**Dulles High School** 

Math and Science Academy

**Graduation Project** 





September 2, 2016

Dear Academy Student and Parent:

All students in the academy are required to complete one (1) graduation project. Students may choose from a variety of options:

- 1. Work experience (internship, volunteer, job, etc.)
- 2. End of year project through a school course
- 3. Attend a pre-approved summer camp
- 4. Place 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> at a science fair outside of DHS
- 5. A pre-approved independent project

Students will need to:

- 1. Complete the attached graduation project request form and return to the Academy Coordinator.
- 2. Complete a portfolio and a poster and present both during the project presentation. Dates will be determined by the academy coordinator.

#### Your request will not be reviewed until it is complete.

A complete request will have no blank spaces and will include the following:

- 1. Graduation Project Request Form.
- 2. (For the Work Experience Option ONLY) Acknowledgement of Responsibility and Permission for Student Participation form.

You will be notified of the academy's approval or denial on or before the end of the academic school year.

Sincerely,

Brian Tucker Dulles High School Coordinator, Math and Science Academy

#### Dulles High School Math and Science Academy Graduation Project

#### **Prerequisite Experience:**

The student must complete a graduation project request form to be considered for a graduation project.

#### **Graduation Project Options:**

The student will either:

- Complete a minimum of 40 hours of work at a math, science, engineering, or computer science location. The student must:
  - Complete the 40 hours on their own time
  - Complete the 40 hours as part of a paid or an un-paid experience
  - Complete the 40 hours during the semester in which you applied (i.e. all hours must be completed by the last day of the semester or by the end of the summer before school begins in the fall)
- Complete an end of the year project through:
  - o SRD
  - GT Mentorship
- Attend a pre-approved summer camp in the areas of:
  - o Math
  - o Science
  - Engineering
  - Computer science
- Receive a 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> place award at a science fair outside of DHS
- A pre-approved independent project
  - Must receive approval through a face to face meeting with the academy coordinator
  - Must be a math- or science-based project

#### **Requirement:**

A final portfolio must be received in order for the graduation project to be considered complete. The portfolio requirements are detailed on the attached page. The portfolios will be presented during the academy fair – one at the end of the fall semester and one at the end of the spring semester. The dates will be determined by the Academy Coordinator.

### Dulles High School Math and Science Academy Graduation Project Request Form (Please print or type all information)

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#### Graduation Project Option: (Choose one)

Complete a minimum of 40 hours of work at a math, science, engineering, or computer science location.
<ul> <li>Please check this box if you completed your experience through a booster club</li> </ul>
internship. (skip a, b, and c, below)
(Please initial on each line)
<b>a</b> . I will complete the 40 hours on my own time.
b. I will be paid/unpaid (circle one) for this work.
<b> c</b> . I will complete the 40 hours during the fall/spring/summer (circle one) semester.
d. I found my organization and it is:
Company Name:
Company Address:
Contact Person:Phone #:
Email Address:
Complete an end of the year project through a course.
The course that I am currently enrolled in is: (select one)
Scientific Research and Design
GT Mentorship
Attend a pre-approved math, science, engineering, or computer science summer camp.
The camp that I am attending is:
Camp Name:
Camp Address:
Camp Website Address:
Dates of Camp:
I received 1 <sup>st</sup> , 2 <sup>nd</sup> , or 3 <sup>rd</sup> place at a science fair outside of DHS
The science fair that I attended was:
Science Fair Name:
I received place.
Contact Person:
Phone #:
E-mail Address:
Complete a pre-approved independent project
Project Title:
My meeting with the academy coordinator to receive approval is/was on:

#### Dulles High School Math and Science Academy Graduation Project

#### **The Portfolio**

The portfolio is the end product for the graduation project. The portfolio showcases your experiences and your learning through the experience. The portfolio is a professional-looking product and **must** include the following items:

