# Downtown Magnets

High School

Academy Pathway Course Catalog

downtownmagnets.org
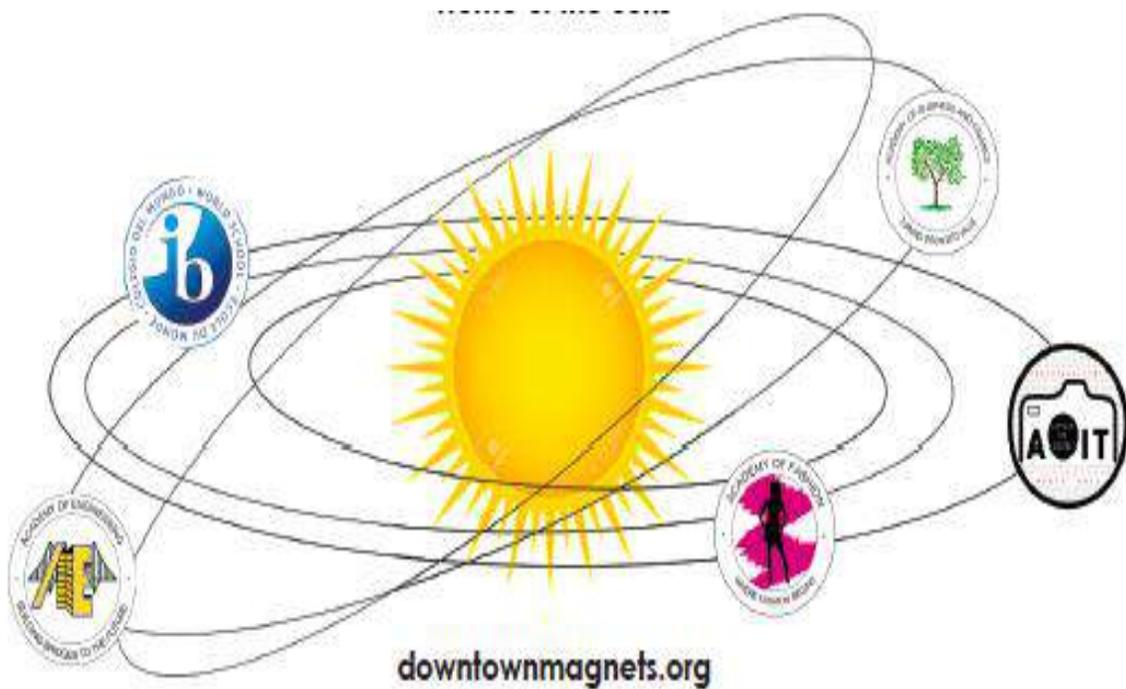
Home of the Suns

Downtown Magnets High School features five distinctive college and career pathways. These pathways include Fashion Design and Merchandising, Business Finance and Accounting, Computer Science and Multimedia, Engineering, and the International Baccalaureate World Program. Each pathway contains a four year specialized career course sequence that compliments the core subjects. Students in all pathways have the opportunity to experience a full range of Advanced Placement courses, participate in dual enrollment options at local colleges and universities, and participate in industry specific internships and job shadowing. DMHS students are prepared to not only compete but also to shape and define the 21st century.

Mission

Our mission is to work collaboratively as a learning organization to ensure that every student graduates college and career ready with the ability to think critically and creatively, communicate effectively, and collaborate with diverse members of society. We develop diverse magnet learning experiences that prepare students to be innovative in the fields of fashion design, engineering, business, and electronic information. A sense of collective responsibility exists. When students are not achieving defined standards, we change our practices to ensure that they do.

Vision

> **All** students are able to achieve **high standards** of learning and character.

> **Every member** of the school's community has the **primary responsibility** of supporting and ensuring high standards of student learning and character development.

*When students are not achieving high standards of learning or character development, **we must change our practices** to ensure that they do.*

Core Program

The curricular and instructional program offered in our core program is aligned with California State Standards and emphasizes the 21st century skills of communication, collaboration, creativity and critical thinking. In addition to our regular core program, students have an opportunity to take a range of honors and advanced placement courses.

AP Art History	AP Human Geography
AP Biology	AP Physics I
AP Calculus AB	AP Psychology
AP Calculus BC	AP Spanish Language
AP Chemistry	AP Spanish Literature
AP Chinese	AP Statistics
AP Computer Science	AP Studio Art: 2-D
AP English Language and Composition	AP US History
AP English Literature and Composition	AP US Government
AP Environmental Science	AP World History

The purpose of this curriculum guide is to highlight our career aligned thematic pathways. The combination of our core program and our elective pathways ensures that DMHS students are college <u>AND</u> career ready.

Table of Contents

Downtown Magnets High School

Downtown Business Magnet			Electronic Information Magnet	
Academy of Finance	**Academy of Fashion Design and Merchandising**	**International Baccalaureate Diploma Programme**	**Academy of Information Technology**	**Academy of Engineering**
A–G Core > 19 AP Options	A-G Core >19 AP Options	A- G Core AP Options	A-G Core >19 AP Options	A-G Core >19 AP Options
Electives	Electives		Electives	Electives
9th: Intro. to Business or Business Organization	9th: Fashion Illustration (Drawing 1)	9th: World Lang, Health 10th: World Lang. AP World History	9th: Exploring Comp. Sc. or Computer Science I	9th:PLTW Intro. to Eng. Design
10th: Business Entrepreneurship (NFTE Internship)	10th: Beginning Clothing (Fashion 2)		10th: Digital Imagery I or Computer Prog. I	10th: PLTW Principles of Engineering
11th: Advanced Accounting (LAEP Internships)	11th: Fashion Textiles and Apparel		11th: Digital Imagery II or AP Computer Science	11th: PLTW Digital Electronics

11th	12th
IB Lang & Comp Yr 1 AP Eng. Exam Yr. 2 HL Exam	
SL Lang B * AP Lang Exam	SL Lang B* SL Exam
IB History of Americas	

12th: International Relations or Corporate Finance	12th: California Market Center (Internship) Fashion Design and Fashion Management Senior fashion show	Yr1 APUSH Exam	Yr 2 HL Exam	12th: Film Making or Computer Prog. III	12th: PLTW Engineering Design and Development
		SL Biology 1	SL Biology 2 AP Bio Exam/SL Exam		
		SL Math 1 * AP Calc AB Exam	SL Math 2 * SL Exam		
		HL Film 1	HL Film 2 HL Film Exam		
		TOK/EE/CAS	TOK/EE/CAS		
Internships Business Internship Foundations in Financ Acctg (USC 2 unit credit) General Electives	Internships Business Internship California World Market Industry Certification* General Electives	IBCC Option 2017-2018 ■ Career-related Pathway (AOF, AFDM AOE, AOIT) ■ 2 Diploma Courses ■ IBCC Core (ATL, Language, Reflective Project, Community Service)		Internships Industry Certification* General Electives	Internships Industry Certification* General Electives

COURSE DESCRIPTIONS

Academy of Information Technology

Media Arts Strand

Digital Imagery 1

In Semester 1 of Digital Imagery, students will learn to use digital imaging hardware (digital camera/s, scanner) and software (Adobe Photoshop and Image Capture) Students will produce digital artwork, utilizing these tools, and gaining familiarity with them. The course is project-based, and progressive. Each project is designed to build on skills already learned/mastered and add new skills, ending with extensive knowledge of the applicable software & equipment.

Sample DI 1 Student Projects

Vector Portrait, by Sharmaine Nunag:

This assignment begins with a photograph, and students use various Photoshop tools and skills gained during the first semester to "paint in" the details. *Photo by CJ3
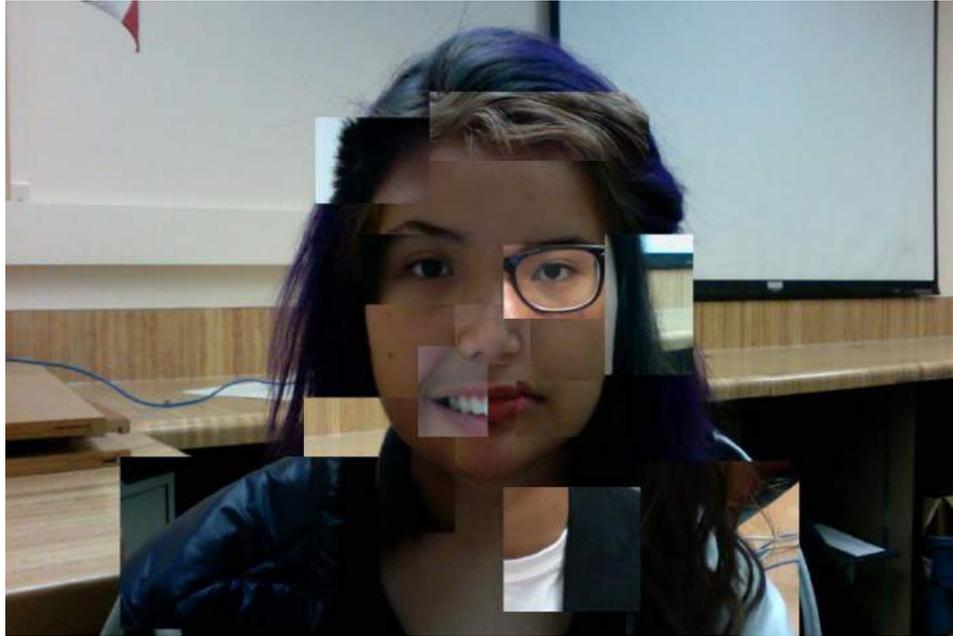
Frankenstein Photo Collage, by Liliana Perez

With a photo of themselves, students substitute features from other photos creating a composite image.

Surrealistic Scene – Photo Collage by Liliana Perez

Students select multiple photos to combine in a new work of art. Photoshop skills gained allow them blend various different images into a new design.

Digital Imagery 2

In Digital Imagery 2, students continue exploring and building on skills acquired in Digital Imagery 1. This course focuses on Graphics Production; Semester 1 will focus on Digital Photography, including an off-site photo shoot, working with a photographer, culminating in an Electronic Portfolio. Semester 2 focuses on "world-of work" tasks and projects, with students designing various products.

This course is project-based. Students will use the skills and techniques mastered in Digital Imagery 1 to create real-world projects, like those that might be found in the workplace. Students will work on collaborative projects as well as individual ones. Group projects provide the opportunity for students to work on building multiple and varied skills, such as:

- Prioritizing tasks;
- Division of labor, delegating;
- Responsibility to the team;
- Leadership;
- Time-management;
- Collaboration and team-building.

Individual projects require different skill sets. Students must manage every aspect of their own projects, including workflow. Individual projects provide a greater opportunity for individual creativity and responsibility.

