consist of Algebra I OR Algebra A, B)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

CORE MATH COURSES

Algebra A **2120** **Term** **C** **10** **9-12**

This course is designed for 9th grade students who do not meet the MUSD 9th grade Mathematics Placement criteria for Algebra I. The topics covered are the same as those covered in the first semester of Algebra I. They include solving linear equations and inequalities, graphing, and writing linear functions and solving systems of linear equations. Students are offered additional learning supports as they progress through the curriculum at a slower pace than Algebra I. Successful completion of Algebra A and Algebra B satisfies the California graduation requirement for Algebra I.

Algebra B **2125** **Term** **C** **10** **9-12**

Prerequisite: Algebra A or first semester of Algebra I

The topics covered are the same as those covered in the second semester of Algebra I. They include exponential functions and sequences, polynomial equations and factoring, graphing quadratic functions, solving quadratic equations, radical functions and equations, and data analysis and displays. Students are offered additional learning supports as they progress though the curriculum at a slower pace than Algebra I. Students with second semester Algebra I credit, will not receive credits for this course. Successful completion of Algebra A and Algebra B satisfies the California graduation requirement for Algebra I.

Algebra I **2130** **Term** **C** **10** **9-12**

Topics include properties of real numbers; linear equations and their graphs; relations and functions; solving and graphing equations and inequalities including those involving absolute value. Additionally, students will solve systems of equations and inequalities algebraically and graphically; use exponents and exponential functions; utilize quadratic equations and their graphs; learn polynomials and factoring; and solve rational equations and problem solving.

Algebra 1 with Computing and Robotics **2133** **Term** **C** **10** **9-12**

The course guides students through topics in Algebra I while simultaneously teaching student programming and computational thinking. Algebra I topics include functions, graphing relations, solving linear equations and inequalities, operation with polynomials and rational expressions, factoring and solving quadratic equations, and properties of real numbers. Robotics activities allow students to reenact physically derived mathematical problems through robotics technologies to visualize situations, associate linear and quadratic graphs with physical phenomenon, predict and identify key features of the graphs with robotic systems, and solve robotics problems through mathematical modeling and program. This course is aligned to CCSS Algebra I Math standards.

Algebra II **2310** **Term** **C** **10** **9-12**

Prerequisite: Algebra I or successful completion of Algebra A and B

The key ideas of this course are: writing algebraic expressions to represent problems described in words, given as diagrams or based on data; understanding the relationships among equations, graphs, and solutions to equations; and knowing how and when to use algebraic or approximate methods to solve a variety of equations; and combinations of equations or inequalities. Other topics covered: roots, radicals, logarithms, and powers.

MATHEMATICS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Finite Mathematics **2318** **Term** **C** **10** **11-12**

Prerequisite: Algebra II

Finite Math is an ideal class for students who are not ready to take calculus but want a 4th year of math to prepare for college. "Finite Math" is a catch-all title for a collection of topics that are anything but calculus. The purpose of the course is to give a survey of mathematical analysis techniques used in the working world, but you might also say that this course gives valuable experience organizing information and then analyzing it. In a larger sense, it's also another way we use math to give people experience at analytical thinking. Business, accounting, and computer majors tend to take this course, or are required to by their programs.

Geometry **2210** **Term** **C** **10** **9-12**

Prerequisite: Algebra I or equivalent

Students will need a scientific calculator, compass, and protractor.

This course covers: algebra; graphing; ratios (similarity, right triangle trigonometry); properties of plane figures (area, perimeter, polygons, angles); problem solving (diagrams, tables/lists, patterns, sub problems); spatial visualization; conjecture, and explanation.

Geometry with Computing & Robotics **2214** **Term** **C** **10** **9-12**

Prerequisite: Algebra I or equivalent

The course guides students through topics in in Geometry in Common Core State Standards for Mathematics while simultaneously teaching students programming and computational thinking. Students use programming in C/C++ interpreter Ch to reinforce and extend their knowledge of mathematical concepts by analyzing real life situations, identifying given information, formulating steps that a computer program could calculate to find a solution, analyzing the results for accuracy, and revising/modifying the programming solutions as necessary. Topics covered include applications using area and perimeter, parallel and perpendicular lines, transformations, congruent triangles, quadrilaterals and other polygons, similarity, right triangles and trigonometry, coordinate proofs, circles, circumference area, volume, and probability. Robotics technology will be used to introduce and expand upon the areas of study listed above. Robotics activities allow students to reenact physically derived mathematical problems to visualize situations, associate graphs with physical phenomenon, apply geometric and trigonometric properties and solve, and solve robotics problems through mathematical modeling and programming. Teaching resources contain robotics activities.

Pre-Calculus **2320** **Term** **C** **10** **10-12**

Prerequisite: Algebra II

This course comprises the algebras of real numbers, vectors, complex numbers, and polynomials; analytic geometry-based on vector algebra; polynomial, exponential, and logarithmic functions; the circular functions and trigonometry; and elementary probability functions.

Probability & Statistics **2230** **Term** **C** **10** **10-12**

Prerequisite: Algebra II

This course is designed to acquaint the student with elementary techniques used in statistical methods. Students will become knowledgeable about organizing, analyzing, and interpreting data. Emphasis is on descriptive statistics, elementary probability concepts, probability distributions, statistical inference, and simple linear regression analysis. Applications are drawn from many facets of daily life: business, education, natural sciences, psychology, social science, and government.

MATHEMATICS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Robotics 1	**2127**	**Term**	**G**	**10**	**9-12**

Fulfills: Third year of math graduation requirement if taken during junior or senior year.

Robotics 1 will introduce students to the working principles and foundational knowledge of robotics, using mathematics and basic physics principles. Students learn to control mobile robots using VEX equipment programs. The students will write robotics programs using Robot C and Easy Robot C computer programming language to perform various tasks based on the sensory information of the robot. Through hands-on problem-based projects, students will develop critical thinking, problem solving, effective communication, and cooperative skills.

HONORS AND ADVANCED PLACEMENT (AP) MATH COURSES

AP Calculus AB **2330** **Term** **C** **10** **11-12**

Prerequisite: Pre-Calculus

Students will need a graphing calculator. This course is a study of the calculus of the elementary functions: polynomial, circular, logarithmic, and exponential. The student studies derivatives and integrals of these functions with their applications. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

AP Calculus BC **2335** **Term** **C** **10** **11-12**

Prerequisite: Calculus AB

This course is a study of the calculus of infinite series, plane curves, parameterization, polar coordinates, vectors and analytic geometry, vectors in space, vector valued functions and motion in space. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

AP Precalculus **2329** **Term** **C** **10** **10-12**

Prerequisite: Algebra II

AP Precalculus prepares students for other college-level mathematics and science courses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple presentations. Students will learn the content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and date science. AP Precalculus gives students the opportunity to earn college credit and/or placement. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

AP Statistics **2240** **Term** **C** **10** **11-12**

Prerequisite: Algebra II

This course is an in-depth study of statistics for the highly motivated student. Its purpose will be to introduce the students to the major concepts and tools for collecting, analyzing, and drawing conclusions for data. Topics also included are probability, statistical inference, exploratory analysis, and planning statistical experiments. This course is recommended for (but not limited to) students who plan to major in college in the areas of engineering, psychology, sociology, health science, business, and mathematics. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

MATHEMATICS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

ELECTIVE MATH COURSES

Computing with Robotics (C-STEM) **2131** **Term** **D** **10** **10-12**

This course covers Common Core topics in Algebra2 while simultaneously teaching students programming and computational thinking. Students will make connections between verbal, numeric, algebraic, and graphical representations of functions and apply this knowledge as they create equations and inequalities that can be used to model and solve mathematical and real-world problems. Robotics labs will be interspersed throughout the course serving as an outlet for mathematical modeling. Topics covered include linear equations, inequalities, graphs, matrices, polynomials and radical expressions, quadratic equations, functions, exponential and logarithmic expressions, sequences and series, probability, and trigonometry.

