Superintendent's Update Science, Technology, Engineering, Arts, and Math (STEAM) Opportunities in GUSD Schools

Board of Education Meeting November 16, 2021 Meeting No. 10





## College, Career, Life Ready Graduates

## **Academic Rigor**

- High Expectations
- Pathways, Choices
   & Personalization
- Cultural Competence





# Safe Learning Environment

- Inclusion
- Mental & Physical Wellness
- Sense of Belonging

**Board of Education Priorities** 





#### **Maximize Student Achievement**

- Close the digital and equity gap.
- Offer robust in-person and independent study learning programs.
- Accelerate learning and improve attendance and engagement.

### Foster a Positive Culture of Learning

- Ensure equitable teaching and learning opportunities led by excellence.
- Support culturally relevant curriculum that emphasizes inclusion.
- Increase school connectedness for students, parents, and families.

### **Ensure the Health and Safety of Students and Employees**

- Strengthen mental health support and programs.
- Ensure best practices for safe and healthy learning environments.
- · Support physical, social, and emotional wellbeing.

### **Maintain District Financial Responsibility**

- · Ensure the fiscal health of the District.
- Implement a fiscal plan to preserve the District resources.
- Plan for the District's future educational and facility needs.



## **Maximize Student Achievement**

- Close the digital and equity gap.
- Offer robust in-person and independent study learning programs.
- Accelerate learning and improve attendance and engagement.



# Secondary Science Course Progression

### Typical Pathway for CVHS, DHS, GHS, HHS, VA

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Living Earth	Chemistry in the Earth System	Physics of the Universe AP Physics I	Elective Science

#### **Typical Pathway for Clark Magnet HS**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Physics of the Universe	Living Earth	Chemistry in the Earth System	Elective Science

### Science Pathways – With Summer Acceleration

CVHS, GHS, HHS

	Summer Pre-	9 <sup>th</sup> Grade	Summer Pre-10 <sup>th</sup>	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
	9 <sup>th</sup> Grade		Grade			
1				Physics of the		
ioi	Living Earth	Chemistry in the		Universe	Elective	Elective
Option	LIVING COLOT	Earth System		AP Physics I	Science	Science
Option 2		Living Earth	Chemistry in the Earth System	Physics of the Universe	Elective Science	Elective Science
ď			Lararsystem	AP Physics I	Science	Science

### Science Pathway - With Summer Acceleration

Clark Magnet

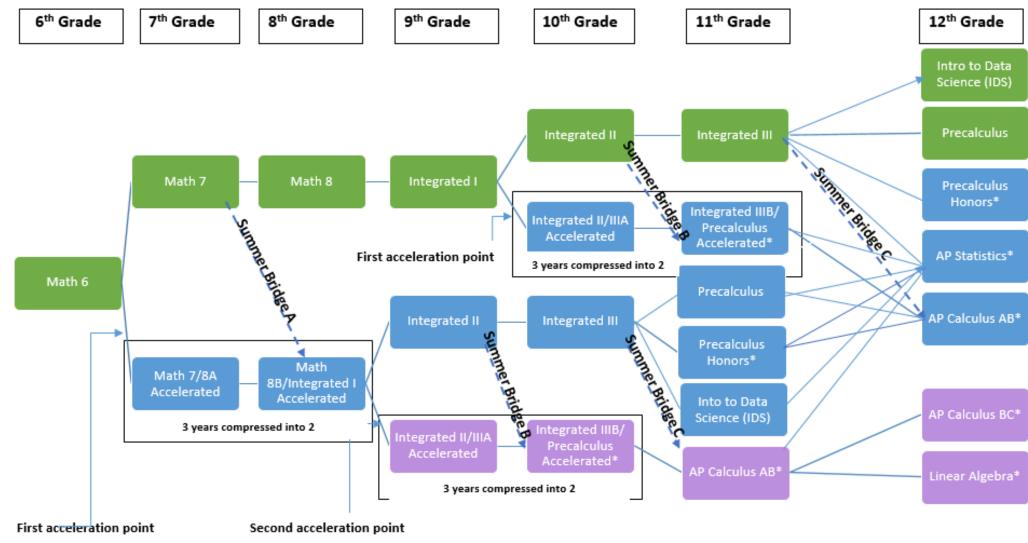
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	Summer Pre-	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	
			11 <sup>th</sup> Grade			
Option	Physics of the Universe	Living Earth	Chemistry in the Earth System	Elective Science	Elective Science	