Projects to be completed include (but are not necessarily limited to):

- Photography Portfolio
- Downtown Photo shoot Poster
- Brochure/s
- Flyer/s
- Individual Choice Projects
- Project/s: students submit proposals for projects of their choice, & w/ approval, will work on the software and/or type of project they are most interested in.
- Creative Collaborative Project: working in a group, students will create a personal project – they will have a choice of topic, genre and approach
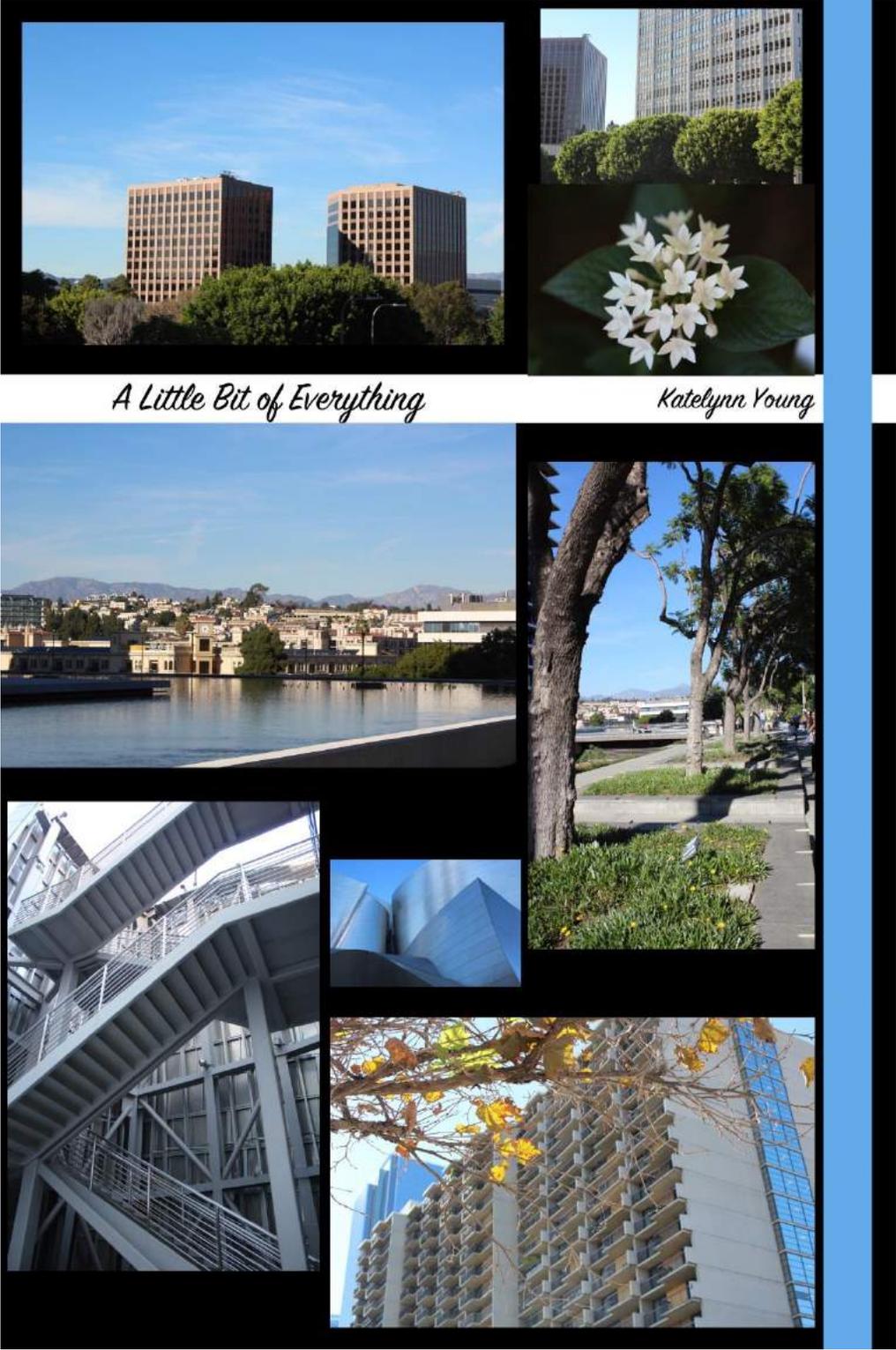
Downtown L.A. Photo-shoot Poster, by Katelynn Young:

Students participate in a field trip walking tour of part of Downtown L.A. All photos are shot and edited by the students, which they then organize into a poster for presentation.

About the President and Vice President

My name is Jane Tan and I am the President of the KP Club. I am a Senior in DMHS and the Secretary for ASB. I am Filipino and a part Tinkiling. I also love the fact we have this club to spread Filipino culture. As I always say, "This is a Democracy." so everyone was voted into the cabinet. Thanks to our sponsors we can do more things no other club can.

My name is Enrico Cortes and I am the Vice President of the KP club. I am a Junior in DMHS and cousins with Jane. I am Filipino and a tapper for Tinkiling. I can be very weird with my friends. Since my brother was President last year I hope to follow his steps to be a great President to this club.

About Kaibigan Filipino Club

KP Club is a longer term of saying Pinoy Club. This club teaches other students about Filipino culture. We have a Kuya/Ate program where we match Freshman and Sophomore students with Juniors and Seniors. We also have banquets for members and staff, which is the most favorable event amongst the school staff. There is a dance team in where we mix Hip-Hop and Tinkiling together.

"You don't have to Filipino to join."
-Trishia Nava

Kaibigan Filipino Club

Pinoy Friends Club

Find Us:
Every Friday during Lunch
B10 Ms. Jacob

Philippine Culture

Tinkiling is the traditional dance KP uses which require two or four long bamboo sticks to be danced in. This dance has won us 2nd and 3rd place in Paramount. Pandanggo sa Ilaw a traditional dance that requires candles to be balaced with our fingers. Sakuting another traditional dance that requires musical rythmn through two wooden sticks.

KP Events

Within our club we several activites for students to enjoy. There is the Ate/Kuya program and the KP Winter Banquet. We host the KP Winter Banquet every beginning semester of the school year. This banquet welcomes both new members and staff to another school year. The Ate/Kuya program runs all year and gives members a chance to connect with other memebers of a different grade level, Ate/Kuya means older sister/older brother. At the end of the Ate/Kuya program we have a reval party with games.

Find Us On Youtube:
-Downtown Magnets 2014 Talent Show
-DTBusinessMagnet
-Downtown Business Magnet at West LA College

Philippine Dances

Tinkiling Fusion (dance team) has gone to Paramount*, Multicultural Night, Talent Show and West LA College to preform and compete against other schools. There are two other dances Tinkiling Fusion has preformed including pandanggo sa ilaw* and sakuting*.

DMHS Brochure, by Trishia Nava: Students select a topic for brochure from offerings at our school. Photos, text & layout are all original. This is a brochure for our Filipino Cultural Club, Kaibigan Pilipino.

Filmmaking

Filmmaking gives students the opportunity to learn about the techniques and processes involved in making a movie. They will receive hands-on practice in following these steps, creating multiple short films as they learn. This course is project-based. Students will continue to use skills and techniques learned in Digital Imagery 1 and 2 to create their films. PROCESS is very important in this class, and the grade for the process, (pre-production, production and post-production phases) is equally weighted with the actual film itself. Students will work on individual projects as well as collaborative ones.

Individual projects require specific skill sets. Students must manage every aspect of their own projects, including workflow. Individual projects provide a greater opportunity for individual creativity and responsibility. All of the assigned projects will be short films, ranging from 1 ½ to 3 minutes, or in certain circumstances, slightly longer – prior approval is required for a longer length film.

Group projects provide the opportunity for students to work on building multiple and varied skills, such as:

- Prioritizing tasks;
- Time-management;
- Collaboration and team-building;
- Division of labor, and delegating;
- Responsibility to the team;
- Leadership.

Student Filmmakers at Work

Writing a script, an important first step in creating a film.

Reviewing raw footage, prior to downloading for editing. Most students shoot their films using their own personal devices – usually smartphones.

This is the last and most important task – editing the raw footage into a quality film. This step involves selecting and editing takes of a scene, adjusting audio, and adding music and credits.

Yearbook/Digital Imagery Production

Course Description: This course is designed to teach the skills necessary to produce the school yearbook, a complete record of the school year. The year begins by planning the coverage for the school year and designing a unifying theme for the book. Students will study magazine journalism including layout and design techniques, writing and editing copy, headlines and picture captions. This course provides practice in gathering and analyzing information, interviewing, note taking and photography. Graphic Design skills are built in designing and developing page layouts

Students will:

- learn strategies of planning, marketing (yearbook sales) and distribution of the yearbook;
- learn editing/revision strategies;
- learn good work habits, especially in;
    - organizing information and digital files,
    - planning and scheduling,
    - Time Management,
    - Communication,
    - Working independently,
    - TEAMWORK and collaboration.

Staff members are responsible for all phases of yearbook publication

Note: At times, deadlines require that staff members work after school, on weekends, and/or on holidays.

Yearbook Staff at Work

Sample Yearbook Layouts

COURSE DESCRIPTIONS

Academy of Engineering
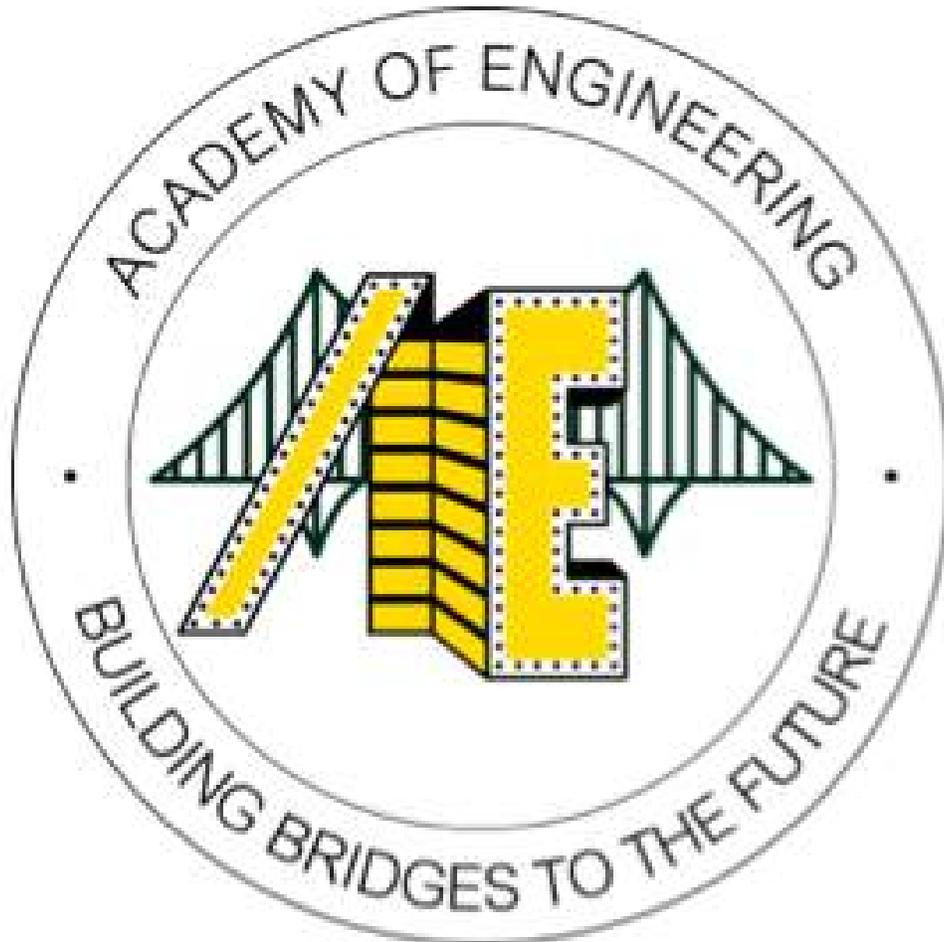
Capstone Course-Engineering Design and Development

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

This course involves extensive research in designing and constructing solutions to an open ended engineering problem of your choice. In EDD you will work in teams to research, design and construct solutions to your problem. You will apply principles developed in the preceding courses and are guided by mentors. You must present progress reports, submit a final online report and defend your solutions to a panel of outside reviewers at the end of the school year. Students will keep a detailed engineering notebook where they record all of their initial data, ideas, and notes on their EDD process. Students will then transfer and solidify information from their engineering notebook to an online portfolio of the teams entire Engineering Design and Development Process.