Robotics 2 **2126** **Year** **G** **10** **10-12**

Students will continue their work from Robotics 1. They will work in engineering teams to design, build and test increasingly complex robots. This course will illustrate the engineering design process, the importance of integrating sensors, and complex machine control, autonomous control and multi robot systems. Students will be expected to solve challenges using physical robots and computer simulations. Students will learn advanced hardware and software techniques, as well as the mathematics and physics to understand them. Students will participate in local and regional competitions.

NON-DEPARTMENTAL

(applies towards 100 elective credits requirement for graduation)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Adult Living **5800** **Term** **10** **11-12**

This course is a part of the Family Consumer Science sector (Education, Child Development, Family Services). Content covered in this course will help students meet the challenges of daily life with confidence. Students will develop a range of skills related to interpersonal and family relationships, healthy living, getting, and keeping a job, resume and cover letters, management, housing and how to manage personal finances. This course focuses on the experiences, skills, and responsibilities students need to form healthy, mature, and successful relationships in their adult lives. Topics covered in this course also include dating, gender roles, crisis management, effective problem solving, communication skills, and the family life cycle.

AVID 9 **8710** **Term** **G** **10** **9**

AVID is an academic elective class that attempts to prepare students high school and college through a rigorous, tutorial program that focuses on writing skills, collaborative learning techniques, standardized test preparation, and note-taking, as well as awareness of college admissions and application procedures. Students will access instruction related to time management, communications, leadership, self-advocacy.

AVID 10 **8720** **Term** **G** **10** **10**

AVID is an academic elective class that attempts to prepare students high school and college through a rigorous, tutorial program that focuses on writing skills, collaborative learning techniques, standardized test preparation, and note-taking, as well a strong focus of college admissions and application procedures. Students will access instruction related to time management, communications, leadership, self-advocacy.

AVID 11 **8730** **Term** **G** **10** **11**

AVID is an academic elective class that attempts to prepare students high school and college through a rigorous, tutorial program that focuses on writing skills, collaborative learning techniques, standardized test preparation, and note-taking, as well a strong focus of college admissions and application procedures. Students will access instruction related to time management, communications, leadership, self-advocacy. Students generate individualized goals based on their postsecondary plans.

AVID 12 **8740** **Term** **G** **10** **12**

AVID is an academic elective class that attempts to prepare students high school and college through a rigorous, tutorial program that focuses on writing skills, collaborative learning techniques, standardized test preparation, and note-taking, as well a strong focus of college admissions and application procedures. Students will access instruction related to time management, communications, leadership, self-advocacy. Students generate individualized goals based on their postsecondary plans.

Academic Decathlon **8610** **Term** **G** **10** **9-12**

This class is for students of all abilities who are interested in preparing for, and competing in, Academic Decathlon and Science Olympiad. This class will focus on fielding winning teams through preparation and effort. Students who enjoy being part of a team should consider this class.

NON-DEPARTMENTAL

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Computer Science **4640** **Term** **G** **10** **9-12**

Computer Science is composed of a variety of topics related to computer programming and physical computing/robotics. Students will be exposed to the principles of computer coding, using languages such as C++ and python. Students will learn how to build electronics circuits based on an Arduino microcontroller. Students will gain experience in 3D design and printing, and engineering design. Students will use the skills learned to complete a project incorporating the use of microcontrollers, such as an Arduino or raspberry pi. Course may be repeated with permission of the instructor.

Introduction to Engineering **2425** **Year** **G** **10** **9-12**

Prerequisite: Algebra I Recommended

This course provides students with a foundation of the various engineering disciplines. This includes the study of the strengths of materials, electronic circuits, robotics, coding, mathematical analysis of test data, and engineering design. Assignments and projects will be from various fields of engineering including Aeronautical, Civil, Electrical, Mechanical and Robotics. Students will design and build cars, bridges, trebuchets, planes, robots, and various electrical circuits.

Introduction to Medical Terminology **5878** **Semester** **G** **5** **9-12**

This course is a prerequisite for most health career courses. The course is centered on the language of healthcare (Medical Terminology) through the study of anatomy and physiology. Emphasis is on providing students with a thorough understanding of body systems and their interrelationships. The course includes advanced medical terminology as applied to diseases, disorders, and medical interventions.

Library Support Period **5809** **Term** **10** **9-12**

Students will be able to remediate course work that they have failed. Students will also be able to use this period to work on Independent Study. Students may be enrolled in an online college course during this time. This course will be held in the Library on the campus the enrolled student attends.

Link Crew Leadership **7605** **Term** **G** **10** **11-12**

Link Crew is a high school orientation and transition program that increases freshman success. Members of the junior and senior class are trained to be Link Crew Leaders who act as positive role models, motivators, student mentors and teachers that help guide the freshman to discover what it takes to be successful during their high school transition. This class is a one-term course that combines high-level critical thinking, writing, and analytical skills with mentorship and entrepreneurial project experiences and implementation.

Peer Resource **5820** **Term** **G** **10** **10-12**

Selection is based on student application, oral interview, attendance, and academic screening by vice principals, counselors, staff, and instructor approval. This course is designed to teach students basic helping skills. These skills are used throughout the school year in a peer facilitator program. The program provides conflict management services and/or one-on-one counseling for students who have attitude, academic, preparedness, and/or attendance issues. Students and parents sign a contract agreeing to meet the expectations of the school site and of the California Association of Peer Programs. This class may be repeated for credit.

NON-DEPARTMENTAL

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Student Leadership	**8600**	**Term**	**G**	**10**	**9-12**

Open to all students with recommendation of instructor

This course is designed to give student body club and class officers an opportunity to work on student activities related to their elected responsibilities. Students will plan and implement some school dances, rallies, and other student activities such as spirit days and homecoming. This class may be repeated for credit.

Student Services **4765** **Term** **10** **11-12**

Open to juniors and seniors with the approval of the supervising staff member. A maximum of twenty (20) credits will be accepted toward graduation.

Student Tech Assistant **8865** **Term** **10** **9-12**

This course is for students who will assist the DST. Helping with devices and other technology related tasks.

Work Experience Education **5880** **Term** **G** **Variable/Max 20** **11-12**

2 periods

Prerequisite: ***Must have a job*** *and coordinator's approval*

Open to any junior or senior who is at least 16 years of age

Work Experience is an education program that allows you to earn credits for learning what takes place on the job. It utilizes community resources to teach job information, work habits, skills, and attitudes.

PHYSICAL EDUCATION

(40 credit graduation requirement)

Physical Fitness Test: all students in 9th grade will take the state mandated Physical Fitness Test (PFT)

Physical Education Exemption: Physical Education Exemption may be made by petition or medical excuse. Exemption for medical reasons require a medical note with doctor's signature giving a date on which physical activity may resume (Board Policy 6142.7).

The Physical Education graduation requirement is for each student to pass forty (40) credits for Physical Education. Juniors or Seniors may elect to take one of the Junior/Senior courses in Physical Education. Swimming is a part of the physical education program. A sound body leads to a sound mind.
Below is the uniform and shower policy for Physical Education:

1. P. E. uniforms are required for all grade levels. Uniforms may be purchased for a fee.
2. Each student is responsible for washing their P.E. uniform weekly and keeping their uniform in order.
3. A student's grade may be reduced for each day of non-participation or absences not made up.
4. Showers are highly recommended after each lesson.
5. Enrollment in advanced or upper level courses may require proficiency in lower level courses.
6. Each class will require a physical performance test and a written test at the completion of each unit.

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

9th GRADE COURSES

Physical Education 1 **2510** **Term** **10** **9**

This course is designed to align with the State PE Framework and CA model content standards. Instruction covers courses of study in the areas of: (1) The effects of physical activity on dynamic health, (2) Mechanics of body movement, (3) Aquatics, (5) Individual and team sports, and (6) Rhythms and dance. Course may include but is not limited to soccer, weight training, basketball, tumbling, badminton, physical fitness, softball, flag football, tennis, track and field, aerobics, volleyball, wrestling, self-defense, and swimming. Students will demonstrate knowledge and skill in each activity and must take a physical performance test at the end of each unit. Students will be required to complete the California State Physical Fitness Test.

