



# Kimball High School

## Medical & Health Services Academy (MHSA)

Overview  
Opportunities  
Leadership  
Classroom Activities  
Field Trips  
Job Shadowing

Graduates  
Application  
Four-year plan  
Course Selection  
Other Steps  
Q&A

November 2022



Kimball High School

ABOUT US

INFORMATION

ACADEMICS / PROGRAMS

ACTIVITIES / ATHLETICS

PUBLICATIONS

PARENT / STUDENT

## MEDICAL AND HEALTH SERVICES ACADEMY



Medical and Health Services Academy (MHSA) is a small learning community within John C. Kimball High School. Our purpose is to meet the needs of our students by preparing them for career and college readiness in the health services community by providing relevant student-driven integrated learning opportunities.



**Assistant Principal**  
Maureen Riley  
[mriley@tusd.net](mailto:mriley@tusd.net)



**MHSA Coordinator**  
Joell Russell  
[jrussell@tusd.net](mailto:jrussell@tusd.net)



**MHSA Counselor**  
David Silva  
[dsilva@tusd.net](mailto:dsilva@tusd.net)

### Dates to F

CPR Trainin  
school clos  
for next year

See Special

### Announce

Congratula  
officers! Pl  
Leadership

If you are in  
opportunity  
events page

# Who are we...

# We are educators that are passionate about guiding and preparing students for the career of their dreams.

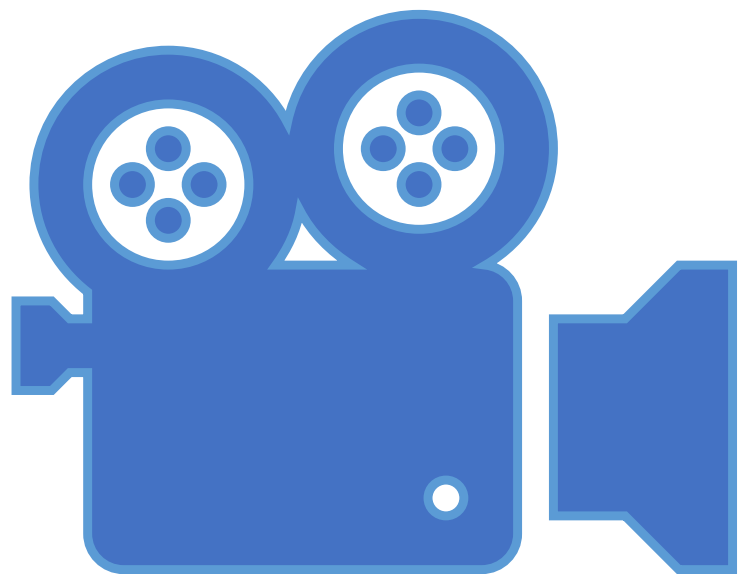
# Examples of careers in the Medical Field you will be prepared for by the end of this program:

- Surgeons
- Anesthesiology
- Orthodontist/ Dentist
- Veterinarian
- Audiologist
- Pediatrics
- Genetics
- Nursing
- Clinical Nurse Specialist
- Dental Assistant/Hygienist
- Physician Assistants
- Surgeon Assistant
- Radiologist
- Physical Therapy
- Dietician/Nutrition
- EMT
- Pharmaceutical



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## Meet Our MHSA Leadership Officers (2020)

Student Video MHSA  
Leadership Club

-

<https://www.youtube.com/watch?v=Gkt86tZgsoQ&feature=youtu.be>



# NOTE TECHNIQUES

## Science News Article Review

Choose an article.

How do the major articles published and found in print?

While Reading the Article... fill in the first two columns.

After reading... discuss with your partners and come up with further questions about the quotes to complete the 3rd column.

Example



While Reading the Article... What assumptions does the author make? What do you agree with in the article? What do you want to argue in the text? What parts of the text do you want to apply to?

Example

While Reading the Article... Choose one of the following note taking techniques.

# CPR


- Cardiopulmonary Resuscitation, or CPR, is an emergency procedure that combines chest compressions, usually with artificial ventilation.
- CPR can double or even triple the chances of a persons survival after cardiac arrest.
- CPR is important because it keeps the blood flow active, which extends the opportunity for a successful resuscitation when a medical staff arrives at the scene.
- CPR is an important part in the AHA's\* chain of Survival
- CPR on an adult is 30:2 ratio of compressions to breaths.