TOPICS TO BE COVERED:

● Design Process	● Prototype Planning and Construction
● Product Scheduling	● Testing and Evaluation of Products
● Patent Search	● Interview Process
● Patent Registration and Development	● Decision Matrix Construction
● Product Life Cycle	● Material Price Lists
● Presentation Techniques	● Confidentiality/Non-Disclosure Agreements
● Data Collection	
● Data Presentation	● Graphical Timeline Mapping

Engineering Design Process
Engineering Design and Development

MNE — Course Introduction / Project Management / Documenting as an Engineer / Application of STEM Practices

ABC — 1. Define and Justify a Problem

A — Brainstorm Possible Problems ← Re-Boot Project

A — Can the Problem Be Justified? → Find Experts

Ethically? Academically? — N → Market Research? — N →

Y ↓ — Y ↓

BC — Has a Solution Been Attempted? / Why Have Prior Solution Attempts Failed? / Critical Solution Design Requirements? → Find Experts

Both Search Paths Must Be Documented

Found In Documented Commercial Product Search? — Y → Found In Documented Patent Search? — Y

N ↓ — N ↓

B — Analysis of Prior Solution Attempts

Problem Statement

Project Proposal

Can You Do It Better? / No Intellectual Property Conflict? — N →

Y ↓

DEF — 2. Generate and Defend Solution Concepts

C / DEF — Identify Design Goals / Design Requirements and Identify Application of STEM Principles → Find Experts

Does the Technology Exist? / Is a Viable Design Possible? — N

Y ↓

DF — Select Final Solution Path / Decision Matrix

DEFG — 3. Develop a Testable Solution

EG — Generate Drawings / Schematic / Process Chart

EG — Identify Materials / Tools / Resources

Skills to Build? / Valid Solution? — N → Find Experts

Y ↓ — Preliminary Design Review

GHIE — 4. Construct Prototype and Develop Testing Plan

EHI — Develop Qualitative and Quantitative Testing Procedures - Build

Safety Addressed? / Incremental Testing Documented? — N

Y ↓

Analyze Results / Are Results Unbiased? — N → Find Experts

Y ↓ — Critical Design Review

JKL — 5. Reflect On/Evaluate Solution / Reflect On/Evaluate Design Process

JKL — Stakeholder Feedback / Finalize Documentation / Next Steps / Modifications / Reflection

MN — 6. Presentation of Findings / Defense of Project Steps

PROJECT LEAD THE WAY — PLTW

Similar Solution Matrix

Sources	Solutions & Designs	Biodegradable	Inexpensive	Accessability to inside of cont.	Easy to cut material	Minimal lotion waste	Easy dispense mechanism	Aesthetics	Total
http://www.amazon.com/Flip-It-FLSKS-Flip-It-Deluxe/dp/B00LNJ/KK7/ref=sr_1_1?ie=UTF8&qid=1436481563&sr=8-1&keywords=flip+it+cap	Flip-It!	0.3	0	0	0	2	2	1	5.3
http://www.aliexpress.com/popularhand-cream-pump-bottle.html	Bump Bottle	0	1.6	0	0	0	2	1	4.6

Engineer Design & Development
Similar Solution Matrix: Unwrapping
Charger cable is tedious

Sources	Solutions & Designs	1 Portable	2 Small size	3 Recoil mechanism	4 Long cable	5 Shape	6 Aesthetic design	Total
https://www.google.com/patents/US673 3328?dq=charger+cable+organizer&hl=en&sa=X&ved=0CFMQ6AEwCDgKah UKEwjw_5XWzaLlAhWBL4gKHZ11B5 E	USB cable adapter with cable winding mechanism	3	3	3	2	1	1	2.3
https://www.google.com/patents/US201 402530387dq=john+g+posa&hl=en&sa =X&ved=0CBwQ6AEwAGoVChMlgOv Xs9KiyAlVyCilCh3XKg13	Mobile devices and cases with built-in	3	3	3	3	2	1	2.5
https://www.google.com/patents/US881 1646?dq=Cord+winder+apparatus+with +earphone&hl=en&sa=X&ved=0CFwQ 6AEwCTgyahUKEwjg2sGP66LlAhWN mogKHTGfCLQ	Retractable earphone set	3	3	3	2	1	1	2.3
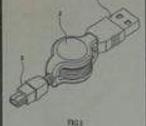
Top Frame Container

Cap with Pump
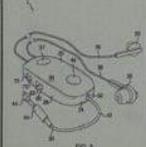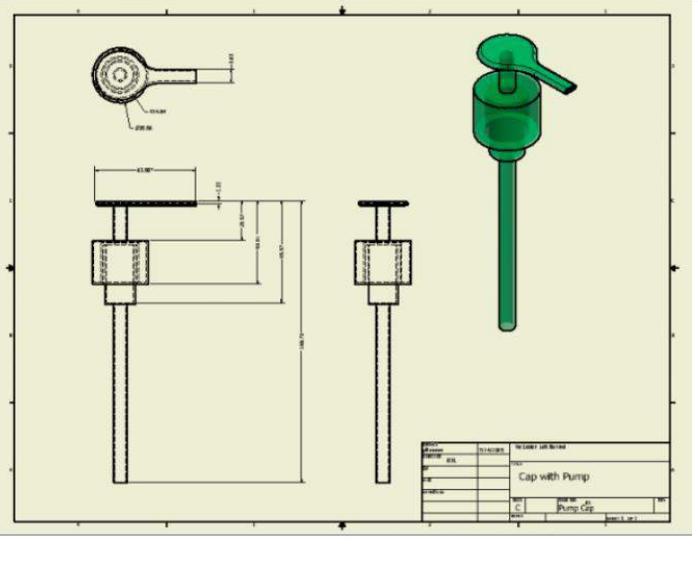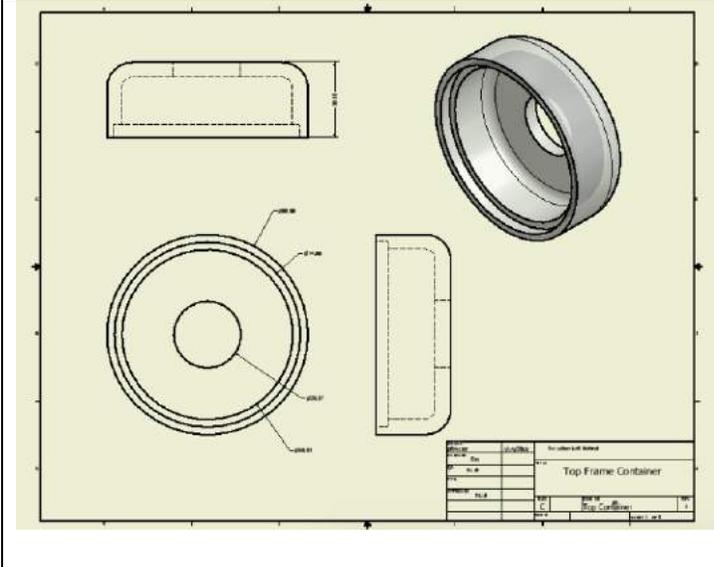
Introduction to Engineering Design

Course Description

Students will learn and apply the engineering design process to design and build products that solve everyday problems. The engineering design process is a series of steps that engineering teams use to help guide them in open-ended design and emphasizes creativity, practicality, and teamwork. Students will learn skills to create technical drawings and sketches, make measurements and dimension objects, reverse engineer and create 3D models of objects using computer software, and document the team's design process in engineering notebooks. Students will study the intention behind the design of a product, from the design theory of simple everyday objects such as chairs and lamps to more complex products like cars and headphones.

Curriculum

Students will complete 'instant challenges' with limited time and resources, such as building a cable car to transport objects across the room. During instant challenges students must brainstorm, communicate and collaborate in groups, and apply hands-on building skills.

Students will create isometric, oblique, and multi-view technical sketches to communicate their product designs.

Students will use measuring tools such as dial calipers to make accurate technical drafts.

Students will learn reverse engineering by acquiring the skills to 3D print replicas of a toy car. They will make measurements and sketches of the toy car and make 3D models using Inventor.

Students will design and build a puzzle cube that is challenging for high school students to solve. This project challenges students to make abstract visualizations and accurately build products based on detailed sketches.

Students will learn how to test and evaluate prototypes by taking data and analyzing statistics.

Students will design and build prototypes for their own shoe soles.

Pre-Requisites: Concurrently enrolled in Algebra I.

Projects: Design and build a puzzle cube. Design your own shoe soles.
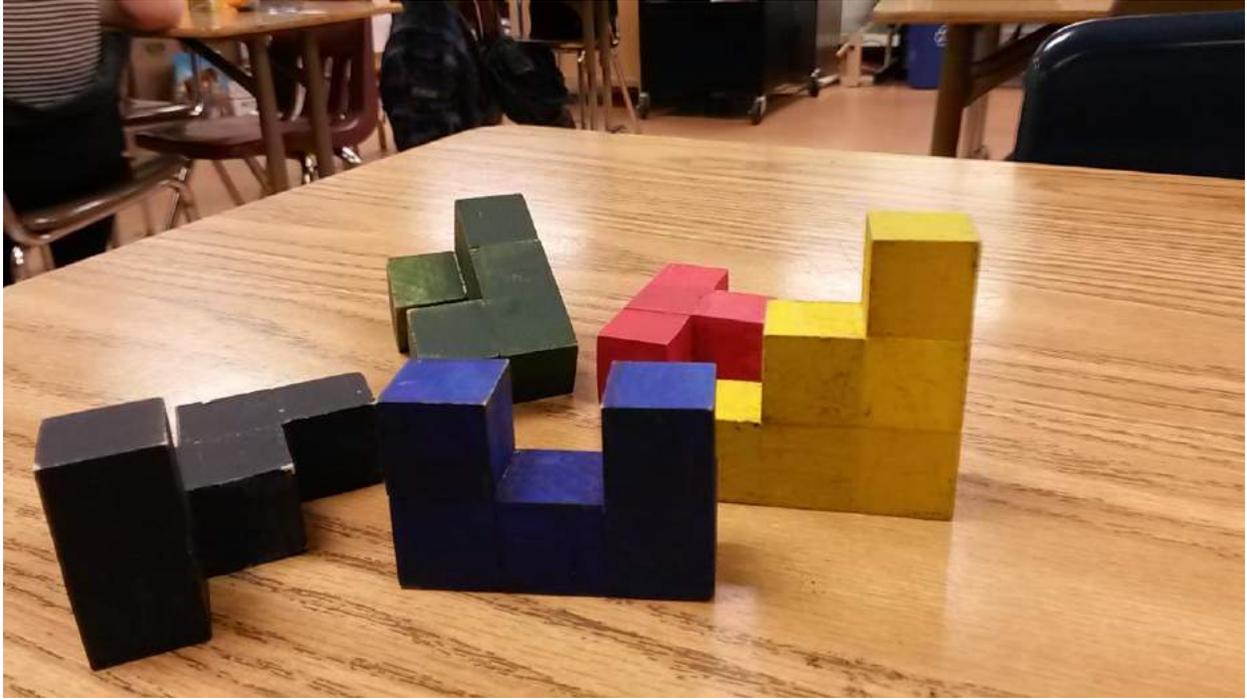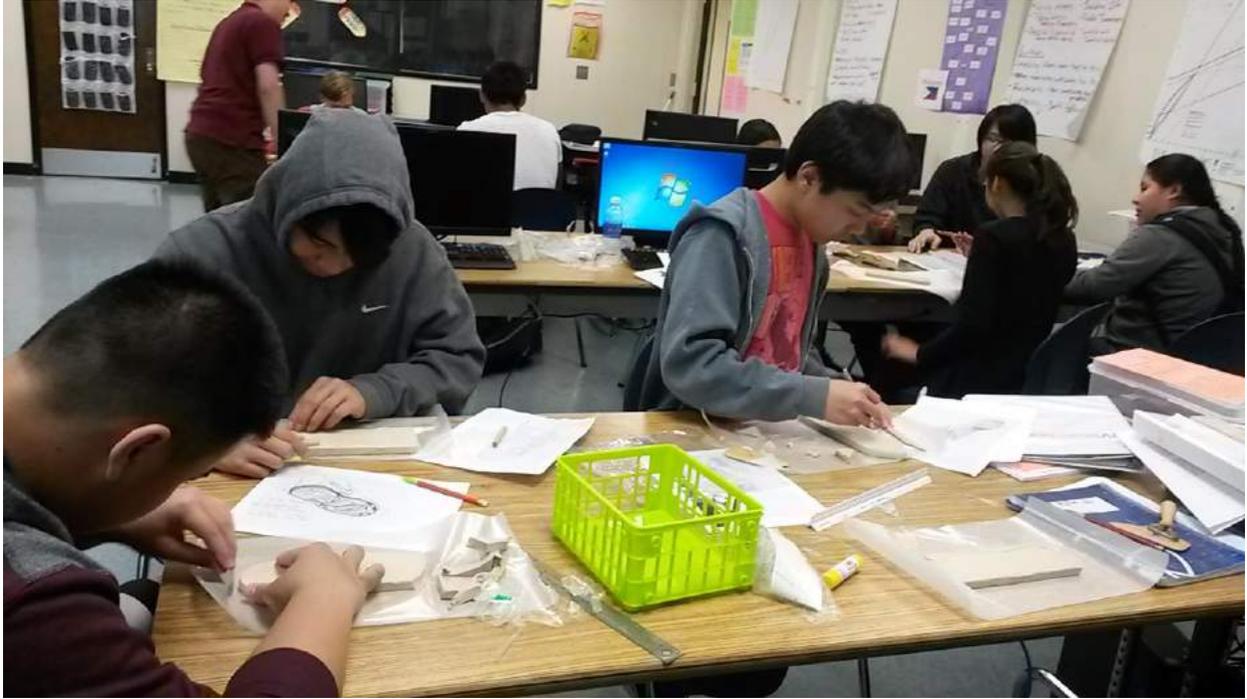
Principles of Engineering A & B, 10 Units

Course Description: Principles of Engineering (POE) is a foundation course of our high school engineering pathway. This survey course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation, and kinematics. In plain English, the course covers how to make things that make life easier, how to convert energy to power them, and how to program them to think for them selves. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

Curriculum: Students have the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based learning. By solving rigorous and relevant design problems using engineering and science concepts within a collaborative learning environment, the curriculum challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

Prerequisites: This course is intended for students in the 10th grade. Students must have completed Algebra 1 with a C or better. Students should concurrently role enroll in physics or chemistry.