Advanced PE 1 **2705** **Term** **10** **9**

This course is designed to align with the State PE Framework and CA model content standards. Instruction covers courses of study in the areas of: (1) The effects of physical activity on dynamic health, (2) Mechanics of body movement, (3) Aquatics, (5) Individual and team sports, and (6) Rhythms and dance. Per recommendation by PE teacher, this course may include but is not limited to, traditional, non-traditional and racquet sports. This course will also focus on body-building, cardiovascular endurance, muscular strength and endurance, as well as flexibility. Students are required to complete the California State Physical Fitness Test (PFT).

PHYSICAL EDUCATION

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

10th GRADE COURSES

Physical Education 2 **2740** **Term** **10** **10**

This course is designed to align with the State PE Framework and CA model content standards. Instruction covers courses of study in the areas of: (1) The effects of physical activity on dynamic health, (2) Mechanics of body movement, (4) Gymnastics and tumbling, (7) Team sports, and (8) Combatives. This course may include, but not limited to, units in team sports such as flag football, tennis, basketball, volleyball, soccer, badminton, softball, ultimate Frisbee, weight training, archery, physical fitness, golf, track & field, team handball, pickle ball, swimming, and aerobics. Students will demonstrate a knowledge and skill in each activity and must take a physical performance test at the end of the unit. This class may be repeated for credit.

Advanced PE 2 **2721** **Term** **10** **10**

This course is designed to align with the State PE Framework and CA model content standards. Instruction covers courses of study in the areas of: (1) The effects of physical activity on dynamic health, (2) Mechanics of body movement, (4) Gymnastics and tumbling, (7) Team sports, and (8) Combatives. Per recommendation by PE teacher, this course may include but is not limited to, traditional, non-traditional and racquet sports. This course will also focus on body-building, cardiovascular endurance, muscular strength and endurance, as well as flexibility.

11th – 12th GRADE COURSES

Physical Education 3 & 4 **2751** **Term** **10** **11-12**

This course may include, but is not limited to, non-traditional and racquet sports. Students will demonstrate knowledge and skill in each activity. Students are required to complete the California State Physical Fitness Test (PFT).

Aerobics **2730** **Term** **10** **11-12**

This is a fitness-for-life course with students being required to participate daily in Aerobic movement exercise. Students will learn about the importance of fitness in their everyday life and obtain knowledge on fitness for life. This class may be repeated for credit.

Athletic Physical Education **2830** **Term** **10** **11-12**

This course is designed for the 11 & 12th grade student athlete who desires to take a P.E. course beyond the regular school day and approved by the site principal. The daily regimen will be distance running, cross training activity, athletic conditioning, and weight training. This class may be repeated for credit.

Basketball Leisure **2515** **Term** **10** **11-12**

This is an introductory activity and participation course for all levels of skill in the fundamentals of basketball. This course is designed to introduce basic basketball skills, techniques, etiquette, and strategies. Emphasis will be placed on fundamentals, as well as the development and improvement of total fitness, and general knowledge about basketball for leisure time use.

PHYSICAL EDUCATION

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Body Conditioning **2710** **Term** **10** **11-12**

Course is designed for students and athletes with interest in body building, strength gain, toning, jogging, and rope jumping. Time is spent teaching proper nutrition, care of the body, and a basic knowledge of skeletal and muscular system and conditioning. This class may be repeated for credit.

Body Tone **2720** **Term** **10** **11-12**

This class is designed for those students who are interested in circuit training, aerobic conditioning, and weight training. Nutrition and body composition knowledge as well as basic anatomy will be the goal of this class. Cardiovascular endurance is emphasized, and students will power walk or jog for fitness. This class may be repeated for credit.

Fundamentals of Dance **2630** **Term** **10** **11-12**

This course is designed for students who desire to learn and actively participate in various dance styles, dance as an art form, and the cultural aspects of dance. Students will learn, create, and perform dances in various styles including jazz, ballet, tap, modern, street, as well as cultural and aerobic dances. Some field trips may require a small fee. This class may be repeated for credit.

Intro to Yoga **2520** **Term** **G** **10** **11-12**

This course is designed to introduce students to the benefits of yoga. Students will learn how to safely maneuver and access the basic postures, breathing techniques, and relaxation methods of yoga. Students will learn the benefits of stretching, moving, and breathing freely as they relieve built up stress, learning to relax, and ultimately gain more out of everyday life. The aim of this course is to promote total body health and to access the body's unused energy reserves.

Sports Conditioning **2950** **Term** **10** **11-12**

This course is designed to give student athletes the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the fundamentals of strength training, aerobic training, and overall fitness training and conditioning. We will also cover agility and flexibility. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

9th – 12th GRADE ALTERNATIVES

Administration of Justice (PE) **2725** **Term** **10** **10-12**

This course is geared for individuals interested in careers in the field of criminal justice. The class introduces individuals to fitness routines they may experience in basic training for law enforcement academies. Students will participate in rigorous workout activities that include weight training and free weightlifting. Outside activities will include running the obstacle course, participating in self-defense training, and working on the FATS simulator.

PHYSICAL EDUCATION

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
JROTC/P.E. (Junior Reserve Officer Training Corps)					
First Year	**2750**	**Term**	**G**	**10**	**9-12**
Second Year	**2760**	**Term**	**G**	**10**	**9-12**
Third Year	**2770**	**Term**	**G**	**10**	**10-12**
Fourth Year	**2780**	**Term**	**G**	**10**	**10-12**

Junior ROTC is a course given during regular school hours but includes many out-of-classroom activities. It helps students develop a combination of skills, knowledge, and inner strengths. It teaches leadership skills, physical confidence, and teamwork. It helps students develop personal pride by teaching study skills, test taking, and interviewing for jobs. It covers the basics in history, government, technology awareness and current events. JROTC offers co-curricular activities such as drill team, color guard, and JROTC summer camps.

Enrollment in the course after the first year is subject to the JROTC instructors' approval. It is open to both men and women. JROTC can be taken in place of physical education. Successful JROTC students also receive an advantage when applying for college and university ROTC Scholarships. This class may be repeated for credit.

Self-Improvement **2910** **Term** **10** **9-12**

Prerequisite: Recommendation of the counselor

Special physical needs could be temporary or permanent. The course includes units in hand-eye coordination, fitness, water activities, and the use of isometric and isotonic exercises. The class is designed for students recovering from injuries or illness on an individual basis working within the limitations prescribed by the physician. Evaluations based on the student's improvement, participation, and written tests.

SCIENCE

(20 credit graduation requirement; 10 credits from a Physical Science course, 10 credits from a Life Science course)

Science gives students the opportunity to look at our world and discover the wonderful mysteries it contains. Our science curriculum is divided into major categories: life sciences and physical sciences. The life sciences emphasize the study of the living portions of our world, whereas the physical sciences investigate the nonliving aspects of our world and beyond. Each of the two categories has several interesting class offerings. Each class includes laboratory activities designed to help increase interest and understanding.

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

LIFE SCIENCE COURSES

The Living Earth **3012** **Term** **D** **10** **9-12**

This Next Generation Science Standards aligned course centers on the biosphere and examines how it interacts with each of the other Earth systems. Students will be introduced to natural phenomena relating to ecosystem interactions and energy; history of Earth's atmosphere; evidence of evolution; inheritance of traits; structure, function, and growth of living things; and ecosystem stability and the response to climate change. The course also includes an engineering component where students will engage with major global issues at the interface of science, technology, society, and the environment. Students will be encouraged to use analytical and strategic thinking to define the problem, develop possible solutions and improve the design of their solutions.

Honors – The Living Earth **3013** **Term** **D** **10** **9-12**

This is a preparatory course for students that will later take AP Biology, Students will student the structure and function of organisms, the inheritance and variance of traits, matter and energy in organisms and ecosystems, the interdependent relationships in ecosystems, and natural selection and evolution.