# FAST FOOD NATION

## McDonald's

Ray Kroc's Story



### Who is Ray Kroc?

- Was born on October 5, 1902 in Oak Park, Illinois.
- American businessman who founded McDonalds at age 52.
- Gained exclusive marketing rights to Maximilian.
- One day, Kroc was fascinated by service at a small restaurant and wanted to be part of the business.
- Once meeting the McDonald brothers, Kroc was given rights to sell the McDonalds method.

### McDonald's Popularity

- First restaurant opened in Des Plaines, Illinois on April 15, 1955.
- McDonald's is one of the

### The Food

- Very affordable
- cheap prices bring many consumers
- At most takes ten minutes to prepare.

### The Job

- Hires one million workers annually in the U.S.
- Employees receive an hourly

# MHSA Algebra I

## Missing Person

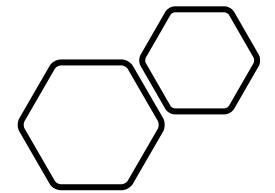
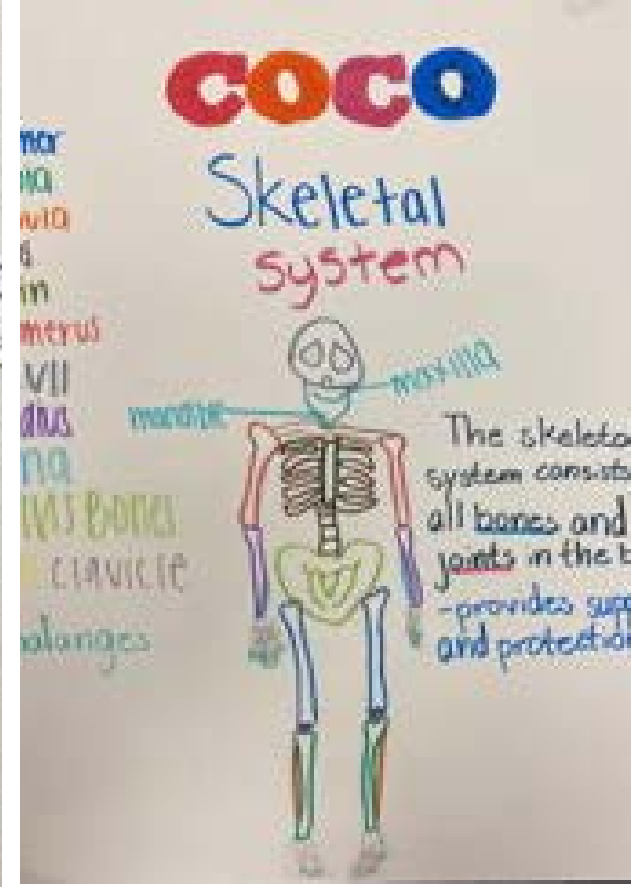
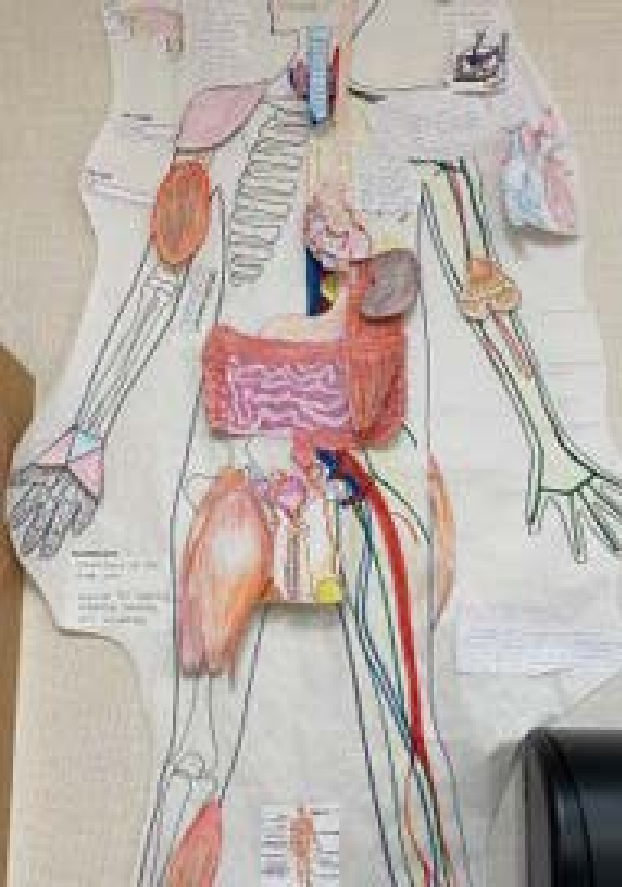
tying medical aspects into math (Algebra I)

- students use algebra by:
  - measuring length of bones
  - using formulas
  - Finding height by multiplying by length
  - graphing height to find line of best fit
- uses given information to calculate who best fits description of missing person

Various Projects throughout our courses lead to practical application of what students learn.

