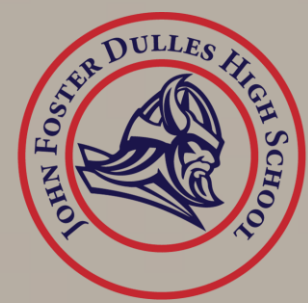


**INSPIREEQUIPIMAGINE**

FBISD Math and Science



ACADEMY



# Math & Science Academy Open House

6:30-7:30 – Formal  
Presentation

November 6, 2016

**FBISD**

## Presentation of Administrators and Counselors

Administrators	Counselors
Melissa King-Knowles Principal	Kathy Carson Lead Counselor, R-Sm
Corey Stewart Associate Principal, E-F, Sn-Z	Nicola Ballard Counselor, A-C
David Orlin Assistant Principal, A-C	Emily Wilcox Counselor, D-Ho
Mario MacDonald Assistant Principal, Hp – Ma	Chastity Rubin Counselor, Hp-Ma
Regina Ingram Assistant Principal, Mb - Q	Dingjun Chiu Counselor, Mb-Q
Suni Walter Assistant Principal, D – Ho	Lezlie Ladd Counselor, Sn-Z
Karissa Ogle Assistant Principal, Sn-Z	Kahley Warren College & Career Readiness Advisor

Donald Lam, Academy Coordinator

Clarissa Rodriguez, Director of Advanced Academics



# Agenda

- Overview of the Math and Science Academy
- Overview of the Application Process



## Why choose an academy?

- Member of a cohort
- Shared interest
- Enrichment opportunities
- Advanced coursework
- Dedicated coordinator
- Dedicated booster club

## Why choose the MSA?

- Dulles High School
- Experienced teachers
- Coursework beyond AP level
- Opportunities to extend the learning outside of the classroom walls
- Competitive Academic UIL Teams

# **Top 3 Benefits** **Math and Science Academy**

- Work alongside and conduct research with practicing scientists, mathematicians, and engineers
- Participate in math and science related activities
- Compete on and with nationally and internationally ranked competitive academic teams

FBISD Math and Science



**Why choose the Math  
and Science Academy?**





## The 5 Dimensions of Academy

1. Relevance
2. Rigor
3. Connections
4. Research
5. Community

FBISD Math and Science



## Math & Science Academy offers:

- 29 AP courses and  
Various College Level courses like
- Multi-variable Calculus
  - Organic Chemistry
  - Modern Physics

**79** | 2019 National AP Scholars

**17/~100** | 2019 National Merit Semi-Finalists  
(Applied for National Merit Finalists)

**31** | 2019 National Merit Commended

## National Level Honors received by MSA Students:

### Represented Team USA

- 1** | International Physics Olympiad – Gold Medal
- 2** | INTEL International Science and Engineering Fair Awards
- 1** | International Math Olympiad – Gold Medal

### National Science Bowl

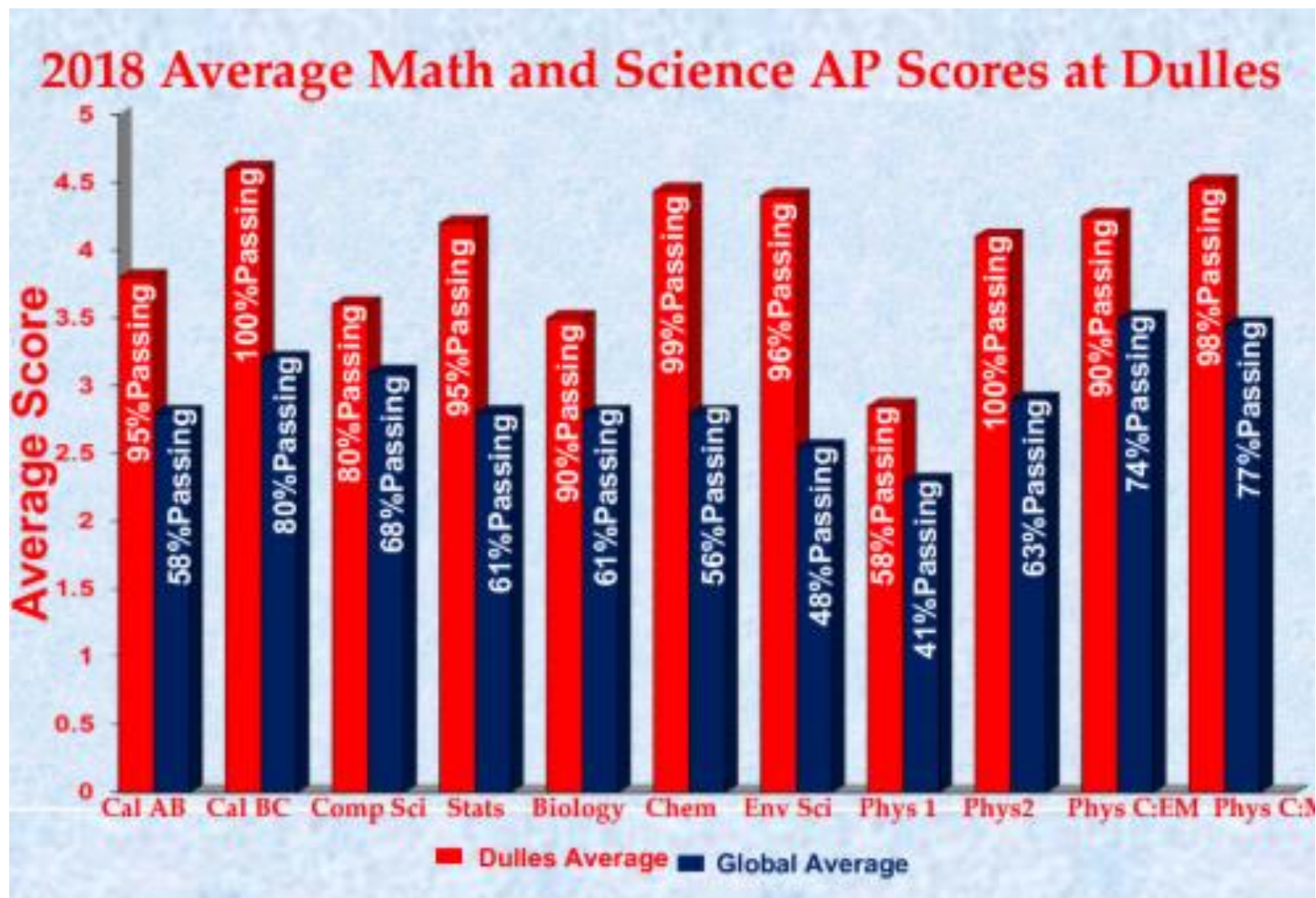
- 6** | Regional Championships
- 1** | 2nd Place National Finishes
- 7** | Consecutive TMSCA State Championships
- 6** | Consecutive Top 5 Finishes in National Physics Bowl
- 3** | UIL Academic State Championships