AP Biology **3140** **Term** **D** **10** **10-12**

Recommendation: This is a second-year course and it is highly recommended that students have taken biology

This course aims to increase students' knowledge of living things and their environment. Course surveys life from cells through organ systems, individuals, populations and living communities of plants and animals. **Fee for all AP exams.**

Environmental Science **3015** **Term** **D** **10** **9-12**

Students will investigate ecology and how ecosystems are affected by human activities, population, nutrient cycling, food chains, food webs, and alternative energy sources. Throughout the course, students will identify and research careers, certifications, and post-secondary education and training requirements to pursue a variety of environmental and energy-related fields.

SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

AP Environmental Science **3145** **Term** **D** **10** **11-12**

This course will be one of the final courses in a two-year course sequence designed for students participating in the Environmental Science Pathway. This course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of this course is to provide students with the scientific principles, methodologies, and concepts required to understand the interrelationships of the natural world to identify and analyze environmental problems, and to examine alternative solutions for resolving or preventing them. This course will include a strong laboratory and field investigative component to complement the classroom component and allow students to learn about the environment through firsthand observation. This course will also prepare students to take the Advanced Placement Environmental Science exam where they may earn college credit. **Fee for all AP exams**.

Anatomy & Physiology **3245** **Term** **D** **10** **11-12**

This course is designed to give students a detailed understanding of the 11 major organ systems of the human body and how they maintain homeostasis through chemical and physical processes. For each system covered, students will learn the structures that comprise that system, explain their functions, and provide and explanation as to how they operate. Students planning careers in nursing, medicine and physical education will find this class of special value. Preference will be given to students in Health Science Program.

Physiology **3230** **Term** **D** **10** **11-12**

Prerequisite: Biology

Human physiology is a laboratory science designed specifically to acquaint mature students with the chemical and physical processes that animate and control their bodies. Students planning careers in nursing, medicine, physical education, and related fields will find this class of special value.

PHYSICAL SCIENCE COURSES

Introductory Physical Earth & Space Systems **3271** **Term** **G** **10** **10-12**

Fulfills: A year of physical science requirement for graduation only

This Next Generation Science Standards-aligned course focuses on understanding fundamental principles of physical science (physics and chemistry). Students will be introduced to natural phenomena relating to energy, matter, and forces in the context of Earth and space systems. The course also includes an engineering component where students will engage with major global issues at the interface of science, technology, society, and the environment.

Chemistry in the Earth System **3252** **Term** **D** **10** **10-12**

This Next Generation Science Standards aligned course focuses on understanding fundamental principles of chemistry as they relate to our Earth systems. Students will be introduced to natural phenomena relating to combustion; heat and energy in the Earth system; atoms, elements and molecules; chemical reaction; chemistry of climate change; and the dynamics of chemical reactions and ocean acidification. The course also includes an engineering component where students will engage with major global issues at the interface of science, technology, society and the environment. Students will be encouraged to use analytical and strategic thinking to define the problem, develop possible solutions and improve the design of their solutions.

SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Honors Chemistry in the Earth Systems **3240** **Term** **D** **10** **10-12**

Honors Chemistry in Earth Systems is a high school laboratory course that is designed to prepare students for both AP chemistry and post-secondary science classes. Honors Chemistry in Earth Systems offers a fast-paced, rigorous curriculum that challenges students to apply chemistry knowledge to predict chemical phenomena, design experiments, and provide solutions to complex problems. Students will integrate technology, mathematics, and chemical literacy into a wide range of chemistry topics that include, but are not limited to: periodicity, atomic structure, chemical bonding, gases, solutions, thermodynamics, acids and bases, equilibrium, kinetics, electrochemistry, organic chemistry, and nuclear chemistry with an emphasis on how these principles and phenomena interact with geologic, atmospheric, and oceanic features of Earth's systems.

AP Chemistry **3211** **Term** **D** **10** **11-12**

Recommended prerequisite: Chemistry

This course is designed to prepare students to pass the Advanced Placement Chemistry exam. All topics typically taught in a university freshman level chemistry course will be covered. All students enrolled in the class will be expected to take the AP exam during the month of May. **Fee for all AP exams.**

Physics in the Universe **3032** **Term** **D** **10** **10-12**

This Next Generation Science Standards aligned course focuses on understanding fundamental relationships that govern the behavior of our universe. Students will be introduced to natural phenomena relating to forces, energy conversion, nuclear processes, waves and electromagnetic radiation, and starts and the origin of the universe. The course also includes an engineering component where students will engage with major global issues at the interface of science, technology, society and the environment. Students will be encouraged to use analytical and strategic thinking to define the problem, develop possible solutions and improve the design of their solutions.

AP Physics 1 **3035** **Term** **D** **10** **11-12**

Recommended prerequisite: Algebra II

AP Physics I is an Algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power, mechanical waves and sound, and introductory simple circuits. Through inquiry-based learning, students will develop scientific, critical thinking and reasoning skills. **Fee for all AP exams.**

AP Physics 2 **3036** **Term** **D** **10** **11-12**

Recommended prerequisite: Algebra II

AP Physics II is an Algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics, thermodynamics with kinetic theory, PV diagrams and probability, electrostatics, electrical circuits with capacitors, magnetic fields, electromagnetics, physical and geometric options, quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. **Fee for all AP exams.**

SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

ELECTIVE SCIENCE COURSES

AP Computer Science Principles **2129** **Term** **D** **10** **10-12**

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Students will be given the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. **Fee for all AP exams.**

Astronomy **3270** **Term** **D** **10** **10-12**

Prerequisite: Core Science and Algebra I

This course is composed of topics in astronomy including the earth, moon and sun, the solar system, stars, constellations, the galaxy, the universe, cosmology, astronomical history, telescope building, light pollution, astrophotography, and space technologies. The class is experiment based requiring students to commit to long-term data collection and analysis.

Medical Biology **3246** **Term** **D** **10** **9-12**

This is the second course in a four-year sequence of courses designed for students participating in the Health Science Program. This course is designed to teach biology in the context of the most important living organism central to many health-related occupations, "the human body." This course will offer students a variety of opportunities to connect biology standards to various important health career topics. Students will engage in learning activities that include building and manipulation of models, operating health care equipment, labs that simulate work-place procedures and important body processes, medically related research projects, guest speakers from the medical field, and more. Preference will be given to students in Health Science Program.

Medical Chemistry **3235** **Term** **D** **10** **9-12**

Recommended prerequisite: Algebra I and one Science course

Medical Chemistry is the third course in a four-year sequence for students participating in the Health Science Program. The course is based on the California State Standards for Chemistry but emphasizes medical applications or contexts where possible. Students will engage in a variety of learning activities including labs, medically related research projects, field trips, and guest speakers. The major topics include atomic and molecular structure, chemical bonding, stoichiometry and chemical equations, dosage calculations for medications, gases, acids and bases, solutions, thermodynamics, reaction rates, chemical equilibrium, organic chemistry and biochemistry, and nuclear processes. Preference will be given to students in Health Science Program.

SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Principles and Design of Cyber - Physical Systems C-STEM	**2340**	**Term**	**D**	**10**	**9-12**

Prerequisite: Computing with Robotics

Fulfills: Third year of math graduation requirement if taken during junior or senior year.

Cyber-physical systems (CPS) are engineered systems that are built from, and depend upon, the seamless integration of computational algorithms and physical components. Students will utilize coding, electronics, and design to develop their understanding of CPS. The course includes the following eight units: Computer Programming, Electronics, Mathematical Modeling, Engineering Design, Programming, Communication, 3D Modeling and 3D Printing, and Robotics

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Sports Medicine **3225** **Term** **D** **10** **11-12**

This course will provide students with an opportunity for the study and application of the components of sports medicine including sports medicine related careers, prevention of athletic injuries, recognition, evaluation, and immediate care of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, first aid/CPR/AED, emergency procedures, environmental factors, nutrition, introductory sports psychology, human anatomy and physiology, therapeutic modalities and therapeutic exercise. Students from this class will also participate in the after-school Student Trainer program.