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English, Math, Economics, History



Health Concepts, Medical PE, Medical Terminology, Human Physiology



# BONE DENSITY & BRIDGE ENGINEERING

**Prosthetic Limbs**

Prosthetic limbs are artificial limbs that replace missing limbs. They are used to restore function and appearance to individuals who have lost a limb due to injury, disease, or congenital conditions.

There are two main types of prosthetic limbs: upper limb prosthetics and lower limb prosthetics. Upper limb prosthetics are used to replace missing arms and hands, while lower limb prosthetics are used to replace missing legs and feet.

Prosthetic limbs are made from a variety of materials, including metal, plastic, and wood. They are designed to be lightweight, durable, and easy to use. Some prosthetic limbs are powered by batteries, while others are controlled by the user's muscles.

Prosthetic limbs can be used for a variety of activities, including walking, running, and working. They can also be used to improve the appearance of the limb and to provide a sense of identity.

Prosthetic limbs are a valuable tool for individuals who have lost a limb. They can help to restore function and improve the quality of life.

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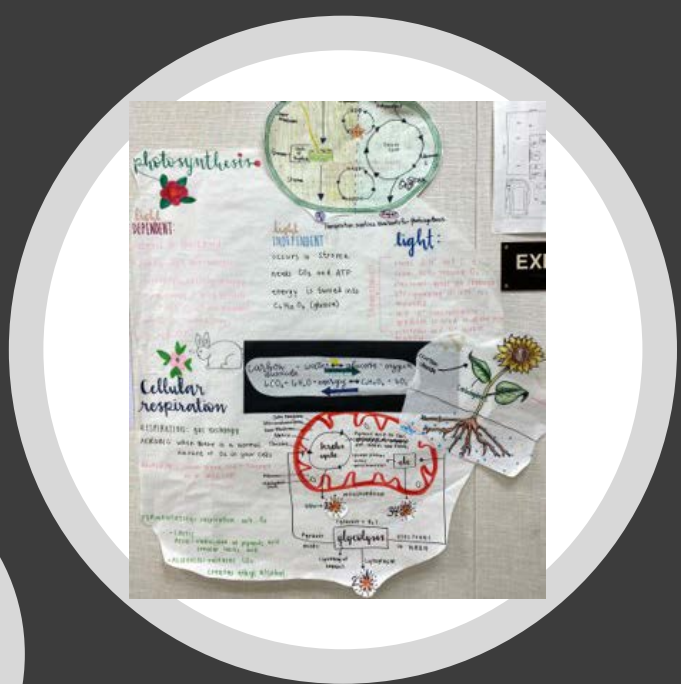
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[illegible]

# PROTECTING OUR ATHLETES

MINNAPOLIS  
Egg drops  
Challenge

## 1. Protein

Protein is an essential nutrient that is required for the body to build and repair tissues, produce energy, and regulate metabolism.

Protein is found in many foods, including meat, fish, eggs, dairy products, and legumes.

Protein is also found in many supplements, including protein powder and amino acids.

Protein is an essential nutrient for athletes, as it helps to build and repair muscles and tissues that are damaged during exercise.

Protein is also important for energy production, as it is used to produce ATP, the body's primary source of energy.

Protein is also important for immune function, as it helps to produce antibodies that fight off infection.

Protein is also important for bone health, as it helps to build and maintain bone density.

Protein is also important for skin health, as it helps to produce collagen, a protein that gives skin its structure and elasticity.

Protein is also important for hair health, as it helps to produce keratin, a protein that gives hair its structure and strength.

Protein is also important for nail health, as it helps to produce keratin, a protein that gives nails their structure and strength.

Protein is also important for overall health and well-being, as it is essential for many of the body's functions.

Protein is also important for mental health, as it helps to produce neurotransmitters that regulate mood and behavior.

Protein is also important for reproductive health, as it helps to produce hormones that regulate the reproductive system.

Protein is also important for fetal development, as it is essential for the growth and development of the fetus.

Protein is also important for lactation, as it helps to produce milk for the baby.