### Academic Decathlon

- 2** | Consecutive State Championships
- 2** | 2nd Place National Finishes

### Destination Imagination

- 1** | 8th Place Global Finishes





# Coursework beyond the AP-level:

- Organic Chemistry
- Modern Physics
- Advanced Biotechnology
- Multivariable Calculus
- Computer Science III



CollegeBoard

AP

# Enrichment Opportunities

Internships through local Universities:

- Rice Ecology & Evolutionary Biology Dept
- TSU'S Physics and Biology Depts
- UH's Chemistry and Engineering Depts
- A&M and UT Austin's Engineering Depts

Field trips to companies and universities in the community:

- University of Houston – College of Natural Science and Mathematics
- Baylor College of Medicine – Prosthetics and Orthotics Lab
- Moody Gardens – Rescue the Rainforest

Guest Speakers:

- Mrs. Mary Marth, VP for Showtime
- Mr. Donald Cooper, NASA
- Mrs. Kathy Tiernan, UTMB
- Mr. Todd Whittemore, Shell Oil



RICE  
Original



TEXAS SOUTHERN UNIVERSITY



UNIVERSITY OF HOUSTON



BCM<sup>®</sup>  
Baylor College of Medicine



# Volunteer Hours Through Youth Expanding Services

## Purpose

To promote character and the ability to serve the community in which the student lives. To build a positive attitude and working relationship with the community and Dulles High School.

\*All MSA Students need 100 service hours during the 4 years of high school.

FBISD Math and Science



Class Of	Total Hours
2015	6033
2016	7327
2017	6719
2018	6320
2019	14795
2020	14111
2021	9247
2022	4910
2023	1225

Dulles High School Students have volunteered a total of **70687** hours in community service.

# SAMPLE 4 – Year Plan

Discipline	MS Credits	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English		English I	English II	English III	English IV
Math	<b>Algebra I PAP</b>	<b>Geometry PAP</b>	<b>Precalculus PAP</b>	<b>AP Calc</b>	<b>Multivar. Calculus</b>
Math 2		<b>Algebra II PAP</b>			
Science		<b>Biology PAP</b>	<b>Chemistry PAP</b>	<b>AP Sci Elect</b>	<b>AP/Beyond AP Sci Elect</b>
Science 2			<b>AP Physics I</b>	<b>AP Sci Elect</b>	
Social Studies		World Geography	World History	US History	Gov't/Eco
Languages		Language I	Language II		
Fine Arts				FA Elective	
PE/Equiv					PE Elective
Electives		AP/PAP Comp Sci		Speech & Health	Elective
Electives			Elective		Elective



# Course Track Options

## Math Concentration:

Math Courses	Science Courses
Pre-AP Algebra I	Pre-AP Biology
Pre-AP Geometry	Pre-AP Chemistry
Pre-AP Algebra II	AP Physics I
Pre-AP Pre-Calculus	AP Science Elective
AP Calculus	AP Science Elective
Multivar Calculus	