Zoology **3275** **Term** **D** **10** **9-12**

Zoology, the study of scientific life, builds on centuries of human inquiry into the animal world. This class is devoted to studying the invertebrates (animals without backbones) and the vertebrates (animals with backbones). Students will participate in dissection labs and other scientific discover-based laboratory exercises. The basic principles of the curriculum focus on the unity and diversity of animal life and the manner in which structure and function complement each other.

SOCIAL SCIENCE

(30 credit graduation requirement)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

9th GRADE SOCIAL SCIENCE COURSES

There are no state-mandated Social Science courses for 9th grade students.

10th GRADE SOCIAL SCIENCE COURSES

World History **1510** **Term** **A** **10** **10**

This course covers the past historical development of Europe, Asia, Africa, and America. Emphasis is placed on present problems in these nations and how they developed out of past events.

AP World History **1515** **Term** **A** **10** **10-12**

AP World History is offered as a class to challenge students preparing for college. The course will cover World History from 10,000 BCE to the present. Skills such as historical research, historical writing, debate, analytical reasoning, and co-operative projects will be used. The course will also prepare students to take the Advanced Placement exam in World History. All students enrolled in the class will be expected to take the Advanced Placement exam during the month of May. **Fee for all AP exams**.

AP European History **1520** **Term** **A** **10** **10**

AP European History is offered as a class to challenge students preparing for college. The course will cover European History from 1450 to the present. Skills such as historical research, historical writing, debate, analytical reasoning, and co-operative projects will be used. The course will also prepare students to take the Advanced Placement exam in European History. All students enrolled in the class will be expected to take the Advanced Placement exam during the month of May. **Fee for all AP exams.**

11th GRADE SOCIAL SCIENCE COURSES

U.S. History **1610** **Term** **A** **10** **11**

Course covers the political, economic, and social development of the United States. First semester begins with the Reconstruction Era and ends with World War I period. Second semester emphasizes recent American History.

Accelerated U.S. History **1640** **Term** **A** **10** **11**

The course is intended to better prepare students for AP U.S. History & Government. This course will expand the depth of knowledge and focus on the history of the United States from the colonial period to recent U.S. History. Specific themes and topics covered in this course include the following: the influence of Enlightenment thinkers on the drafting of the nation's founding documents postbellum immigration and industrialization, World War I, the Great Depression and the New Deal, World War II, the Civil Rights Movement, the Cold War, and other recent historical events. Through the study of major themes in U.S. History students will develop such academic skills emphasizing essay writing, data analysis, utilization of primary sources of information (documents). Students will write a research paper based upon one of the major themes of U.S. History.

SOCIAL SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
AP United States History	**1630**	**Term**	**A**	**10**	**11**

AP U.S. History is offered as a course to challenge students preparing for college. The course will cover American History from the colonial period to the present. Skills such as historical research, historical writing, debate, analytical reasoning, and cooperative projects will be used. The course will also prepare students to take the college Advanced Placement test in U.S. History. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

12th GRADE SOCIAL SCIENCE COURSES

American Government	**1712**	**Semester**	**A**	**5**	**12**

Course covers the structure, development, and authority of federal, state, and local government. Emphasis is placed on individual's rights and responsibilities connected with government.

Economics	**1711**	**Semester**	**G**	**5**	**12**

This course covers traditional topics common to most high school economic courses. Emphasis is placed on a comprehensive study of the consumer's role in the American economic system, an explanation of markets, prices, and competition and the role of government in a mixed economy. The course will also deal with such topics as the problems associated with maintaining a stable economy in the U.S., money, banking, monetary policy, and the role of labor-management relations. Consumer survival skills will be dealt with toward the end of the semester.

AP Government and Politics United States	**1720**	**Term**	**A**	**10**	**12**

This course will examine and analyze the foundations, history and organization of our institutions: courts, presidency, bureaucracy, congress, political participation, and freedoms inherent to the Bill of Rights. Emphasis is placed upon understanding the basic values of American politics. This course is an introduction of U.S. Government. Attention will be given to explaining what political scientists do, what they study and how they approach the world of politics. This course will prepare the student for the AP Exam. All students enrolled in this class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

AP Government and Politics Comparative	**1723**	**Term**	**A**	**10**	**11-12**

This course is designed to provide students with the conceptual tools necessary to develop an understanding of some of the world's diverse political structures and practices. Students will examine six countries in detail: China, Great Britain, Russia, Mexico, Nigeria, and Iran. These countries are taught because they are excellent examples of six core topics of a comparative course. These topics include methodology, power, institutional structure, civil society, political/economic change and public policy. **Fee for all AP exams.**

AP Macroeconomics	**1714**	**Term**	**G**	**10**	**12**

AP Macroeconomics focuses on the principles of economics that apply to economics systems as a whole. The course places emphasis on the study of national income and price level determination. In addition, the course will help students understand principles such as economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. **Fee for all AP exams.**

SOCIAL SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

AP Microeconomics **1715** **Term** **G** **10** **12**

Microeconomics examines the behaviors of individual businesses and individual households in economics decision-making. As our world becomes interconnected through technological advances, an awareness of basic economic theory becomes imperative for the active citizen. Consumers and producers, as well as national economies, rely on economic information for their decision making. The course is intended to meet the needs of a variety of students, from those intending to pursue college work in business and seeking a firm foundation in theory, to those planning to join the labor force directly out of high school and wanting to understand their role in the national economy. All students enrolled in class will be expected to take the AP Exam during the month of May. Students passing the AP Exam may qualify to receive college credit. **Fee for all AP exams.**

AP Psychology **1751** **Term** **G** **10** **11-12**

This course covers the development of human behavior from infancy to adult. It examines the states of consciousness, learning, child development, personality, personality disorders and statistical analysis. An emphasis will be placed on the four perspectives of psychology: the psychodynamic; behavioral; cognitive; humanistic-phenomenological. Psychological methodology will be stressed along with the development of research and writing skills. The curriculum follows most college survey courses and as outlined in the AP course description for Psychology. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

ELECTIVE SOCIAL SCIENCE COURSES

AP Human Geography **1514** **Term** **A** **10** **9-12**

This course is equivalent to an introductory college-level course in human geography. Students will be introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organizations and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. **Fee for all AP exams.**

Ethnic Studies **1740** **Term** **G** **10** **9-12**

Ethnic Studies is an interdisciplinary course that uses a comparative and historical perspective to examine the languages, values, and voices of diverse groups within the United States. Using the skills and knowledge under the Common Core Standards for History/Social Studies and California State Social Science Framework students will investigate the practice of naming and being named, the intersection between ethnicity, culture, nationality, and gender, and the historical, economic, and personal consequences of oppression and resistance. Students will also learn how the social construction of identity is created, contested, and altered by historical and economic processes, using academic language development strategies and critical historical thinking skills. Emphasis will be on African-Americans, Asian/Pacific Islanders, Chicanos/Latinos, Native Americans, and histories of the San Joaquin Valley, other groups are also discussed relevant to our students.

SOCIAL SCIENCE

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
History & Film	**1645**	**Term**	**G**	**10**	**11-12**

This course examines twentieth-century American history, culture, and society through film. Students will learn how to read American films as cultural texts that help us better understand our history and culture. We will critically analyze how American history and culture are portrayed in the popular film. Students will develop an appreciation for how films not only reflect history and culture, but also how films might critique, reshape, and impact the "real world." Students will be asked to understand film from not only their own personal perspective, but also the perspective of a wide range of film audiences, according to gender, class, race, religion, and political orientation. By watching, discussing, and writing about these films, we will examine how films create a window into modern American society.

History of American Sports	**1650**	**Year**	**G**	**10**	**9-12**

This history elective class will examine the development of sport(s) in America. Our historical study will focus on helping students gain a better understanding of the inner relationship that sports has had on social, economic, cultural and political forces that are at work in the United States, as well as the world. We will examine the historical context as well as the significance of gender, race, ethnicity, and social class. We will do our historical investigation through readings, primary sources, audio and visual materials, as well as class discussion.