Protein is also important for aging, as it helps to maintain muscle mass and bone density as we get older.

Protein is also important for longevity, as it helps to reduce the risk of chronic diseases and promote a healthy lifespan.

Protein is also important for quality of life, as it helps to improve energy levels, mood, and overall health.

Protein is also important for happiness, as it helps to produce endorphins, the body's natural feel-good chemicals.

Protein is also important for love, as it helps to produce oxytocin, the hormone of love.

Protein is also important for success, as it helps to improve focus, concentration, and performance.

Protein is also important for achievement, as it helps to provide the energy and strength needed to reach your goals.

Protein is also important for greatness, as it helps to provide the foundation for all that you do.

Protein is also important for legacy, as it helps to ensure that you leave a positive impact on the world.

Protein is also important for eternity, as it helps to ensure that you live on in the hearts of those you love.

Protein is also important for everything, as it is essential for life.

Protein is also important for nothing, as it is essential for everything.

Protein is also important for the future, as it helps to ensure that you are prepared for whatever comes your way.

Protein is also important for the past, as it helps to ensure that you are grateful for what you have.

Protein is also important for the present, as it helps to ensure that you are living in the moment.

Protein is also important for the universe, as it helps to ensure that you are part of something bigger than yourself.

Protein is also important for the earth, as it helps to ensure that you are taking care of the planet.

Protein is also important for the sun, as it helps to ensure that you are appreciating the beauty of nature.

Protein is also important for the moon, as it helps to ensure that you are looking up at the stars.

Protein is also important for the stars, as it helps to ensure that you are dreaming big.

Protein is also important for the clouds, as it helps to ensure that you are embracing change.

Protein is also important for the rain, as it helps to ensure that you are staying hydrated.

Protein is also important for the snow, as it helps to ensure that you are staying warm.

Protein is also important for the wind, as it helps to ensure that you are feeling the breeze.

Protein is also important for the fire, as it helps to ensure that you are feeling the heat.

Protein is also important for the water, as it helps to ensure that you are staying hydrated.

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**MRI** Magnetic Resonance Imaging

MRI used radio waves passing through body and create signals for computer images of the body. This is called MRI. It is not an x-ray or ultrasound.

**How does MRI work?**

Body contains mostly water. MRI machine creates magnetic field and radio waves pass through body and create signals for computer images of the body.

**Advantages of MRI:**

1. No radiation
2. No pain
3. No contrast
4. No anesthesia

**Types of MRI:**

1. T1-weighted
2. T2-weighted
3. Proton density
4. Functional MRI

**Applications of MRI:**

1. Brain
2. Spine
3. Heart
4. Joints

**Types of MRI machines:**

1. Open MRI
2. Closed MRI
3. Hybrid MRI
4. Mobile MRI

[illegible]



# Field Trips

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# Job Shadowing Opportunity

## What is it?

- A chance to shadow a medical professional

## When is it?

- Junior/Senior Year
- A full day once per Semester

## Why participate?

- Great experience/looks good on college applications
- Good way to learn about different health professions
- Possible job opportunities





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Hospital — All Rights Reserved



## 2019-2020 Participants



# Graduate Highlights



- **NEXT STEP**
  - Earn a Biological Sciences, B.S. in pursuit of becoming a Doctor.
- **Extra Curricular Activities**
  - Rotary Interact Club
  - Volunteer at Astoria Gardens



- **NEXT STEP**
  - UC Berkley: BS – Biology & Business
  - In pursuit of a career as a Medical Professional.



- **Special Recognitions**
  - State Seal of Biliteracy
- **Extra Curricular Activities**
  - Secretary and Co-founder of Rotary Interact Club
  - Volunteering at Football Games snack shack, Shrimp Feeds & Astoria Gardens



- **Favorite Moments in the Academy**
  - “The Field Trip to Santa Clara University and Mr. Wall wearing a blue wig and acting like he wasn’t wearing a blue wig.”

- **NEXT STEP**
  - San Jose State University: BS - Nursing
  - In pursuit of a career as a Labor and Delivery Nurse

- **Special Recognitions**
  - Biliteracy Seal
  - Jaguar Project
  - KHS Leadership

- **Favorite Moments in the Academy**
  - “Field trip to UOP.”

- **NEXT STEP**
  - San Francisco State University: BS - Chemistry
  - In pursuit of a career as in the Medical Field

- **Special Recognitions**
  - Athletic Scholar Award

- **Extra Curricular Activities**
  - Jaguar Project
  - MHSA Leadership Treasurer (1 year)
  - MHSA Leadership President (2years)
  - Volunteering at MHSA Open Houses and Freshman Orientations

- **Job Shadowed**
  - Comfort Care Dental - “Really inspired me to become a dentist.”