## Biology Concentration:

Math Courses	Science Courses
Pre-AP Algebra I	Pre-AP Biology
Pre-AP Geometry	Pre-AP Chemistry
Pre-AP Algebra II	AP Physics I
Pre-AP Pre-Calculus	AP Biology
AP Calculus	Adv. Biotech
	AP Science Elective

## Physics Concentration:

Math Courses	Science Courses
Pre-AP Algebra I	Pre-AP Biology
Pre-AP Geometry	Pre-AP Chemistry
Pre-AP Algebra II	AP Physics I
Pre-AP Pre-Calculus	AP Physics II
AP Calculus	AP Physics C
	Modern Physics

## Chemistry Concentration:

Math Courses	Science Courses
Pre-AP Algebra I	Pre-AP Biology
Pre-AP Geometry	Pre-AP Chemistry
Pre-AP Algebra II	AP Physics I
Pre-AP Pre-Calculus	AP Chemistry
AP Calculus	Organic Chemistry
	AP Science Elective



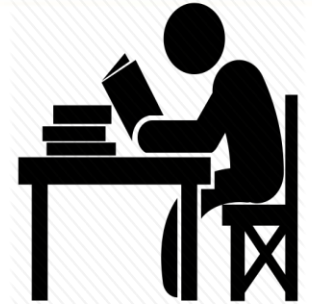
# Where do they go?



Massachusetts  
Institute of  
Technology



# What do they study?



- Actuarial Science
- Biochemistry
- Biophysics
- Biology
- Chemistry
- Computer Science
- Earth Science
- Engineering
- Environmental Science
- Geology
- Geophysics
- Kinesiology
- Mathematics
- Physics
- Pre-Med Programs

# Athletic Disclaimer



Any student attending an academy outside of the attendance zone in which he/she resides, will be ineligible for varsity athletic competition for one calendar year.



**APPLY NOW**

- Applications can be found online at:  
<https://academy.fortbendisd.com/>  
(Available November 1, 2019 – TODAY!)
- Completed applications are **due on or before November 30, 2019**
- More information can be found at:  
<http://www.fortbendisd.com/mathandscience>

# Application Process

Log on to <https://academy.fortbendisd.com/>

Current FBISD Students	Non-FBISD Students
Sign in using your Student User Name & ID (just like you would into a school computer)	Sign up using your email address and password
Answer All Questions	Answer All Questions
Address, parent information, and zoned campus are automatically pulled from Skyward	Input your address, parent information, and zoned campus information
Select the Academy(ies) for which you wish to apply	Select the Academy(ies) for which you wish to apply
Select the priority of each academy (1, 2, 3, ...)	Select the priority of each academy (1, 2, 3, ...)
No additional documentation is needed	Upload a PDF copy of the 7 <sup>th</sup> grade report card and the 7 <sup>th</sup> grade standardized test. Also, input the actual 7 <sup>th</sup> grade grades
Hit the Submit button to submit your application	Hit the Submit button to submit your application

# Application Timeline



Step 1: Apply Online

Step 2: Get Validated

Step 3: Sit for the Exam/Interview – January (11, 18, 25)

Step 4: Get Notified

Priority 1 Notifications – Feb. 10th

Regular Window Notifications – Feb. 18th

Waitlist Notifications – Feb. 25th

Step 5: Commit

Step 6: Attend Commitment Night – March 19th

# Applicant Requirements

- Success on all sections of the 7<sup>th</sup> grade STAAR
- Currently resides in FBISD Attendance zone
- Currently in the 8<sup>th</sup> Grade

# Academy Selection Criteria

- 7<sup>th</sup> grade semester grades in Math, Science, SS, ELA
- 8<sup>th</sup> grade semester grades in Math, Science, SS, ELA
- Academy entrance exam grade



# Academy Entrance Exam



- ❖ 1 test for three academies:
  - Engineering Academy
  - Math and Science Academy
  - Medical Science Academy
- ❖ January 11, 18, 19 (8:30 AM Session and 10 AM Session)
- ❖ Check-In at 30 minutes before schedule testing time
- ❖ Student Email – Application (Office 365)
- ❖ Email Reminder
- ❖ Test Topics:
  - 8<sup>th</sup> Grade Math
  - Algebra I

# Final Acceptance

Is contingent upon:

- Successful completion of all 8<sup>th</sup> grade courses during the academic school year
- Successful completion of all parts of the 8<sup>th</sup> Grade STAAR exam



# Contact Information



[www.fortbendisd.com/domain/2399](http://www.fortbendisd.com/domain/2399)



[www.fortbendisd.com/Domain/2402](http://www.fortbendisd.com/Domain/2402)



[www.fortbendisd.com/Domain/2404](http://www.fortbendisd.com/Domain/2404)



## **Donald Lam**

Academy Coordinator

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Elkins High School

Medical Science Academy  
Hightower High School

Math and Science Academy  
Dulles High School

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