Final Design Project: Students will design a robot that automatically identifies and sorts various materials. Such a robot would be useful at a recycling facility.
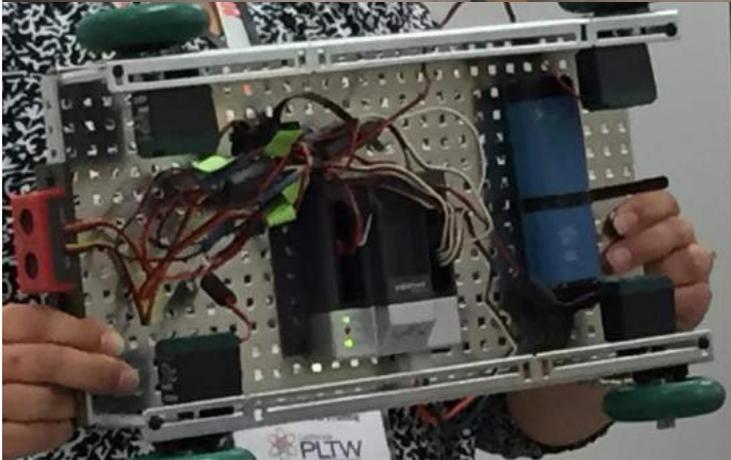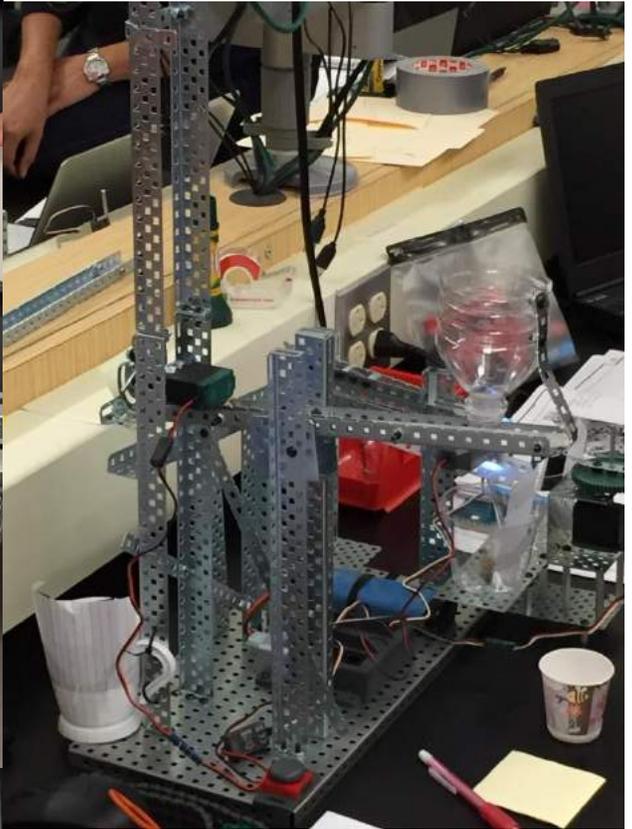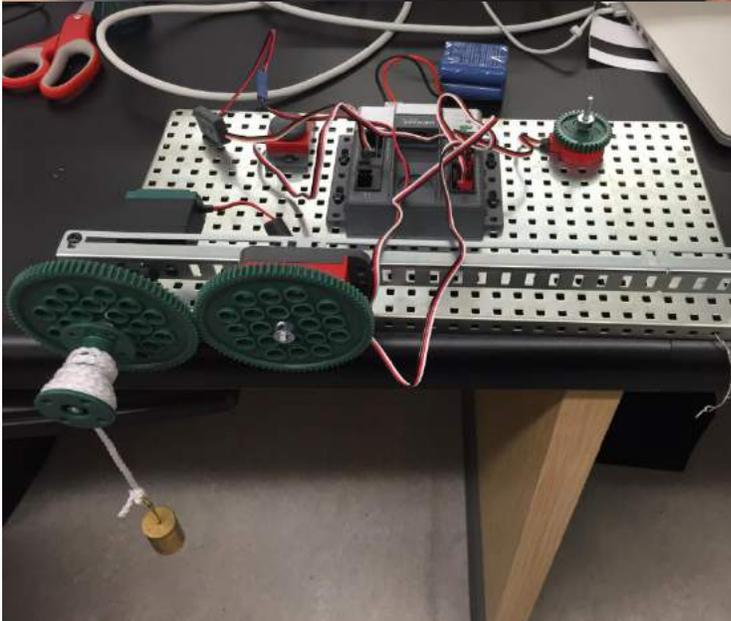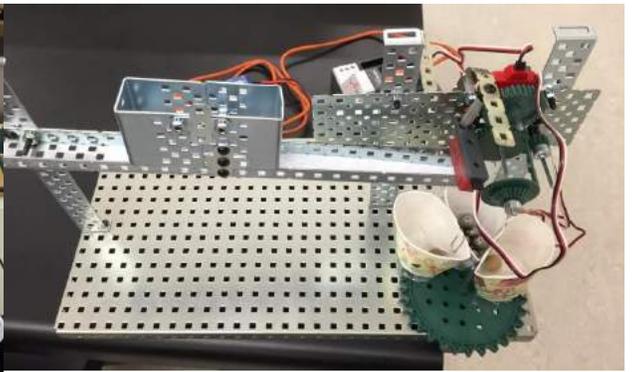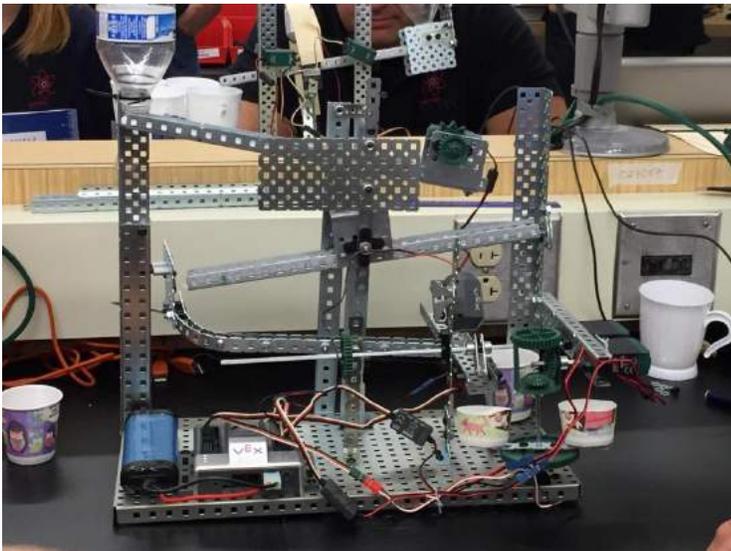
**Computer Science
Program/Curriculum**

Year 1: Computer Science 1: Computer Programming as if the Rest of the World Existed
Year 2: Computer Programming II / AP Computer Science
Year 3: Computer Programming III

There is a lot of hype and misinformation about Computer Programming. The truth is that there are only a handful of schools within LAUSD that teach students how to program. There are even fewer taught by teachers who have a Computer Science degree and/or have worked as Software Engineers.

Computer programming is not "coding". It is not a hobby. It is a subject as important and as rigorous as Math, Biology, History or Spanish Language / Literature; perhaps even more so because its 21st century applications extend in every possible direction and into nearly any field you can imagine. More job growth is projected in the Computer Programming field than for any other profession, the number of job openings is high, and the wages equally high.

Computer programs are written with a ***<u>PROGRAMMING LANGUAGE</u>***.   Just as learning a foreign language takes time and lots of practice, so too learning a programming language and <u>how to use it</u> is a gradual process. It takes at least two years to become a fluent programmer. During that time, though, you will gain increasing levels of proficiency, skill and confidence.

Students at DMHS learn the programming language **Java**. Once you have become a proficient programmer using one programming language, it is easy to pick up others.

The Industrial Revolution was about extending
the power of human muscle with inventions like the Steam Engine.

The Computer Revolution is about extending **Thought**,
the power of the human mind.

The CS program at DMHS expands students' notions about the applicability of computer programs to solve engaging and significant problems in a diverse range of fields. The projects that students study are modeled after software programs that fill a ***SOCIAL*** or ***SCIENTIFIC PURPOSE***.

The program is designed this way to attract a wide variety of students, especially young women. The popular misconception is that computer programmers are either geeks or gamers. The reality is that software developers are as varied as they are in any other occupation. The website ***DOT DIVA*** showcases women using computing in a widely diverse range of fields, including: Engineering, Human Rights, Disaster Relief, Journalism, Law, Medicine, Politics, Psychology and Social Justice.

COURSE DESCRIPTIONS

Academy of Information Technology

Computer Science Strand
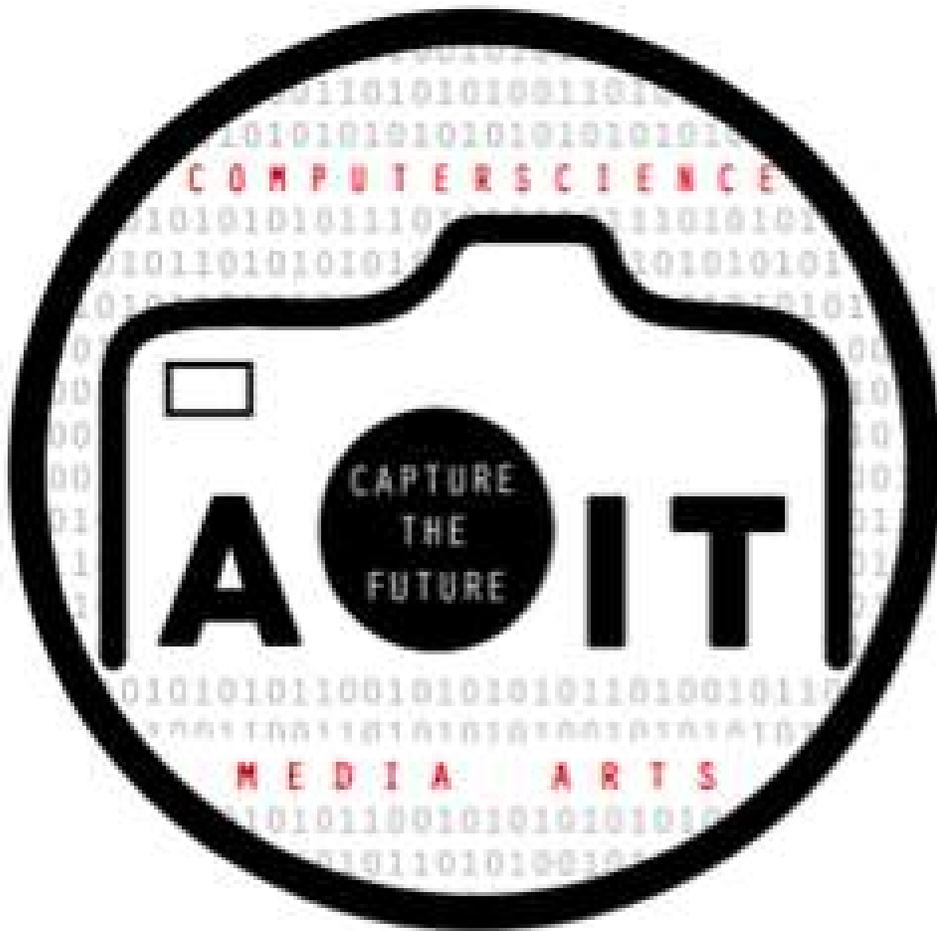
Year 1. Computer Science 1.