## **Elective Science Options:**

- AP Biology
- AP Chemistry
- AP Environmental Science (CVHS, Clark)
- AP Physics I, II, C
- Earth & Space Science
- Environmental GIS, Honors Env. GIS, and Honors GIS & Remote Sensing (Clark)
- Forensic Science (HHS)
- Geology of Disasters (Clark)
- Marine Biology (GHS)
- Physiology (CVHS, GHS, HHS)
- Honors Physiology (CVHS, GHS, HHS)
- Kinesiology Rehab (CVHS)
- Courses in CVHS Science CTE Pathway: BioTech, Sports Medicine, Advanced Sports Medicine, Healthcare Internship, and Science Research



# Secondary Math Course Progression



# CTE Industry Sector Pathways Through Elementary, Middle, and High School

**STEAM Focus** 



#### ARTS, MEDIA AND ENTERTAINMENT

Animation Clark Magnet HS

Digital Arts Hoover HS, Glendale HS, Daily HS, Toli MS, Roosevelt MS, Wilson MS

Cinematography Clark Magnet HS, Glendale HS, Crescenta Valley HS, Wilson MS

Photography Clark Magnet HS, Crescenta Valley HS, Hoover HS

Digital Design Clark Magnet HS

Entertainment Technology & Live Production Hoover HS, Crescenta Valley HS

Studio Arts Hoover HS, Toll MS

Professional Certifications
AVID Professional Editor • Adobe • OSHA



#### HEALTH, SCIENCE AND MEDICAL TECHNOLOGY

Biotechnology Crescenta Valley HS, Rosemont MS

Patient Care Crescenta Valley HS

Professional Certifications
EKG Technician • HIPPA • National
Occupational Competency Testing Institute
(NOCTI) Health Assisting Exam & Certified
Nursing Assistant (CNA Certification
Preparation



#### **ENGINEERING AND ARCHITECTURE**

Engineering Design and Technology Clark Magnet HS, Glendale HS, Rosemont MS, Toll MS, Roosevelt MS

Professional Certifications
NIMS - Immerse2Learn - ArcGIS Desktop



## MANUFACTURING AND PRODUCT DEVELOPMENT

Graphic Production Technologies Crescenta Valley HS, Rosemont MS

Professional Certifications
Adobe InDesign, Photoshop, Illustrator



#### HOSPITALITY, TOURISM AND RECREATION

Food Service and Hospitality - Culinary Dally HS, Hoover HS, Glendale HS, Wilson MS, Roosevelt MS, Toll MS, Rosemont MS

Professional Certifications ServSafe



#### **FASHION AND INTERIOR DESIGN**

Personal Services - Cosmetology Glendale HS. Roosevelt MS

Personal Services - Barbering Dally HS

Professional Certifications Certificate of Completion: Cosmetology Business and Industry Academy

CA Board of Barbering and Cosmetology License



#### **BUILDING AND CONSTRUCTION TRADES**

Residential and Commercial Construction Glendale HS, Rosemont MS



#### **PUBLIC SERVICES**

Public Safety - Police and Fire Academy Hoover HS, Toll MS

Professional Certifications
FEMA ICS 100, 200 • NIMS 700, 800 • CPR
First Aid • EKG Technician • EMT



#### TRANSPORTATION

Systems Diagnostics, Service, and Repair Hoover HS, Toll MS

Operations Air Force JROTC Crescenta Valley HS



## INFORMATION AND COMMUNICATION TECHNOLOGIES

Programming and Systems Development Crescenta Valley HS, Glendale HS, Rosemont MS, Wilson MS, Roosevelt MS, Toll MS