Human Rights & Contemporary Society	**1770**	**Term**	**G**	**10**	**11-12**

This course investigates examples of genocide in the twentieth and twenty-first centuries, including the Holocaust, Armenia, Bosnia, Cambodia, and Rwanda. Students will research the terms genocide, crimes against humanity, and war crimes and explore them through the lens of historical analysis. Students will examine aspects of social psychology to learn about human behavior while discovering topics such as hate crimes, exploitation, slavery, women's rights and torture. This course requires significant reading, writing, and reflecting.

Psychology	**1750**	**Term**	**G**	**10**	**11-12**

This class is recommended for those students considering careers in education, law enforcement, social work, and business. In this introductory course in psychology, students will focus on the scientific study of human development, learning, and personality. Students will explore the implications of psychology to everyday life and will learn about the various careers associated with this field of study.

World Geography	**1513**	**Term**	**G**	**10**	**9-12**

World Geography is a course designed to provide students with a basic understanding of and interrelationship between physical and human geography. Instruction is in accordance with the content standards set forth by Manteca Unified School District social studies.

VISUAL & PERFORMING ARTS

(applies towards 100 elective credits requirement for graduation)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

ART COURSES

Introduction to Art **6000** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Introduction to Art is intended to develop an understanding and appreciation of the basic elements and principles of art, color design, and art history. Through classroom application, students will explore a variety of media which may include pencil, pastels, watercolor, ink, papier-mâché, and clay. Students will develop a portfolio of their work.

Advanced Art **6010** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Successful completion of Introduction to Art with a B or higher and/or instructor approval

Advanced Art is a continuation of Introduction to Art through drawing, painting, sculpture, and the study of art history. Students will explore various media which may include charcoal, watercolor, ink, and acrylics. Students will develop individual portfolios of their work. This course may be repeated for credit with instructor approval.

AP Art History **6051** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Advanced Placement Art History is a one-year course divided into two semesters. It provides a broad overview of the history of art chronologically from prehistoric art to the 1990's. Due to time constraints, the course focuses primarily on Western Art, but will provide some coverage on non-European art. It is intended to provide a familiarity with the development of art, its major movements and figures, and its relationship to the historical period in which it was created. In addition, this course is designed to help students' encounters with art, whether historical or contemporary, to become more meaningful, comprehensible, and enjoyable. The curriculum follows most college survey texts as outlined in the AP Course Description for Art History. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

AP 2D Art & Design **6050** **Term** **F** **10** **11-12**

2 Sequential term course

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: One-year introductory course and a minimum of one-year advanced course with accepted application to the program

This is a third-year studio art course with college level expectations. Primary emphasis will be to produce art that will showcase their skills and creativity in drawing, painting, color and design, and sculpture. All students enrolled in this class will be expected to submit an AP Portfolio either in Drawing, 2-Dimensional Design, or 3-Dimensional Art. All students are expected to submit their portfolio in May or date requested by the College Board. Enrichment fee does not include AP portfolio fee. This course may be repeated for credit with instructor approval. **Fee for all AP exams.**

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

AP 3D Art & Design **6052** **Term** **F** **10** **11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: One-year Ceramics and minimum one year of Advanced Ceramics or one year of Introduction to Art with one year of Advanced Art, and accepted application to the program

This is a third-year studio art course with college level expectations. Primary emphasis will be for students to produce art that will showcase their skills and creativity using clay construction, drawing, painting, color, and design theory. All students enrolled in this class will be expected to submit an AP Portfolio in 3-Dimensinal Art. All students are expected to submit their portfolio in May or date requested by the College Board. Enrichment fee does not include AP Portfolio fee charge by the College Board. This course may be repeated for credit with instructor approval. **Fee for all AP exams.**

Ceramics **6030** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Ceramics presents basic techniques and history of hand-built construction, design applications, decoration, and glazing. Students will demonstrate a knowledge of the basic techniques by submitting required projects and a portfolio.

Advanced Ceramics **6035** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Successful completion of Introduction to Ceramics with a B or higher and/or instructor approval

Advanced Ceramics is a continuation of Introduction to Ceramics. Students will further explore hand-build constructions, the wheel, decoration, glazing, sculpture, and art history. Students will develop individual portfolios of their work. This course may be repeated for credit with instructor approval.

Digital Photography **6215** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course introduces students to the fundamentals of digital photography while expanding the student's knowledge of basic digital photography. Students will learn proper camera technique, create multimedia presentations, explore various software programs to enhance, alter, and print photographs. Students will create and present a personal portfolio.

Advanced Digital Photography **6220** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Successful completion of Digital Photography with a B or higher and/or instructor approval

Advanced Digital Photography expands the process of image capture, alteration, combination, and correction by developing a thematic-artistic approach to student-and-instructor-generated projects. Students will emphasize quality of image and visual communication of thoughts and feelings through dynamic imagery using the elements of art and the principles of design, as well as historical/professional examples for self-evaluation and reflection to develop a strong portfolio of their work. This course may be repeated for credit with instructor approval.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Photography **6200** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Photography is designed to explore the black and white photographic process and history as a method of creative visual communication. Students will learn photographic composition which includes the elements and principles of design. Students will take, develop, print, and critique photographs while developing a personal portfolio.

Advanced Photography **6210** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Successful completion of Photography with a B or higher and/or instructor approval

Advanced Photography students will expand their knowledge of the basic concepts of photography to develop more sophisticated projects. More emphasis will be placed on lighting conditions, camera techniques, and darkroom control. Students will develop a personal portfolio. This course may be repeated for credit with instructor approval.

Color & Design **6020** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Introduction to Art

Students will work in cartooning, fashion design, graphic design, technical mechanical drawing, and automotive design using pen and inks, airbrush, colored pencils, watercolor, and computers. All students enrolled in this class are expected to develop a portfolio. This course may be repeated for credit with instructor approval.

Computer Graphics and Animation **6115** **Term** **F** **10** **9-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Computer Graphics & Animation introduces and refines layout, font usage, and illustration techniques based on the elements and principles of art, color, design, and art/design history, as well as image creation, motion sequencing, and multimedia presentation. Students will explore and combine various software programs and hardware applications to create an individual portfolio of their work. This course may be repeated for credit with instructor approval.

Computer Animation Production **6105** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Prerequisite: Computer Graphics & Animation

Computer Animation Production explores the complete process of creating computer-generated animation covering story creation, character/scene design, storyboarding, modeling forms, animating movement, expressive lighting, special effects, rendering, sound design, and editing. These projects will be based on historical/professional examples, state standards, as well as the elements of art and the principles of design. Students working individually and/or collaboratively will combine both traditional and computer-generated techniques using various software applications to create a short-feature animated movie for submission to film festivals.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Three-Dimensional Art **6100** **Term** **F** **10** **10-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

Recommended Prerequisite: Introduction to Art or Ceramics

Students will explore techniques of three-dimensional design using a variety of materials which may include papier-mâché, wood, wire, fiber, stone, leather, stain glass, clay, and metal. Students will develop an individual portfolio. This course may be repeated for credit with instructor approval.

Video Production & Broadcasting **6270** **Term** **F** **10** **11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course introduces students to the fundamentals of video production both in front of and behind the camera. The focus of the course will be to produce the morning school announcements to be aired throughout the school. Students will also participate in various individual and group projects to develop skills in all the stages of video production. This course may be repeated for credit with instructor approval.

Video Editing **6265** **Term** **G** **10** **11-12**

A cost may be associated for enrichment activities; to be determined by the instructor(s)

This course emphasizes professional ethics, professional processes of photography, and professional editing techniques for the video production profession. The course included visual and audio concepts in preparation for a career in the video industry. It requires students to address essential questions of specific production project units while applying their knowledge and skills with reference to the Common Core reading, writing, listening, and speaking standards.

CHORAL

Choir **6400** **Term** **F** **10** **9-12**

Choir is an introductory course in choral music performance. Students will practice and perform various choral styles in two and three-part harmony, develop sight reading skills, and an understanding of choral music heritage. Open to new students at semester. Attendance at performances is mandatory.