Course Description:

Most high school Computer Science (CS) programs emphasize gaming or the latest tech fad, but at DMHS the focus is on how CS can be used in the Real World.

From Day 1, students begin writing **Java** applications (software programs) that model and simulate problems in such fields as Dynamic Art, Geography, Astronomy and Molecular Biology. We use a free and simple – but extremely powerful – programming development tool called **Processing**, which was designed for visual artists to create computer art.

In the first semester students become familiar with the fundamentals of programming by writing programs that generate Computer Art. The dynamic art pieces shown below are among the first programs that students build. In the second semester, students study the language in-depth.

Curriculum:

Textbook: *Learning Processing, A Beginner's Guide to Programming Images, Animation, and Interaction*, 2008, by Daniel Shiffman

Semester 1: Using **Processing**, students learn the uses of variables, Boolean expressions, and iterative (repetition) and conditional control structures. They learn to encapsulate code within methods, pass input (arguments) via parameters, and calculate return values. They learn software engineering principles for top-down design. They learn to write hierarchically structured programs that are easy to maintain and modify. They learn to weigh the advantages and disadvantages in choosing between different ways to write a piece of computer code. They learn the possibilities for non-trivial applications of programming to study and solve problems across the *STEM*, Humanities and Arts curriculum.

Semester 2: Students progress to **Java** and study the first 40% of the AP course. They delve into in-depth study of variables, methods, parameters, loops and if-statements. This gives students a good look at what they can expect to study in the AP course. It also gives them a huge head-start when they take the AP course in their sophomore year.

Prerequisites:

Demonstrated Proficiency in Algebra 1
Grade-level in English Language Arts

Final Project:

Students design their own project and write a program implementing their design.

Below are screen shots of dynamic (animation) programs students write in CS1.
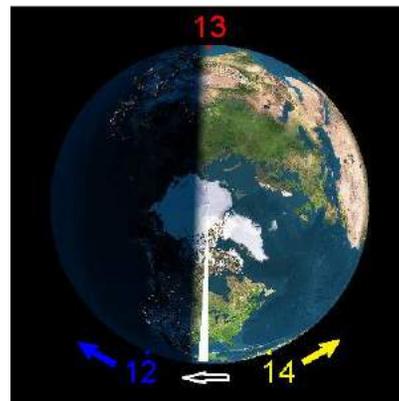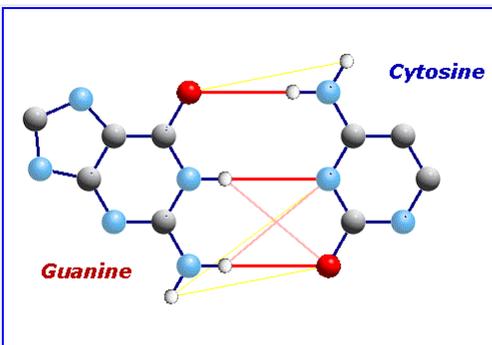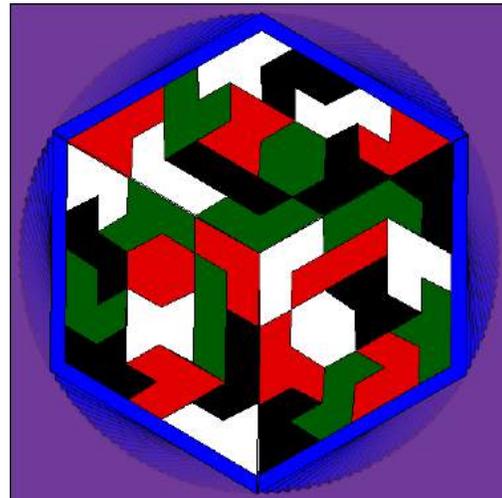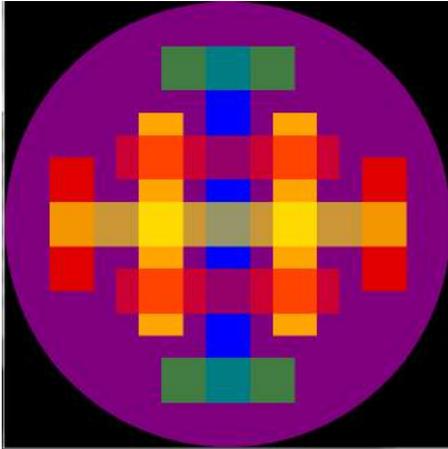
Year 2. AP Computer Science / Computer Programming II

Course Description:

The AP Computer Science A course and Computer Programming II are one and the same. The difference is that students enrolled in CP2 are not expected to take the APCS-A exam. Students gain greater proficiency in using Java to solve problems of ever-increasing complexity. They are introduced to computer architecture, binary (base-2) and hexadecimal (base-16) number systems, variable references, classes and objects, inheritance and other advanced concepts and topics. The course prepares students to <u>pass</u> the College Board APCS-A exam.

Curriculum:

Textbook: *Building Java Programs: A Back to Basics Approach*, 2nd ed. by Regis and Stepp.

Prerequisites:

Successful completion of CS1

Final Project:

No final project is required.

Year 3. Computer Programming III: post-AP

Course Description:

Students learn advanced Java data structures, graphics and user interface design and programming. They program open-ended projects, such as dynamically-created word clouds. They program solutions to fundamental bioinformatics problems, like gene / protein assembly and sequence alignment.

Curriculum:

Textbook: *Building Java Programs: A Back to Basics Approach*, 2nd ed. by Regis and Stepp.

Prerequisites:

Successful completion of AP Computer Science

Final Project:

Students will create a 3-D Simulation of the Solar System or Music Visualization software.
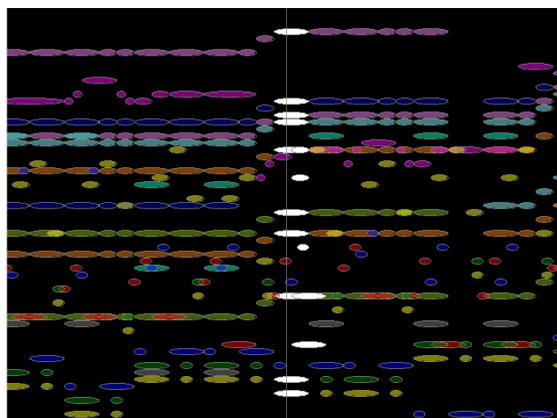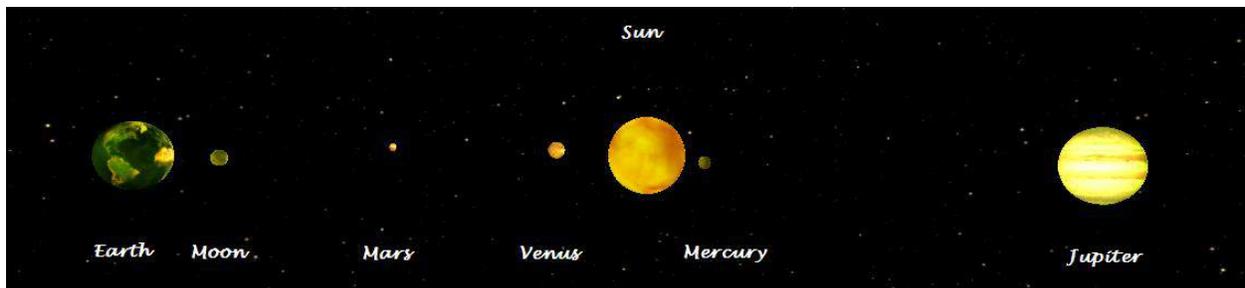
COURSE DESCRIPTIONS

Academy of Finance

BUSINESS ENTREPRENEURSHIP A & B 10 UNITS

(Academy Course)

Course Description: This course introduces students to the exciting world of creating and owning their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. With "learning by doing" as the goal, students will write a business plan for a business of their choice and attend a field trip to the Los Angeles Wholesale District where they will purchase items to be sold at "MARKET DAY". In addition, students will have the opportunity to compete in several business plan competitions.

Curriculum: Develop a basic understanding of entrepreneurship. Develop a basic understanding of the entrepreneurial lifestyle. Develop a basic understanding of professional skills. Develop a basic understanding of economics. Develop a basic understanding of how to use financial information in ownership. Understand how to analyze a market. Demonstrate how to use marketing strategy to start a business. Demonstrate how to use financial skills to start a business. Use communication skills in a professional environment. Develop a basic understanding of how technology is used in entrepreneurship

**All of this will be achieved through guest speakers, field trips to the Wholesale Market, developing a business plan, and other hands-on activities.

Partnerships: Network for Teaching Entrepreneurship (NFTE) and DECA (Career Technical Student Program which business students may join.)

Prerequisites: Beginning in the 9th grade the first course students will need to enroll is the "Introduction to Business" course. "Business Entrepreneurship" requires students to be extremely motivated and stay on top of their work at all times. Deadlines are firm, however, the experiences students will have in this class will last a lifetime. Students who have succeeded in this class have displayed the following:

10th grader	Self-starter
Entrepreneurial mindset	Eager to be involved

Annual Project: Develop a written business plan for a business of their choice.

Career Opportunities

Just because Entrepreneurship is a marketing course does not mean all students go on to be business majors, by taking Entrepreneurship, some career options available to you will include:

- Doctor
- Lawyer
- Accountant
- Engineering
- Auto Service
- Culinary
- Communications
- Interior Designer
- Business Professional

Pictures of Business Entrepreneurship Activities:

Website of Formal Student Competing for the National Business Plan Competition:

www.prnewswire.com/news-releases/los-angeles-teen-**hayley**.

ACCOUNTING A & B

(Academy Course)

Course Description: The number one college major for both men and women is Business. Accounting is the basic language in business. This is a one year introductory college accounting course. Students will learn the basics of double-entry accounting for various types of business organizations by using simple application of mathematics. Computers are used throughout the course to simplify the process of maintaining financial information. Students will use EXCEL to maintain financial information for a business. In addition, students will research job functions, career outlooks, and academic preparation for a variety of entry level positions in the accounting profession.

Curriculum: This hands-on course offers the following units of study: Accounting Careers, Ethics in Accounting, Basic Accounting Cycle, Accounting for a Payroll System, Accounting Legalities, and Generally Accepted Accounting Procedures.

The material covered is reinforced and enhanced through the use of technology, guest speakers, videos and hands-on, project-based activities, such as the "Accounting Monopoly". In this project, students will apply what they have learned by creating and running a real estate developing business. Students will play a modified version of the "Monopoly" game during the semester and record their business activities on various financial statements, analyze their data, and prepare a presentation for their peers and the local business community, evaluate their company's performance over time.

In addition, because experiential learning is an important aspect of this course, a field trip to an accounting firm may be planned if possible.

Certification: Students who qualify are eligible to sit for the NOCTI Advanced Accounting assessment or the NAFTrack Certification. Microsoft EXCEL Certified User certification which can be used for student selected verified credit for future employment.

Partnerships: National Academy Foundation (NAF), the Los Angeles Education Program (LAEP) and DECA.

Prerequisites: Beginning in the 9th grade the first course(s) students will need to enroll are the "Introduction to Business" and "Business Organization: courses followed by the "Business Entrepreneurship" in the 10th grade. This course requires students to be extremely motivated and stay on top of their work at all times. Deadlines are firm, however, the experiences students will have in this class will last a lifetime. Students who have succeeded in this class have displayed the following:

- 11th grader   Self-starter
- Entrepreneurial and accounting mindset   Eager to be involved

Annual Project: Student will generate transactions playing Monopoly using checks and receipts. The transactions will be analyzed, journalized, and posted. Student's periodically post

transactions to a Journal and General Ledger (at least monthly). Quarterly each student prepares a three column Trial Balance. Midyear and at year-end students prepare a full set of Financial Statements (Income, Balance Sheet, Statement of Changes in Cash and Stockholder's Equity) At year end, students Audit each other's final financial statements render an audit opinion and produce an Annual Report.