- **NEXT STEP**
  - Go to college to earn a BA and MS in pursuit of becoming a Nurse.

- **Extra Curricular Activities**
  - “I volunteered at the local mosque teaching kids about religion and how to read and write Arabic.”

- **Job Shadowed**
  - Trosien Orthodontist - “it was still a great learning experience.”

- **Favorite Moments in the Academy**

- “The UOP field trip because it allowed us to explore the campus.”



Arts & Sciences



- **NEXT STEP**
  - University of California, Los Angeles: BS - Pre-Human Biology
  - In pursuit of a career as a Neurosurgeon



SAN DIEGO STATE UNIVERSITY

- **Special Recognitions**
  - Seal of Biliteracy
  - AP Scholar
- **Extra Curricular Activities**
  - 4 years of; Volleyball, HOSA, CSF, NHS & Rotary Interact
  - MHSA Leadership President(Freshman), Secretary(Junior and Senior)
  - Volunteered at MHSA Ice Cream Socials, Freshman Seminars, Freshman Orientations & Freshman Icebreakers
  - Volunteer at People for Pets (200+ hours)
  - Volunteer at annual Volleyball Youth Camps



- **Job Shadowed**
  - Valley Chiropractic Mountain House
  - “It was interesting to see what other positions in the medical field do on a day-to-day basis.”

- **Favorite Moments in the Academy**
  - “I enjoyed the Forensic project we did freshman year. We got to simulate a forensic file with our classmates.”



# Application

## Process:

Opens early  
November and  
Closes Early  
December of  
each year.



## Medical and Health Services Academy John C. Kimball High School

- Number of Openings Available: 70
- Requirements:
  - Complete and Sign Application & Course Selection Form
  - Personal Statement (possible follow-up interview may be requested)
  - Transcript of Grades
  - Two Teacher References from grade 6, 7, or 8 (provide school email address)
  - Inter/Intra District Transfer (if Applicable)
  - 4 Year Commitment
- Student Expectations:
  - Maintain a C or Better in All Courses
    - If grades fall below a C, Tutoring is mandatory
  - Follow Academy Dress Code Policy
  - EXPECTED to Follow Any/All Rules Regarding Privacy and Confidentiality (HIPAA)
  - Participate in Extra Curricular MHSA Activities

### ZONING:

<https://www.tracy.k12.ca.us/parent-student-information/zoned-schoolboundaries>

### TRANSFER FORMS:

<https://www.tracy.k12.ca.us/departments/student-services>

Completed paperwork must be turned in at the KHS Main Office by the deadline.

STUDENT  
MUST  
REGISTER  
AT THEIR  
HOME  
SCHOOL

# MHSA Four-Year Plan

Meets or exceeds High School Graduation & A-G Requirements

Since 2020, two Valedictorians and a Salutatorian have been MHSA students.