Intermediate Choir **6420** **Year** **F** **10** **9-12**

This course is a continuation of Choir, in which music theory and choral techniques are introduced and explored. This course allows the second-year student to further explore vocal technique and range through ear training and music theory. Emphasis will be on matching pitch, reading music, and using appropriate choral technique. Students are expected to sing in a variety of musical genres. Since this is a performance-based class, performances will be during school as well as after school hours, which are mandatory and graded.

Advanced Choir **6430** **Term** **F** **10** **9-12**

Prerequisite: Choir

Advanced Choir will study various advanced choral styles in three-and-four-part harmony. Students will receive instruction in music theory and choral music heritage to develop an appreciation of musical styles. Attendance at performances is mandatory. This course may be repeated for credit with instructor approval.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

INSTRUMENTAL

Band **6310** **Term** **F** **10** **9-12**

Students will be taught basic music theory, terminology, history, and performance techniques in an ensemble setting. The serious student may, with permission of the instructor, perform with the advanced band as well. More expensive instruments may be provided. Attendance at performances outside of regular school hours will be required, such as the marching band and concerts.

Beginning Band **6317** **Year** **F** **10** **9-12**

Students will learn basic music theory and technical musicianship skills. This performance-based class is dedicated to students who have never played an instrument before. Students are encouraged to research their desired instrument prior to signing up for the class. Instruments taught in the course are primarily, but not limited to, flute, trumpet, horn, baritone, tuba and percussion (mallets/snare/timpani). Contact teacher ahead of time if an instrument needs to be borrowed. If using your own instrument, make sure that it has been turned and in good working order prior to start of class. Students are expected to perform, not only for their peers during class, but also in a public performance at least twice within the term. Public performances take place outside of the regular school day. Students will be expected to practice their instrument outside of school hours.

Percussion Ensemble **6316** **Term** **F** **10** **9-12**

A one term course where students learn how to play percussion instruments, including in a drumline for athletic events, school rallies, and in a traditional concert percussion section that accompanies the school band and orchestra. Students will experience a wide variety of instruments and types of music. This course requires an investment of time outside of normal school hours. Performances are mandatory.

Concert Band **6315** **Term** **F** **10** **9-12**

Students will be taught basic music theory, terminology, history, and performance techniques in an ensemble setting. Emphasis will be on preparing and performing Concert Band music. Attendance at performances and rehearsals outside of school hours will be required. Students will be expected to practice outside of school hours.

Advanced Band **6320** **Term** **F** **10** **9-12**

Prerequisite: Band or Concert Band and approval of the instructor

Students will be taught advanced music theory, terminology, history, and performance techniques in an ensemble setting. More expensive instruments may be provided. Attendance at performances outside of regular school hours will be required, such as the marching band and concerts. This course may be repeated for credit with instructor approval.

Jazz Band **6330** **Term** **F** **10** **9-12**

Prerequisite: Approval of the instructor

Jazz Band will emphasize performance techniques, music theory, history, and improvisation in jazz and related styles. More expensive instruments and equipment may be provided. Attendance at performances outside of regular school hours will be required. This course may be repeated for credit with instructor approval.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Orchestra **6350** **Term** **F** **10** **9-12**

Through performing on string instruments, students will explore a diverse repertory of music. This course will focus on developing basic musicianship and performance skills. Musicianship will be emphasized at every level of learning. Students will be taught to play musically and to listen for expressive elements in music. Finally, students will be encouraged to participate in solo and small ensemble experiences at every level. Attendance at performances outside of regular school hours will be required.

Advanced Orchestra **6355** **Term** **F** **10** **9-12**

Prerequisite: Prior orchestra experience and/or approval of the instructor

Through performance on a string instrument, students will earn advanced music technique, theory, terminology, and history. Students will further their study on violin, viola, cello, or contrabass in an ensemble setting. Attendance at performances outside of regular school will be required. More expensive instruments (cello, contrabass) may be provided. This course may be repeated for credit with instructor approval.

Piano **6460** **Term** **F** **10** **9-12**

This course will teach beginning and intermediate levels of piano instruction. Students will work at their own pace and will learn many styles of music. Students will explore music heritage and learn music theory. Students will perform at a mandatory piano recital.

Advanced Piano **6470** **Term** **F** **10** **9-12**

Prerequisite: Prior piano instruction and/or approval of the instructor

Advanced student will work at their own pace and will learn many styles of music at a greater level of difficulty. They will continue the exploration of music heritage and will learn complex music theory, chording, critiquing, and composition. They will create their own compositions. Students will perform at a piano recital. This course may be repeated for credit with instructor approval.

Guitar **6450** **Term** **F** **10** **9-12**

The class will cover beginning instruction on the guitar including open chords, barre chords, accompaniment techniques, music fundamentals, music theory, performance techniques, and learning how to read standard music notation, chord charts, lead sheets, and tablature. Advanced students may have the opportunity to explore more challenging literature and techniques. Students are strongly encouraged to provide their own guitar.

Mariachi **6335** **Term** **F** **10** **9-12**

This course is designed for students wishing to learn to play traditional instruments (violin, vihuela, guitar, guittarron, trumpet and voice) in the Mariachi style. Previous experience in music is helpful, but not required. Students will learn to demonstrate a variety of the basic Mariachi styles, vocal and instrumental techniques and basic note-reading skills required to become a successful musician. Areas of concentration include correct posture, aural skills, intonation, rhythmic patterns, melody construction, tonality inherent to Mariachi music, musical forms, improvisation, historical context, and performance techniques. The importance of sustained group and individual effort is stressed. A progression of fundamental and technical proficiency is expected. Performances outside of class time may be required.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Music Theory & Composition **6340** **Term** **F** **10** **9-12**

Prerequisite: Approval of the instructor and a basic understanding of music notation

This course is designed to give students useful, practical knowledge, and experience that will help them prepare for further musical pursuits. A student who successfully completes this course should be prepared to confidently enter a college or university Freshman-level theory class. Course content will include: the treble and bass clefs, basic rhythmic notation and reading, major and minor key signatures, whole and half steps, simple triads, and basic musical terminology. Students will compose their own music and perform in class. Outstanding compositions may be considered for public performance. This course may be repeated for credit with instructor approval.

AP Music Theory **6345** **Term** **F** **10** **9-12**

Prerequisite: Approval of the instructor and understanding of music notation and performance

Concurrent enrollment in a music performing ensemble class (band or choir) is highly encouraged and will be required in most cases. This course is designed to parallel a college freshman level music theory class. The course is designed to build upon prior knowledge to develop skills that will lead to a thorough understanding of music theory and composition. Students are prepared to take the AP Music Theory exam and/or confidently enroll in college level music theory classes upon completion of this course. Student enrolled in this course are expected to take the AP Music Theory test offered each May. **Fee for all AP exams.**

THEATRE

Beginning Dance **6442** **Term** **F** **10** **9-12**

This course will provide students with dance aptitude with the opportunity to receive training in a variety of dance styles. Techniques in ballet, modern, and jazz dance will be covered. Other dance styles, such as hip-hop and multicultural forms, may be included. Students will learn some of the basics of choreography and have the chance to make their own dances. Basin dance history and dance critique skills will also be studied in this Beginner Dance course. As the final test for the course, all of the students will have to take part in the dance concert.

Introduction to Theatre **6240** **Term** **F** **10** **9-12**

Introduction to Theatre provides the student with knowledge of theatre heritage and stage terminology and acting skills. The student will perform original scenes, read plays, participate in plays, and keep a learning journal. The student will be asked to perform publicly or to participate in festivals or competitions.

Intermediate Theatre **6250** **Term** **F** **10** **9-12**

Prerequisite: Introduction to Theatre, and/or auditions

Intermediate Theatre is a performance-oriented course that allows the second-year student the opportunity to enhance his/her skills. The class deals with techniques of scene study, audition materials, theatre heritage, and one-act/full length plays. The course will stress the importance of physical and vocal preparation for the actor and exposure to the production aspects of the theatre which will include makeup, costuming, and set design. Students will keep journals and write play evaluations and scripts. This course may be repeated for credit with audition and permission of instructor.