- 1. Title Page
- 2. Table of Contents
- 3. Resume
- 4. Student evaluation paper and journal.
  - Journals should be kept on a daily basis in order to help better track your experience. This will be a personal
    informal collection of notes from the student's perspective. Journals will be collected and reviewed with the
    student paper.
  - The student evaluation paper is a typed summary of the experience. Your paper should be between four and eight pages, double spaced using either Times New Roman, Arial, or Calibri font (no larger than 12 point). The reader is supposed to learn what it's like to complete this same experience. Be sure to describe the day to day experience. The paper should include the following elements:
    - A. Overview of the experience
      - The student should begin with an overview of the entire experience, noting the things the student experienced and/or learned during his/her time in attendance. This overview should include not only skills or new information learned, but also things student learned about him or herself or the world of math and science in general.
    - B. Sample of work
      - The student must include a sample of the work performed during the course of the work experience. These examples can be written descriptions, a video of your work (DVD or webpage), or any form of media (charts, graphs, pictures, sketches) in which your efforts are demonstrated. The student should include in the written paper an explanation of what he/she actually contributed to the work sample.
    - C. Real world connections
      - The student should discuss what he/she learned while in attendance in conjunction with what he or she has been learning in the classroom. Discuss the consistency of the two as well as the differences between real life and classroom information.
    - D. Management Evaluation
      - The student should evaluate the rigor and caliber of the experience. Include in this evaluation
        the strengths and weaknesses of those in supervisory roles and your colleagues. You should
        also discuss the things you would want to do, same or different, if you were in charge. This is
        important because it helps us better understand the experience and evaluate the value of
        future students attending that program.
    - E. Recommendation
      - The student should evaluate the overall experience, pointing out what was enjoyed and what the student would have changed (regarding the performance of his/her duties). Here the student can make recommendations for future students interested attending this program.
- 5. (For Internships and Volunteer Experiences ONLY)
  - Thank you letter to employer.
    - A. Upon completion of the experience, the student will write a thank you letter to the employer. This letter must be written and mailed within three days of the last day of the experience. Use a business letter format. The letter must be typed. Include a copy of the thank you letter you sent in this section.
  - Employer evaluation.
    - A. The employer evaluation is a form that allows the employer to critique the accomplishments and professionalism of the student. It is the student's responsibility to submit the evaluation to their employer. It is the student's responsibility to make sure the evaluation is in on time. Include a copy of the evaluation form in this section.
- 6. Posterboard.
  - The student should display important components of the experience. The poster should be set up on a threepanel display board that unfolds to be 36" tall by 48" wide. The student will want to include important facts about their experiences as well as possibly photos. Below is a sample of how a student might set up their posterboard. Please note that each student will most likely have differing section titles.



Dulles High School Math and Science Academy Graduation Project

# THE NEXT PAGES ARE ONLY REQUIRED FOR STUDENTS COMPLETING A WORK EXPERIENCE



STUDENT ID# \_\_\_\_\_

# ACKNOWLEDGEMENT OF RESPONSIBILITY AND PERMISSION FOR STUDENT PARTICIPATION IN SCHOOL SPONSORED ACTIVITY.

Student Name:	
School sponsored trip to: <u>Academy Work</u>	Experience
Your child has the opportunity to participate in a teacher accompanying the student on this trip w	a school-sponsored trip. Please complete this form to provide the vith information relating to your child.
Teacher:MR. TUCKER	Date:
List any physical limitations (temporary or perma	anently):
List any current medications (prescribed or over	r the counter) taken:
List any allergies including reactions to medicatio	ons, food, insects, and environment:
Name of child's physician:	Phone:
Insurance company:	Phone:
Policy Number:	

## ACKNOWLEDGEMENT OF RESPONSIBILITY

My signature below indicates that I give my child pe	ermission to participate in this activity, to have any				
medications administered that would normally be given at school, and that I authorize any needed emergency					
medical treatment. I also acknowledge that I have b	been informed that Fort Bend Independent School District				
has immunity from liability. Transportation will be provided by the District or a commercial carrier.					
Parent Signature:	Date:				
Address:					
Home Telephone: 0	Cell: Work:				
Emergency contact person:	Phone:				

#### Dulles High School Math and Science Academy Graduation Project (Only for those students completing the work experience option)

#### Student Work Experience Evaluation Form

(To be completed by the student's supervisor)

tudent Name:
Company/Organization Name:
upervisor Name:

Please complete the following sections and please discuss your evaluation with the student.

1. Summarize the areas where the student showed strength and any outstanding skills the student exhibited:

2. Summarize areas where the student can improve:

3. Would you consider this student for employment? Why or Why Not?

4.	Use the table below to rank the student on the qualities listed based on your interactions
	with the student

	Not Applicable	Unsatisfactory	Neutral	Satisfactory
	NA	123	4	567
Relationship with clients				
Relationship with supervisor				
Relationship with other staff				
Dependability				
Meets deadlines				
Appropriate attire				
Attitude				
Acceptance of criticism				
Hard-working				
Works well as part of a team				
Follows instructions				
Ability to think critically				
Ability to work independently				
Ability to solve problems				
Oral communication skills				
Written communication skills				
Behaves ethically				
Self-awareness				
Knowledge of field				
Intake skills				
Interviewing skills				
Assessment skills				
Case Management skills				
Use of community resources				

- 5. Was this internship beneficial to your organization? Why or Why not?
- 6. Would you accept another intern from the Math and Science Academy?
- 7. Do you have any suggestions for improving our internship program?

Supervisor's Signature:	Dat	:e:
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