Career Plans	Student Name _____																																					
	Career Choice _____																																					
Programs	<input type="checkbox"/> Medical and Health Services Academy <input type="checkbox"/> Dual Enrollment (college courses)																																					
Requirements	<b>John C. Kimball High School Graduation</b> <table border="1"> <thead> <tr> <th>Credits</th> <th>Course</th> </tr> </thead> <tbody> <tr><td>40</td><td>English (4 yr)</td></tr> <tr><td>30</td><td>Social Studies (3 yr)</td></tr> <tr><td>20</td><td>Mathematics (2 yr)</td></tr> <tr><td>20</td><td>Physical Education (2 yr)</td></tr> <tr><td>30</td><td>Science (3 yr)</td></tr> <tr><td>10</td><td>Fine Art/Modern Lang (1 yr)</td></tr> <tr><td>70</td><td>Electives</td></tr> <tr><td><b>220</b></td><td><b>Credits needed to graduate</b></td></tr> </tbody> </table>	Credits	Course	40	English (4 yr)	30	Social Studies (3 yr)	20	Mathematics (2 yr)	20	Physical Education (2 yr)	30	Science (3 yr)	10	Fine Art/Modern Lang (1 yr)	70	Electives	<b>220</b>	<b>Credits needed to graduate</b>	<b>A-G College Requirements</b> <table border="1"> <thead> <tr> <th>Credits</th> <th>Course</th> </tr> </thead> <tbody> <tr><td colspan="2"><i>*each must be passed with a C or better</i></td></tr> <tr><td>20</td><td>a. History (2 yr)</td></tr> <tr><td>40</td><td>b. English (4 yr)</td></tr> <tr><td>30</td><td>c. Mathematics (3 yr., 4 recommended)</td></tr> <tr><td>20</td><td>d. Laboratory Science (2 yr., 3 recommended)</td></tr> <tr><td>20</td><td>e. Modern Language (2 yr., 3 recommended)</td></tr> <tr><td>10</td><td>f. Visual or Performing Arts (1 yr)</td></tr> <tr><td>10</td><td>g. College Preparatory Electives (1 yr)</td></tr> </tbody> </table>	Credits	Course	<i>*each must be passed with a C or better</i>		20	a. History (2 yr)	40	b. English (4 yr)	30	c. Mathematics (3 yr., 4 recommended)	20	d. Laboratory Science (2 yr., 3 recommended)	20	e. Modern Language (2 yr., 3 recommended)	10	f. Visual or Performing Arts (1 yr)	10	g. College Preparatory Electives (1 yr)
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9-Freshman	English 1/English 1 Pre AP MHSA	S1	S2	10-Sophomore	English 2/English 2 Pre AP MHSA	S1	S2
	Enhanced Biology MHSA				Enhanced Chemistry MHSA		
	Health Concepts MHSA				P.E. MHSA		
	Math				Math		
	P.E.				World History		
	Elective: World Language/Fine Art (Other)				Elective: Mod. Language/Fine Art (Other)		
TOTAL				TOTAL			
11-Junior	English 3 MHSA/AP English 3	S1	S2	12-Senior	English 4 MHSA/AP English 4	S1	S2
	Physics/Enhanced/AP MHSA				Human Physiology MHSA		
	Medical Terminology MHSA				MHSA Elective		
	Math				Gov/Econ or AP US Gov & Pol		
	US History				Math		
	Elective/Mod. Language (Other)				Elective (Other)		
TOTAL				TOTAL			
Testing	<b>ACT</b> Composite Score _____ Writing _____		<b>SAT</b> Critical Reading _____ Math _____ Total _____ SAT Subject Test _____				
Post-Grad Goal	Four-Year College Direct _____			Military _____			
	Community College _____			School to Work _____			
	Technical School _____						

# Course Selection Form

Kimball High School 2023-2024



9th Grade Course Selections  
MHSA



Last Name (Print)

First Name (Print)

Student Phone Number

Middle School Name

SUBJECT	COURSE #	COURSE TITLE
English		English 1 MHSA (1006) or Adv. English 1 MHSA (1016)
Math		
Biology	3164	Enhanced Biology MHSA
P.E.		CORE 9 PE (9001), Freshman Weight Training (2514), Freshman Personal Fitness (9314)
Elective	3440	Health Concepts
Elective: Spanish, French, Fine Art		
Elective Alternate		
Elective Alternate		
Elective Alternate		

• Be sure to list three *Elective Alternates*! If you do not list *Elective Alternates*, your counselor will choose for you, which you WILL NOT be able to change.

• I understand the additional rigor involved in Advanced/Enhanced/AP classes and that they may include summer assignments. \_\_\_\_\_ (Student Initials)

• Please return this form with student signature and parent signature by email to [zpajarillo@tUSD.net](mailto:zpajarillo@tUSD.net)

• Please make sure to look at the electives on the 2023-2024 Course Catalog.

I agree with the course selections listed above.

I UNDERSTAND THAT WHEN MY STUDENT'S SCHEDULE IS FINALIZED, IT WILL NOT BE CHANGED.

Student Signature

Date

Parent Signature

Date

DUE DATE: December 09, 2022

- [KHS Website](#)
  - [MHSA Site](#)
    - [Application Information](#)
      - MHSA 9th Grade Course Selection Form
- [KHS Course Catalog](#)



# Other Steps if not Zoned for KHS.



Complete all registration forms at your zone school.



Fill out and submit intra/inter district transfer requests to KHS with your application paperwork.



If accepted into the MHSA Academy, KHS will contact the District Office & zone school to complete the transfer process.

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# Questions?

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Please attend the KHS Academic Programs Fair for incoming Freshmen held the third week of November each year.

- Thank you
  - Joell Russell – [jrussell@tusd.net](mailto:jrussell@tusd.net)
  - David Silva – [dsilva@tusd.net](mailto:dsilva@tusd.net)