Software Systems Development & Networking Clark Magnet HS



#### **BUSINESS AND FINANCE**

Business Management Clark Magnet HS



### EDUCATION, CHILD DEVELOPMENT AND FAMILY SERVICES

Education Hoover HS

For more information contact the GUSD CTE Office at (818) 241-3111, ext. 2100 or visit

www.gusd.net/cte





## ARTS, MEDIA AND ENTERTAINMENT

**Animation** Clark Magnet HS

**Digital Arts** Hoover HS, Glendale HS, Daily HS, Toll MS, Roosevelt MS, Wilson MS

**Cinematography** Clark Magnet HS, Glendale HS, Crescenta Valley HS, Wilson MS

**Photography** Clark Magnet HS, Crescenta Valley HS, Hoover HS

**Digital Design** Clark Magnet HS

**Entertainment Technology & Live Production** *Hoover HS, Crescenta Valley HS* 

Studio Arts Hoover HS, Toll MS

Professional Certifications

AVID Professional Editor • Adobe • OSHA





# HEALTH, SCIENCE AND MEDICAL TECHNOLOGY

**Biotechnology** Crescenta Valley HS, Rosemont MS

Patient Care Crescenta Valley HS

Professional Certifications

EKG Technician • HIPPA • National
Occupational Competency Testing Institute
(NOCTI) Health Assisting Exam & Certified
Nursing Assistant (CNA Certification

Preparation





## **ENGINEERING AND ARCHITECTURE**

Engineering Design and Technology
Clark Magnet HS, Glendale HS, Rosemont MS,
Toll MS, Roosevelt MS

Professional Certifications

NIMS • Immerse2Learn • ArcGIS Desktop





# MANUFACTURING AND PRODUCT DEVELOPMENT

**Graphic Production Technologies** 

Crescenta Valley HS, Rosemont MS

Professional Certifications

Adobe InDesign, Photoshop, Illustrator





# INFORMATION AND COMMUNICATION TECHNOLOGIES

Programming and Systems Development Crescenta Valley HS, Glendale HS, Rosemont MS, Wilson MS, Roosevelt MS, Toll MS

**Software Systems Development** & Networking Clark Magnet HS





## TRANSPORTATION

Systems Diagnostics, Service, and Repair Hoover HS, Toll MS

Operations Air Force JROTC Crescenta Valley HS



# Arts, Media, and Entertainment



Mark Keppel Elementary Visual and Performing Arts Magnet School



Digital Arts
Ceramics & Sculpture
Visual Art
Photography
Design



Animation Cinematography Photography Design



Digital Arts
Ceramics & Sculpture
Visual Art
Photography
Design
Performance & Video
Production



Cinematography Performance & Video Production



Digital Arts Ceramics & Sculpture Visual Art Photography Design



Photography



Digital Arts
Ceramics & Sculpture
Visual Art
Photography
Design



Digital Arts Cinematography Ceramics & Sculpture



Animation
Ceramics & Sculpture
Visual Art
Photography
Performance & Video
Production

# Jaclyn Scott

Principal, Mountain Avenue Elementary







# Mountain Avenue Elementary

## Providing pathway experiences for young learners:

- Coding
  - Partnered with Windtree
  - 10 Weeks
  - 30 minutes per week
  - Grades TK-6
- Arts
  - Partnering with Inner City Arts
  - 45 minutes per week in all classrooms
  - Resident artist in classrooms for 10 weeks



# Mountain Avenue Elementary: Coding Fun!







# Lena Kortoshian

Principal, Clark Magnet High School







# Clark Magnet High School CTE Pathways

## Arts, Media, & Entertainment Sector

Program	Intro Course	Concentrator 1	Concentrator 2	Capstone/Intern	GCC or Certification
Animation	Tech Lit Comp	Computer Animation 1-2	Computer Animation 3-4	Computer Animation 5-6	Computer Animation 5-6 (GCC Art 201)
Cinematography	Cinematography 1-2	Cinematography 3-4	Cinematography 5-6 Honors	Arts, Media & Entertainment/Cinem a Internship	AVID Certified User
Design	Tech Lit	Design 1-2	Design 3-4	Design 5-6	
Digital Photography	Tech Lit	Digital Photography Foundations 1-2	Honors Digital Photography 3-4	AP Studio Art 2D	Digital Photo Fnd. 1-2 (GCC Photo 101) Honors Digital Photo 3-4 (GCC Photo 130)