Career Opportunities

Some career options available to you will include:

- Accountant
- Appraiser
- Auditor
- Bank Manager
- Certified Public Accountant (CPA)
- Chief Executive Officer (CEO)
- Chief Financial Officer (CFO)
- Financial Planner
- Stock Broker
- Tax Preparer

Pictures of Accounting Activities:
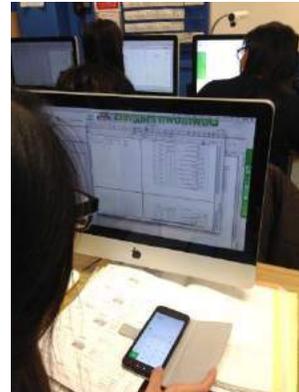
COLLEGE ACCOUNTING/PRINCIPLES OF FINANCE

The "College Accounting/Principles of Finance" course is a six week college course. The purpose of the "College Accounting/Principles of Finance" course is to give students an opportunity to experience and take a college course. This course will be taken during the student's senior year. Classes will be held afterschool on the University of Southern California (USC) campus from 4 pm to 6 pm. Bus transportation from the Downtown Magnets (DMHS) to USC and transportation back to DMHS will be provided by the school.

STUDENT ORGANIZATION

DECA is the co-curricular organization for high school Business students. The organization expands the occupational preparation for students by helping

them attain the following goals: leadership skills; knowledge of the American enterprise system; self-confidence; improvement of home, business, and community; scholarship; citizenship; and career goals

Fundraising Activities

Many fund raising projects will occur throughout the year. Students will suggest and research all fund raising endeavors. All Academy students are encouraged to partici-pate in fund raising activities.

Funds may be used for Academy trips, team-building activities, or any other activity voted on by the students and approved by the staff.

Community Service

The community service program is a mandatory program for all Academy students. All students must complete 100 hours of voluntary service in the community. Service may be done in various areas such as schools, city government, churches, and other community entities. Fifty (50) of the 100 hours should be completed by the end of their sophomore year and the remaining 50 by the end of their junior year. Exceptions on the total number of hours (40 hours in the tenth grade and 40 hours in the eleventh grade) are only made if a student can display written proof that he /she is working afterschool hours. This written proof must be given to the Academy counselor and teacher no later than the third week of each semester. **It is highly recommended that students complete all 100 hours by the end of their sophomore year. Students must complete at least 45 hours before being assigned to an On-The-Job (OJT) Training position.**

Unpaid Internship

The purpose of the Unpaid Internship component of the Academy is to provide students with the opportunity to use the skills they have learned and to learn more business skills as they do On-The-Job-Training (OJT). OJT begins in the 11th grade or after completing 50 hours of community service. Off-track internships will also be available for juniors and seniors.

Upon completion of the Unpaid Internship program, students should be able to apply knowledge, skills, attitudes and good work ethics to real-life work situations. This should enable the students to relate school work to the demands of business and industry.

Mentor-Protege Program

The purpose of the Mentor-Protege Program is to give students a role model and friend who can offer information and guidance on how to achieve success. The goal of the Mentor-Protege Program is to work cooperatively with local business/industry within the framework of the public schools to provide a bridge that carries students from school to employment and/or higher education.

The success of the Mentor-Protege Program relies on mentor, student, and teacher participation. Their responsibilities are listed below.

Responsibilities of Mentors include the following:

1. Communicates and/or participates with student in at least one activity per month.
2. Takes initiative to contact student, follows through with commitments, and contacts student about any changes, concerns, or the need to drop from the program.
3. Communicates immediately with student, Academy teacher, and Mentor Coordinator to discuss any changes, concerns, or the need to drop from the program.
4. Each mentor will also be invited to attend several school activities, such as mentor-student match-up luncheon, mentor feedback meetings, graduation/awards ceremony, visits student's school at least one time during the school year.

Responsibilities of Student Protege include the following:

1. Contacts personal mentor at least once a month.
2. Encourage mentor visits to school for special occasions and corresponds in writing at appropriate times (i.e., invitations, etc.). Logs student/mentor activities on a consistent basis.
3. Keeps mentor up to date on any changes (appointments, phone number, address, etc.).

Responsibilities of the Academy Teacher include the followings:

1. Matches mentors and students according to mentor registration forms and facilitates introductions.
2. Attend industry site meetings with Mentor Coordinator to discuss experiences.
3. Inform mentors of school activities by providing school calendars and other invitations.

Parents/Guardians

Parent and guardian participation are the key to success for the students. The students tend to do better in school when the parents are involved in their school activities. The Academy promotes parent/guardian participation in the following ways:

Parent Involvement

Parents will be called upon to assist the Academy staff and students by being a mentor; tutoring students; helping with fundraising, providing field trip and/or OJT sites and as guest speakers.

Parent Conferences

Parent conferences take place at least twice a year. These conferences are to give parents an opportunity to meet the Academy teachers and monitor their child's performance in the Academy. Parent participation is required at each conference.

Tutoring

The Academy offers tutoring for any student needing additional help to succeed in their classes. Academy teachers are available for individual tutoring before and after school, at lunch and/or by appointment. Check with each teacher for specific tutoring hours.

GRADUATION CERTIFICATES

In addition to the High School diploma, academy students will receive either a "Certificate of Completion" or a "Certificate of Participation". Students who graduate with the "Certificate of Completion" will receive a certificate stating their completion of the all "Academy of Finance" courses, and "College Accounting/Principles of Finance" course as well as the "Academy Cord". Students who graduate with the "Certificate of Participation" will only receive a certificate stating their complete

Certificate of Completion: To qualify for the "Certificate of Completion" students must complete at least two years of all of the Academy of Finance courses ("Business Entrepreneurship AB, Accounting AB, Finance, and International Relations") and pass with a letter grade of "C" or better. In addition to the courses students must attend and pass the USC "College Accounting/Principles of Finance" course.

Certificate of Participation: To qualify for the "Certificate of Participation" students must complete at least two years of all of the Academy of Finance courses ("Business Entrepreneurship AB, Accounting AB, Finance, and International Relations") and pass with a letter grade of "C" or better.

Introduction to Business

Course Description: *Introduction to Business* provides an overview of the world of business covering basic economic concepts, owning and operating a business, globalization, personal financial planning, and more.

Students will be able to demonstrate knowledge of:

- Business terms and concepts
- Economic principles
- Entrepreneurship
- Business communications
- Government affect on business
- Business finances
- Management of human resources
- Basic marketing concepts
- Current events related to business

Projects: Differentiating wants and needs, decision-making strategies, personal/ business budgeting and career exploration.

Business Merchandising

Course Description: *Business Merchandising* provides an introduction to the theory and practice of marketing and explains the core functions of marketing. . Students study economic functions at work in the marketplace, marketing functions including purchasing, pricing, and distribution functions through project-based activities in the classroom. Decision-making and problem-solving skills are involved in units of personal finance, human relations and communications, distribution systems, product/service planning and the use of technology in marketing.

Students will be able to demonstrate knowledge of:

- Business terms and concepts
- Economic principles
- Entrepreneurship
- Business communications
- Marketing plan
- Basic marketing concepts
- Current events related to business

Projects: Resume writing, business letter, business plan and real world problem- solving activities.

International Relations

This course provides an overview of international relations. Students will analyze interactions among countries, learning different ways to explain why countries act as they do. Main topics include states, nations, war, peace, trade, alliances, international organizations, non-state groups, and globalization.

Students will be able to demonstrate knowledge of:

- Business terms and concepts
- Economic principles
- Entrepreneurship
- Business communications
- International Business
- Organization
- Managing in a global environment
- Technology
- Current events related to business

Projects: Report on cultural differences/similarities with U.S. business, smaller projects include resume writing, problem-solving projects and critical thinking activities.

Work Experience

This is an elective class, which combines employment with classroom instruction. As a student you will attend your own job or internship during the week, and attend a class session on the first day of the school week during fifth/sixth period. You will develop ethical work habits, sensible and positive attitude, self-confidence, and job skills which can be used to locate, secure, retain employment, and enhance your career development. Job skills include resume writing, interview skills, mock interviews and career exploration.

Students will be able to demonstrate knowledge of:

- Prepare a resume & Write a correct resume cover letter
- Develop interviewing skills & Write correct, timely thank you letters
- Set priorities, plan use of time, adhere to a schedule
- Develop effective interpersonal skills with workers and supervisors
- Develop soft skills such as promptness, reliability and accuracy
- Understand the evaluation process in the workplace

Projects: Resume writing, mock interviews (several), interview questions and soft skills in addition to internships, and understanding and developing budgets.

SAMPLE Business Budget (Apple)

	January	February	March
Revenue/Net Income	$ 1,000,000.00	$ 1,000,000.00	$ 1,000,000.00
Cost of Sales	$ 600,000.00	$ 600,000.00	$ 600,000.00
Gross Margin	$ 450,000.00	$ 450,000.00	$ 450,000.00
Operating Expenses:			
Research and Development	$ 50,000.00	$ 50,000.00	$ 50,000.00
Selling and Administrative	$ 70,000.00	$ 70,000.00	$ 70,000.00
Total Operating Expenses	$ 120,000.00	$ 120,000.00	$ 120,000.00
Operating income			
Other income/(expenses)	$ 10,000.00	$ 10,001.00	$ 10,002.00
Income before provision for taxes	$ 340,000.00	$ 340,001.00	$ 340,002.00
Provision for income taxes	$ 85,000.00	$ 85,000.25	$ 85,000.50
Net Income	$ 255,000.00	$ 255,000.75	$ 255,001.50

Mary Student {SAMPLE ASSIGNMENT: Creating a RESUME)

1081 West Temple Street   Los Angeles, CA 90012   818-555-1212

OBJECTIVE Seeking an entry-level position in banking.

EDUCATION

San Fernando High School   2013 - Present

- Graduation pending June, 2017
- College level classes: AP Government, AP Spanish, AP English, AP Statistics.
- Attained Grade Point Average to qualify for Honor Roll.
- Extra Curricular Activities:
  - Junior Council – fundraising activities, planning for future school events.
  - Project Grad – college bound program related to academic achievement.
  - Hostess Program – assisted with school activities and organization of events.

EXPERIENCE

El Proyecto del Barrio-One Source   Computer Lab Assistant   2016 – Present

- Trained students to use computer software programs and integrated operations.
- Organized information for accurate reports of activities and expenses for accountability within funding sources.

IN-N-OUT   Sales, Cashier, Customer Service   2015 – 2016

- Balanced daily cash register receipts with accuracy.
- Promoted to Sales/Cashier immediately after training.
- Recognized by Divisional Manager for outstanding service (2005)

General Nutrition Center   Assistant Manager   2014 – 2015

- Independently maintained records, ordered supplies and maintained inventory.
- Responsible for opening and closing the store three times a week.
- Balanced cash register daily.
- Achieved sales targets for store on a daily basis.
-

SKILLS and ABILITIES

- Bilingual: Spanish/English
- Computer Skills: Excel, Power Point, Word, Outlook.

REFERENCES Available upon request

(SAMPLE SHORT BUSINESS LETTER)

John Student

18741 Elkwood Street   Reseda, CA 91335   818-555-7400

December 5, 2014

Sony Corporation
11200 Washington Boulevard
Culver City, CA 90230

Re: PlayStation4

Dear Sir:

In November 2014, I received a Sony PlayStation4 system for my birthday. I was very happy because I have been waiting a long time. Recently, I found that the games do not load or the games will not start. This may be due to the cocoa cola I spilled on the controller, but it was not working properly before that occurred.

Please repair or replace my Sony PlayStaion4 so I can again enjoy the games and escape the drudgery of homework. Thank you for your assistance in this matter. I look forward to hearing from you in the next ten days.

Sincerely,

John Student

Sample Warm-Up Questions

Marketing

You are the owner of a service business, your community is growing, but you're your sales are not! How would you evaluate the quality of your service? Based on your evaluation, how would you change your marketing?

International Relations

Why are job placement firms called corporate headhunters? Are there any rules or customs they follow?

Intro to Business

Small businesses are considered the best place to prepare for a career in business. Explain why?

Marketing

Provide examples of ways businesses can improve their purchasing procedures.

International Relations

Discuss ways a company could use an employee's international experience when he/she returns from abroad.

Marketing

How has ecommerce changed retailing? What is the future of online shopping vs. physical stores?