VISUAL & PERFORMING ARTS

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
Advanced Theatre	**6260**	**Term**	**F**	**10**	**10-12**

Prerequisite: Intermediate Theatre and/or auditions

Advanced Theatre students will learn terminology related to advanced scene study and theatrical production. The student will learn aspects of musical theatre, techniques of preparing audition materials, write original scripts, critique student video performances, direct scenes, and work with the techniques of production. Theatre heritage will be explored through reading, viewing, and performing. Students will write play evaluations and scripts. Advanced students will be required to do public performances. This course may be repeated for credit with audition and permission of instructor.

Musical Theatre I	**6263**	**Term**	**F**	**10**	**9-12**

Recommended Prerequisite: Choir

Musical Theatre is carefully designed to nurture students across a wide range of interests and abilities. Students will gain foundational skills onstage and backstage, exploring the ways in which music is presented in formal, informal and theatrical environments. All musical theatre students will acquire a basic knowledge that produces well-rounded performances artists through an interdisciplinary study of singing, acting and movement, and requires students to participate in performances for outside audiences.

Musical Theatre II	**6264**	**Term**	**F**	**10**	**9-12**

Recommended Prerequisite: Musical Theatre I and/or auditions

Musical Theatre is designed to refine performance skills on stage and backstage, exploring the ways I which music is presented in formal, informal, and theatrical environments. All Musical Theatre II students will build upon the foundational skills gained in Musical Theatre I and continue to build skills through an interdisciplinary study of singing, acting, and movement. Students at this level are required to perform in formal environments featuring The National Anthem and other choral pieces demanding complex harmonies, present in informal settings requiring performances of contemporary music, and perform for outside audiences across a wide range of musical styles in a theatrical setting.

Technical Theatre & Design	**6275**	**Term**	**F**	**10**	**9-12**

This course is an in-depth study of set, costume, and make-up design for Theatre. Students will study technical theatre in the context of full-scale productions, creating design sketches, ground plans, formal renderings, color charts/swatches, and models. Students will study the history of theatre architecture and stage design, from Classical Greece to contemporary spaces. Students will study the history of costume design, be expected to correctly identify styles across time and culture and will be involved in the practical application of costume design as related to production. Make-up techniques and special effects will also be explored. Students will work in backstage positions during school productions and will be given priority for placement on stage crew for extra-curricular productions.

WORLD LANGUAGES

(applies towards 100 elective credits requirement for graduation)

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

Spanish 1 **4110** **Term** **E** **10** **8-12**

Spanish I is an academic college preparatory elective which requires verbal and written participation and reading comprehension. Students are required to communicate in the target language in both small groups and individually through listening and speaking activities. The instructor will use target language in both lecture and discussion.

Spanish 2 **4120** **Term** **E** **10** **9-12**

Prerequisite: Spanish I or approval of the instructor

This is a college preparatory, advanced beginning course which emphasizes communication, culture, comparisons of language with connections across curriculums and communities. It is an intense academic elective, which requires class participation including performing within a classroom setting. The student is exposed to more Spanish by the instructor, his/her peers and listening/speaking activities.

Spanish 3 **4130** **Term** **E** **10** **10-12**

Prerequisite: Spanish II or approval of the instructor

This is a rigorous college prep course which applies and extends the grammatical and cultural concepts taught in Spanish II. Students will be required to communicate and to make connections and comparisons between Hispanic cultures and their own. There will be projects where the students will be required to draw upon community and technological resources for their presentations.

Spanish 4 **4140** **Term** **E** **10** **10-12**

Prerequisite: Spanish III or approval of the instructor

Spanish IV is a highly demanding course that builds upon the course work of the previous levels (Spanish I, II, and III). Students will be expected to develop and demonstrate communication skills in Spanish by individual and group presentations, research and analytical essays in Spanish, and comparative cultural studies.

Spanish for Spanish Speakers **4160** **Term** **E** **10** **9-12**

This class is about writing and understanding the Spanish language and culture. It includes the study of the grammar and orthography of this language, the history and different cultures inside of the Spanish speaking countries, and the interpretation of a variety of topics and concepts integrated with the core curriculum, such as history, government, science, economics, and literature.

Spanish for Spanish Speakers 2 **4170** **Term** **E** **10** **9-12**

Prerequisite: Spanish for Spanish Speakers I or approval of the instructor

In Spanish for Spanish Speakers II students further develop their Spanish language skills with a deeper mastery of grammar and dialog. Students also gain a broader knowledge of the culture of various Spanish-speaking countries. The course expands the aspects of the Spanish world, including situational language usage and interpretation of a variety of topics and concepts that form the core curriculum including history, art, and government.

WORLD LANGUAGES

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES

AP Spanish Language & Culture **4150** **Term** **E** **10** **10-12**

Prerequisite: Spanish III, Native Speakers Spanish II or approval of the instructor

This is a very demanding and fast-paced advanced course in Spanish language and culture. Students study advanced vocabulary and grammatical structures through literature and authentic cultural readings. Students develop a deeper awareness of the cultures of the Spanish-speaking world through reading, listening, speaking and writing. Students are required to use Spanish in many writings, listening, speaking, and reading activities. Throughout the course, students work on developing their Spanish communication skills in preparation for the exam. All students enrolled will be expected to take the AP Spanish Language and Culture exam in the month of May. **Fee for all AP exams.**

AP Spanish Literature & Culture **4155** **Term** **E** **10** **11-12**

Prerequisite: AP Spanish Language & Culture

The AP Spanish Literature course provides a perfect curriculum for college bound students to learn to read critically, write literary analysis, speak clearly, and become acquainted with the characteristics of major literary movements in the Spanish-speaking world. The works are both accessible and interesting and provide an opportunity to reinforce Spanish language skills. Course activities provide students with the opportunity to accomplish an accurate reading of literature in Spanish, in addition to the ability to comprehend formal and informal spoken Spanish, to compose expository passages, and to express ideas orally with fluency and accuracy. This course is conducted nearly 100 percent in Spanish. **Fee for all AP exams.**

French 1 **4210** **Term** **E** **10** **9-12**

French 1 is an academic college preparatory elective which requires verbal and written participation along with reading comprehension. Students are required to communicate in French in both small groups and individually through listening and speaking activities. The instructor will use the language in both lecture and discussion.

French 2 **4220** **Term** **E** **10** **9-12**

Prerequisite: French 1 or approval of the instructor

This is a college preparatory course which emphasizes communication, culture, comparisons of language, connections across curriculums and communities. It is an intense academic elective which requires class participation including performing within a classroom setting using the language. The student is exposed to French by the instructor, his/her peers through listening/speaking activities.

French 3 **4230** **Term** **E** **10** **10-12**

Prerequisite: French 2 or approval of the instructor

This is a rigorous college prep course which applies and extends the grammatical and cultural concepts taught in French 2. Students will be required to communicate in the language and to make connections and comparisons between French cultures and their own. There will be projects where the students will be required to draw upon community and technological resources for their presentations.

WORLD LANGUAGES

COURSE NAME	COURSE#	TERM	UC/CSU A-G	CREDITS	GRADES
French 4	**4240**	**Term**	**E**	**10**	**10-12**

Prerequisite: French 3 or approval of the instructor

French 4 is a highly demanding course that builds upon the coursework of the previous levels (French 1, 2, and 3). Students will be expected to develop and demonstrate communication skills in French by individual and group presentations, research and analytical essays in the language, and comparative cultural studies.

AP French Language & Culture	**4250**	**Term**	**E**	**10**	**11-12**

Prerequisite: Completed French 3 or approval of the instructor

This course focuses on four aspects of communication: listening, speaking, reading, and writing. It also requires a high level of commitment and is conducted entirely in French. Students should expect to study outside of the class. Students will learn advanced grammar concepts, read authentic French materials, take part in group discussions, and write essays. All students enrolled in class will be expected to take the AP Exam during the month of May. **Fee for all AP exams.**

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