# Clark Magnet High School CTE Pathways



**Engineering and Architecture Sector** 

Program	Intro Course	Concentrator 1	Concentrator 2	Capstone/Intern	GCC or Certification
Engineering	Tech Lit	Intro to Engineering 1-2	Principles of Engineering & Manufacturing 3-4	Comp aided manufacturing 5-6	Intro to Engineering 1-2 (GCC ENGR 117) Principles of Engineering/Manufact uring 3-4 (GCC ENGR 120)
Engineering	Tech Lit	Robotics Team Project 1-2	Honors Robotics Team 3-4		Robotics Team Project 1-2 (GCC ENGR 130)
Architecture	Tech Lit		Architecture 101, 102		Architecture 101, 102
Geographical Info System (GIS)	Tech Lit	Geology of Disaster	Honors GIS, Remote sensing	Honors Env GIS	(GCC Geo 155) ArchGIS Certification





# Clark Magnet High School CTE Pathways

## **Business Management Sector**

Program	Intro Course	Concentrator 1	Concentrator 2	Capstone/Intern	GCC or Certification
Entrepreneurship/ Business		Business Foundation & Law 1-2	Bus Com & Social Media Marketing 3-4	Bus Com & Social Media Marketing 4 Internship	Bus 101, 110, 141 Google Fundamentals of Digital Marketing Certification

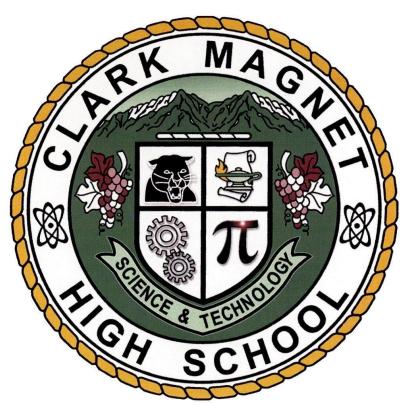
## Information & Communication Technologies Sector

Program	Intro Course	Concentrator 1	Concentrator 2	Capstone/Intern	GCC or Certification
Information Technology/ Cyber Security	Tech Lit	Info Systems & Info Tech Essentials 1-2	Networking & Cyber Security 3-4		Info Systems & Info Tech Essentials 1-2 (GCC CS/IS 194) Test Out PC Pro, Test Out Network Pro, and Test Out Security Pro.



# Clark Magnet High School NEW CTE Pathways

- Architecture 250
- 2D Animation Pathway
- Comic Illustration Pathway
- Engineering Pathway
- Manufacturing Pathway



# Dr. Jennifer Earl

Principal, Hoover High School







# **Hoover High School CTE Pathways**

## Arts, Media, and Entertainment

Program	Intro Course	Concentrator	Capstone	Additional Course	GCC or Certification
Animation/ Cinema/ 3D Digital Design	Digital Arts 1-2	Digital Arts 3-4	Digital Arts 5-6		Articulated Courses, Adobe Cert
Stage Technician	Entertainment Tech & Live Production 1-2	Entertainment Tech & Live Production 3-4	Entertainment Tech & Live Production 5-6		Articulated Courses, OSHA Cert
Photography	Photography Foundations 1-2	Honors Photography 3-4	AP Studio Art 2D	Photography Seminar	Articulated Courses
Visual Art	Studio Art 1-2	Honors Studio Art 3-4	AP Studio Art Drawing	Studio Art Seminar	Articulated Courses
Ceramics & Sculpture	Intro to Ceramics & Sculpture 1-2	Intermediate Ceramics & Sculpture 3-4	Advanced Ceramics & Sculpture		





# **Hoover High School CTE Pathways**

## Hospitality, Tourism, and Recreation

Program	Intro Course	Concentrator	Capstone	Internship	GCC or Certification
Culinary Arts	Culinary 1-2	Culinary 3-4	Culinary 5-6	Food Service & Hospitality	Articulated Courses, e-Food Handlers; ServSafe

## Transportation

Program	Intro Course	Concentrator	Capstone	Additional Course	GCC or Certification
Automotive	Intro to Auto Serv & Repair 101	Intro to Auto Serv & Repair 103	Auto Elec & Diagnostic	Intro to Auto Light Systems	Articulated Courses (Rio Hondo), General Service Tech Cert





# Hoover High School Additional Personalized Learning Pathways

- Early College Academy
- Distinguished Scholars Academy



# GUSD STEAM Magnets Now Accepting Lottery Applications for Fall





- Computer Science Immersion Magnet
- Edison Elementary
  - Advanced Technology Magnet
- Keppel Elementary
  - Visual & Performing Arts Magnet



- Roosevelt Middle School
  - STEAM Academy Magnet