International Relations

Identify skills or abilities that would be useful for people who desire to work for an embassy, consulate, foreign trade office, or chamber of commerce.

Marketing

What steps are used in making a purchasing decision? Why is the last step the most important? Prepare a list of five (5) questions you might ask applicants for managerial positions in major cities in Europe.

Intro to Business

How do you choose the right employees? What "objective" information is available to help you?

Why is it important to have a budget for a business or individually?

Marketing

"Image is everything." We seem to be preoccupied with designer brands. Value shopping is also a trend - purchasing at discount stores. How is retailing managing and handling this new trend?

Interns prepare to leave campus to report to their work sites

COURSE DESCRIPTIONS

International Baccalaureate

Full Diploma Programme

The IB Programme at DMHS

Authorized by the International Baccalaureate Organization to administer the International Diploma Programme, Downtown Magnets High School (DMHS) offers its students a truly unique educational opportunity, participating in one of the most highly regarded academic programs in the world to earn a second diploma, the International Baccalaureate Diploma. The programme involves rigorous academic studies and promotes international mindedness and critical thinking. Students are encouraged to ask challenging questions, learn how to learn, develop a strong sense of their own identity and culture, and develop the ability to communicate with people from other cultures.

University Recognition

The Diploma Program has become a leading, internationally recognized pre-university qualification. A student who satisfies the requirements for the Diploma has demonstrated independent study skills, developed a broad range of academic skills, studied at least three disciplines in depth, engaged with interdisciplinary ideas, reflected on the nature of human knowledge in an international context and taken part in social, physical and creative pursuits beyond the classroom.

The two-year program is in grades 11 and 12 with a Pre-IB Program in grades 9 and 10. The Diploma Program is shaped by a desire to provide motivated students an education that is:

Pragmatic   A nationally and internationally recognized course of study that provides academic, professional and personal development of the highest caliber.

Idealistic through   Founded upon the goal of creating a better and more peaceful world

understanding and respect.

Pedagogical   Broad-based and developmental, promoting skills of critical and creative thinking while instilling the value of life-long learning.

The Diploma Program Curriculum is concerned with the whole educational experience of each student. The Diploma Program framework and its supporting structures and principles are designed to ensure that each student is exposed to a broad and balanced curriculum

A Focus on the Liberal Arts

Students must study six courses. These include two language courses (groups 1 & 2), one course from individuals and societies (group 3), one experimental science (group 4), one mathematics course (group 5), and one course in the arts (group 6).

A Unified Learning Experience

Students will study three subjects at the higher level (HL) and the other three at the standard level (SL). The Diploma Program is a discipline-based course of study. Each academic discipline provides its own methodological framework that students understand and use. This understanding is essential in order to provide a deep appreciation of the nature of an academic discipline as well as a solid foundation for future university-level work. However, students are also expected to make connections between different academic disciplines. For this reason, at the heart of the diploma Program is the Learner Profile, surrounded by the program core requirements. Concurrency of learning in the Diploma Program is expected as it provides one important mechanism to support interdisciplinary learning.

The IB Core

IB Theory of Knowledge (ToK): a critical thinking course in which IB students analyze knowledge and information with regard to source, intellectual bias, assumptive basis, proof, interpretation, social construct, opposition, and rationality. The ToK student examines the philosophical framework of each academic discipline while learning to reflect critically and logically on ideas originating in the other courses. Students begin this course in their 9th grade Advisory, continue in their 10th grade advisory and then as a 7th period, one day a week throughout their junior year.

The Extended Essay (EE): is an in-depth study of a limited topic chosen from one of the six groups of the IB curriculum. It is designed to provide the candidate the opportunity to engage in independent research. Students are encouraged to pursue an area of special interest to them. In the junior year, the student decides on a topic and seeks the sponsorship of a faculty advisor. Students are expected to begin work on the project during the junior year and the summer between the junior and senior years under the supervision of an advisor. The Extended Essay time functions as a 7th period, one day a week in their senior year.

Creativity Action Service (CAS): is an integral element of the IB curriculum and for successful award of the diploma. IB Diploma students design and complete approximately 150 CAS hours - 75 hours for community service, 50 hours for a personal activity, and 25 hours for a creative activity. While the Creativity and Action components of CAS are largely met through curricular and extracurricular programs, the Service component is the responsibility of the student. The services will be rendered individually and in groups. Students may begin to

accumulate CAS hours the summer after tenth grade and must complete all requirements by January of their senior year.

Examinations and Assessments

A wide variety of approaches to assessment are used to provide students with suitable contexts in which to demonstrate their capabilities. Internal assessments—language exercises, portfolios, presentations, laboratory work, performances—aim to evaluate student achievement against objectives that do not end themselves to external written examinations or tests. These are administered and graded by the classroom teacher and monitored by the IB organization. Teachers are sent feedback and in doing so, maintain a high and consistent standard of instruction. Standardized examinations, taken at the end of the course of study, are externally graded. Objective tests comprising a set of multiple-choice questions (similar to Advanced Placement Exams) are occasionally used as well as short-answer questions, structured questions, extended-response questions, essay questions, data-analysis questions, text-analysis questions, and case-study questions.

Each subject is graded on a scale from one point (lowest) to seven points (highest), with three possible points for performance in the Theory of Knowledge and the Extended Essay. Therefore, forty-five points are possible. The minimum score needed to gain the Diploma is twenty-four points.

IB Subject Descriptions

Group 1: Language A – IB English Language & Literature HL – Grades 11 and 12

Students develop their knowledge and understanding of both language and literature through the study of literary and non-fiction texts. Students are challenged to think critically about the different interactions between text, audience and purpose and understand how language, culture and context determine the way in which meaning is constructed. Through the study of varied texts, students will gain a broad understanding of the role of language in peoples' lives, in the media and in the arts. This two-year course is divided into four parts:

1. Language in cultural context
2. Language and mass communication
3. Literature – texts and contexts
4. Literature – critical study

Students will think critically, work independently, and take an active role in class discussion. Under the teacher's guidance, students may make decisions on the form of tasks, undertake research projects, generate text materials and participate in online learning environments. In addition to IB requirements, students will complete a variety of written and oral assignments.

9th	10th	11th	12th
Pre-IB: Honors English	Pre IB: Honors English	English IB HL 1*	English IB HL 2*

Pre-IB Honors English courses will prepare students for IB English through the following activities: active reading of highly advanced and varied texts for what they say explicitly as well as the logical inferences that can be drawn, analysis of literature and informational texts from varied literary periods to examine text craft and structure, elements of literature, arguments and claims supported by textual evidence, power and impact of language, influence of history, culture, and setting on language. Students will also engage in advanced writing for varied purposes, develop and support arguments, craft coherent texts, respond to literature and regularly engage in the research process. Students in Honors English 10 are required to write a 5-6 page research essay as preparation for the IB extended essay requirement.

Group 2: Language B - IB Spanish SL or IB Mandarin SL

Students will achieve advanced competence in a second language to communicate effectively and in a culturally appropriate way, in a range of situations and contexts and for a variety of purposes. The course will also develop students' ability to analyze a variety of written texts from a variety of sources. At the end of the course, students will improve their skills of three communication modes and intercultural understanding through the study of three required core area: communication and media, global issues, social technology.

9th	10th	11th	12th
Pre-IB: Spanish I or II	Pre-IB: Spanish II or III	AP/IB Spanish*	IB Spanish SL*
Pre-IB: Mandarin I	Pre-IB: Mandarin II	Pre-IB: Mandarin III	IB Mandarin SL*

To begin their second language development, students are placed at a learning level that meets their language backgrounds, abilities, and needs in Pre-IB Language courses. In grade 11, students take AP Spanish and begin studies in IB Spanish. Students may take the AP Spanish test in their junior year.

Group 3: Individuals and Societies – AP/IB History HL 1 & IB History of Americas HL 2

In the first year of this two-year course, students consider the foundations of the American economic and political systems by examining life and thought in colonial America, revolutionary ideology and war, the establishment of a new democratic republic, and the growing crisis over the issue of slavery and states rights that led to American Civil War and Reconstruction. Students then focus on 20th Century America's influence on world affairs through economic, political and social activities.

In their second year, students focus on modern world affairs by undertaking a critical investigation aimed at reconstruction and interpreting the major events of the 20th century in the US in comparison with other countries. There is an emphasis on the uses and limitations of a variety of types of source material; students develop an understanding of different interpretations of history and their roots. Specifically, students compare the causes, practices and effects of industrialization, the rise of democratic states and human civil rights movements throughout the world.

9th	10th	11th	12th
Pre IB: AP Art History or Pre IB: AP Human Geog.	Pre IB: AP World History*	AP/IB US History HL 1*	IB History HL 2*

To prepare students for the rigors of IB History, students will take AP Social Science courses in grades 9 and 11. Students may take the AP exams for each of these courses. Instruction in IB History HL 2 addresses the standards for American Government and Economics, therefore, AP/IB US History and IB History HL 2 fulfill graduation requirements for US History, American Government and Economics.

Group 4: Experimental Sciences – Honors Advanced Biology & IB Biology SL

IB Biology SL is a two-year life-science course that begins with Honors Advanced Biology in 11th grade and continues in 12th grade as IB Biology SL. Over two years, students' studies include Cell & Molecular Biology, Genetics, Ecology, Evolution and Biodiversity, and Human Physiology, and a minimum of 40 hours laboratory work in which students design their own experiments.

9th	10th	11th	12th
Pre-IB: Honors	Pre-IB: Chemistry	Honors Adv. Biology*	IB Biology SL

Biology			

Students prepare for the rigors of IB Biology, beginning in grade 9 in which emphasis is placed on students developing critical thinking skills, collaboration, and scientific inquiry. Students will be introduced to the concept of biodiversity conservation and the evolutionary processes that lead to adaptations.

Building on this knowledge, in grade 10, students take chemistry in which great emphasis is placed on laboratory work and problem-solving skills, including gathering and presenting data from experimental work and the analysis and evaluation of these results. Chemistry, not only prepares students for IB Biology, but also fulfills student's physical science graduation requirement. Biology meets student's life-science graduation requirement.

Group 5: Mathematics – Math SL or Math Studies

Students will develop the concepts and reasoning skills necessary to contend with, communicate about, and collaborate on solving complex mathematics problems in both real world and abstract contexts. Depending on the level of math students enter DMHS, students will prepare to take either Math SL or Math Studies.

9th	10th	11th	12th
Pre-IB: Algebra I	Pre-IB: Geometry	Pre-IB: Algebra II	Math Studies
Pre-IB: Geometry	Pre-IB: Honors Adv. Math	Math SL	AP Calculus*

Math SL is a natural extension of the Algebra sequence at DMHS and should be attempted by students with a solid Algebra background. Algebraic concepts are studied in more detail and developed through analysis to a strong introduction to differential and integral calculus, without the same depth and rigor found in Calculus AB. Topics include number and algebra, functions and equations, circular functions and trigonometry, statistics and probability, and calculus. Students who are successful in Math SL are encourage to take AP Calculus their senior year.

IB Math Studies is designed to provide students of varied backgrounds and abilities with a realistic course that provides the skills to cope with the demands made by a technological society. Compulsory topics include number and algebra, sets and logic, geometry and trigonometry, statistics and probability, functions, and financial mathematics.

Group 6: Fine Arts – Film HL 1 & Film HL 2

A two year course in which students will develop the skills to achieve creative and critical independence in the knowledge, experience, and enjoyment of film. The aims are to promote an appreciation and understanding of film as a complex and unique art form; an ability to formulate ideas in filmic terns; and a knowledge of film making traditions of different cultures. Students will learn how film creates meaning and will gain skills to develop ideas through the various stages from conception to finished production. The course consists of three parts:

1. Textual Analysis – the detailed study of film sequences
2. Film History and Theory – film and film-making of more than one culture
3. Techniques and Organization of Production – planning and creating a film

9th	10th	11th	12th
Physical Education	Physical Education	IB Film HL 1*	IB Film HL 2*

Students fulfill their physical education requirements in grades 9 and 10 before beginning their studies in film in grades 10 and 11. IB film fulfills the graduation art requirement.
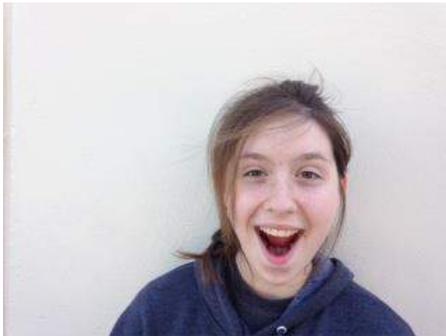
Creativity Action Service   IB Film

Theory of Knowledge
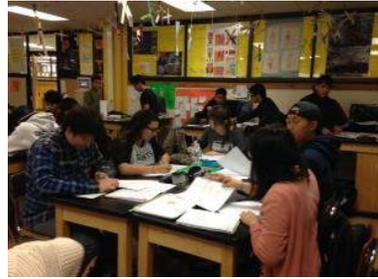
IB Biology

Extended Essay

COURSE DESCRIPTIONS

Academy of Fashion Design and Merchandising

Fashion Merchandising

Course Description: The course is designed to develop entry-level skills in apparel and accessory merchandising. Students learn how to develop a personal and employee image for job success in the fashion industry. An instruction includes basic fashion concepts; positive sales techniques; advertising occupations. Opportunities are provided for students to do Project Based Learning. Linked learning opportunities exist between this course and courses in social science, ELA, and math. The content of this course is aligned with the Model CTE Standards and California High School Academic Core Content Area Standards.

Student Performance Objectives

Communications

- Students will acquire and accurately use Fashion Design sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

Career Planning and Management

- Students will integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.

Technology

- Students will use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Fashion Design sector workplace environment.

Problem Solving and Critical Thinking

- Students will conduct short, as well as more sustained, research to create alternative solutions to answer a question, or solve a problem unique to the Fashion Design sector using critical and creative thinking, logical reasoning analysis, inquiry, and problem-solving techniques.

Health and Safety

- Students will demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phases as related to the Fashion Design sector workplace environment.

Responsibility and Flexibility

- Students will initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Fashion Design sector workplace environment and community settings.

Visual Merchandising: Students will develop a theme to display in the upstairs windows.

Students will work in teams in completing the project.

Dates have been set for students to have project completed.

Classmates will evaluate each display and use a point system to grade the displays.

Spring Semester Project

Fashion Merchandising Students will be exposed to Fashion Merchandising Careers:

Buyer, Customer Service Representative, Department Manager, Fashion Coordinator, Merchandise Manager, Product Developer, Sales Associate, Stock Clerk, Store Manager, Visual Merchandiser, Stylist, Event Planner.

Students will research a Career of their choice and make a presentation of chosen career.

Students will learn:

Career Preparation

Success on the Job

Fashion Entrepreneurs

Global Marketplace

Communication and Education Careers

Students will develop a **Personal Portfolio** that includes:

Job Application

Cover Letter

Resume

Follow-up Letter

Thank you letter

Job Interviewing Skills

<p style="text-align: center;"><u>Fashion Design</u></p>

Students begin preparation for the Spring Fashion show.

Students complete the following assignments by Dec. 15:

Mood Board - Collection of pictures that express their vision of their collection.

Sew one piece of apparel (their choice): Pants, skirt, top or dress.

If student is designing an original piece of apparel (not using a pattern), then they must have a Fashion Illustration showing the design, color and type of fabric to be used.

If student is using a pattern, they must have selected the pattern and chosen the correct size to fit the model.

Models must be selected and measured.

All students must have completed the above in order to go on the field trip to purchase fabric.

Spring Semester Culmination Project:

Students sew their Collection for Fashion Show in April.

<u>Fall Semester Culminating Project</u>

Students will put together a book with the following information:

How to select Patterns, Fabrics and Notions

How to operate Sewing Machines and Equipment

How to prepare to construct a garment

<u>Spring Semester Culminating Project</u>

Basic Construction of a garment

Students will sew a garment using a pattern of their choice.

Students will be assisting Fashion Design Students in preparing for the Fashion show

Students will be attending the Fashion Show and help in setting up for the show

Fall Semester Culminating Project

Internship at Showrooms at the California Mart, New Mart and Gerry Building

Spring Semester Culminating Project

Students work together to produce the Fashion Show

Students complete their collection for the Fashion Show

All Students must participate in the Fashion Show!

<u>Fashion Design: Beginning Clothing</u>

Beginning Clothing teaches the fundamentals of modern precision sewing and clothing construction. Students will begin by practicing essential hand sewing techniques and progress to using power sewing machines. They will then select fabric and notions for a pattern and construct a simple garment.

This course covers general topics related to clothing, such as why people wear certain clothes and how families and cultures influence clothing choices. Students will also receive and overview of the history of fashion, the fashion industry, and the vocabulary used to describe clothing styles.

Academic skills will be reinforced through <u>reading </u>of patterns instructions, and textbook, <u>writing</u> of class notes, written assignments and worksheets, <u>math </u>in calculating yardage, taking body measuring and alteration of patterns, and pricing costs of sewing projects.

<u>Students Performance Objectives</u>

- Students will understand operational procedures and safety practices commonly performed in the fashion design, manufacturing, and merchandising industry.
- Students will understand the elements and principles of design.
- Students will understand the historical aspects and trends of fashion and their relationship to changing economic, social, and cultural conditions.
- Students will understand garment construction skills used in a variety of occupations within the fashion manufacturing and merchandising industry.

<u>Fall Semester Culminating Project</u>

Students collate a Project Book that includes the following:

Clothing and Society

1. Influences in Clothing
2. Cultures and Customs
3. Clothing and Families
4. Clothing and Self- Expression

The Fashion World

1. Fashion History
2. Fashion Styles
3. Fashion Designers
4. The Fashion Industry

Color and Design

1. Understanding Color and Design

2. Understanding Design

Fibers and Fabrics

1. Textile Fibers
2. Fabric Construction
3. Fabric Finishes

Spring Semester Culminating Project:

Students collate aProject Book that includes the following:

Fashion Styles

Fashion Features

Garment Styles

How to Write Fashion Copy - Students will write copy describing the Fashion Design Students garments for the Fashion show.

Student's attend Fashion Show and work together as crewmembers on the day of the show.
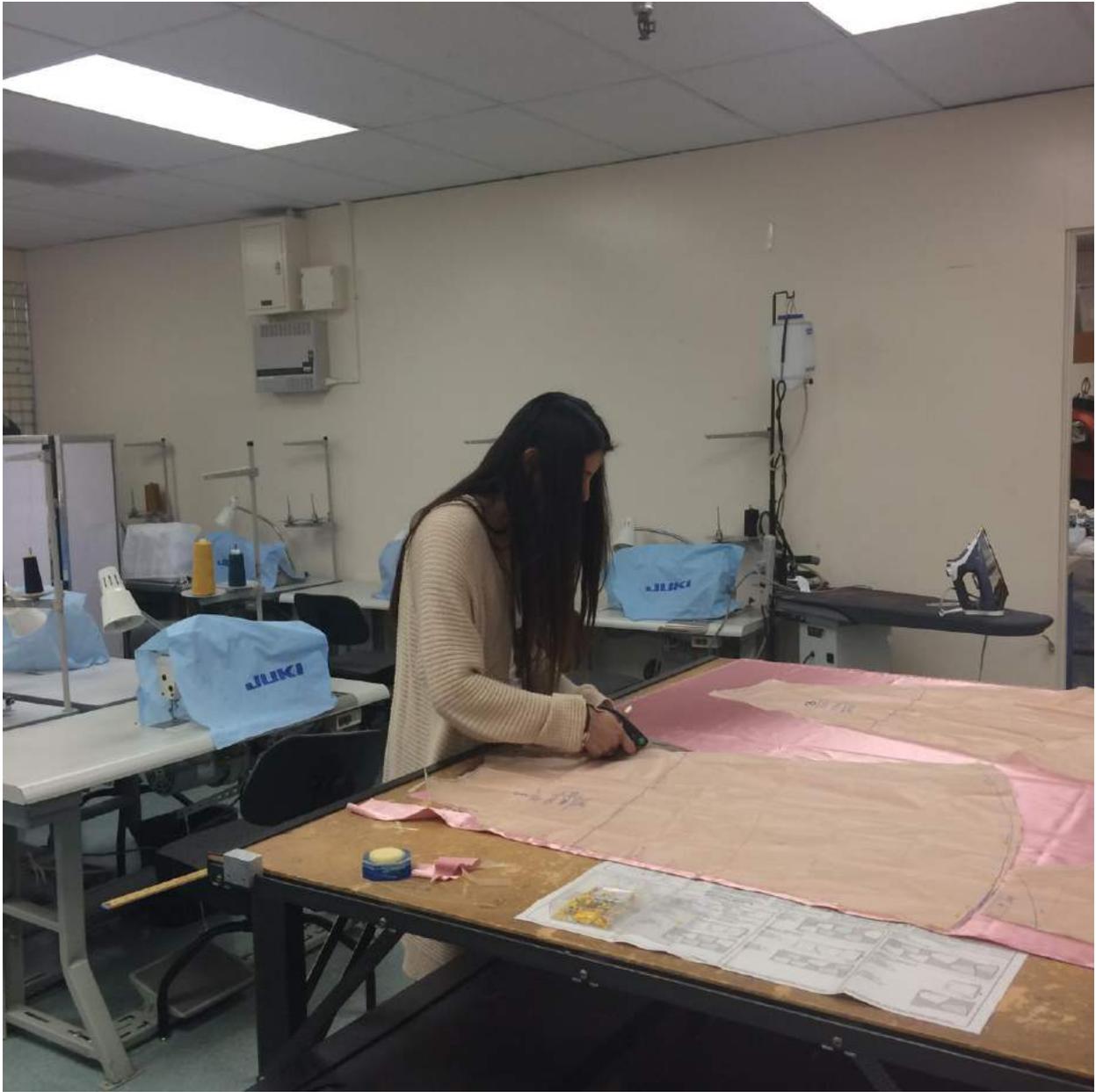
DRAWING Course Description

Drawing is a skill that is learned and developed and this class is designed to show you how to draw better. Each aspect of drawing is broken down into "easy to follow" and "easy to understand" segments complete with drawing demonstrations and commentary. All lessons are presented with live demonstrations from Ms. Choi. Here's what's included...

- "Introduction"- An introduction to drawing
- "The elements of art"- line, shape, form, value, space and its relationship to drawing
- "Perspective" – Space is explored further through one and two point perspective.
- "Drawing Techniques" – A look at basic drawing techniques and suggested media.
- "Composition" – How to create successful compositions in drawings. Concepts covered include sketching thumbnails, positive and negative space, The Rule of Thirds, The Golden Mean, eye movement, and how to create focal points.
- "Facial Proportions" – A look at basic facial proportions from the front and profile views. Concepts covered include general locations of facial features and placement relationships.
- "The Eye" – An in-depth look at drawing a human eye.
- "The Nose and the Mouth" – A look at drawing the nose and the mouth.
- "The Ear" – A look at drawing the human ear with graphite.
- "Hair" – A look at drawing hair with graphite.
- "Basic Figure and gesture Drawing" – A basic introduction to figure drawing including a simple four step method for drawing a figure.
- "Foreshortening" – Drawing the figure in perspective.
- "Conclusion" – A review of the course and a plan for moving forward.

Major Projects Line Drawing, Still Life Drawing, Favorite Person, Self-Portrait, My Pet Project, Figure Drawing, Skeleton Drawing, My "Sun" Project, and the Final 3D Figures Project

Planned Field Trips LACMA and /or Getty

What am I going to get from this course?

- This course is designed for anyone looking to improve their drawing skills and by the end of this course, the student will have a strong understanding of the core concepts of drawing including materials, processes, and devices.

AP STUDIO ART

AP Course Description The AP Studio Art course is designed for students who are seriously interested in the practical experience of art and wish to develop mastery in the concept, composition and the execution of their ideas. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. In building the portfolio, students experience a variety of concepts, techniques, art mediums, and approaches designed to help them demonstrate their abilities and versatility with specific techniques, problem solving, and ideation developed in their sketchbooks and finished works. Students will develop a body of work for the Concentration section of the portfolio that investigates an idea of personal interest to them.

AP Drawing In-Class Assignments, 1st Semester May Include:

* Still Life using a variety paper and chalk values

* Fabric gesture drawing with hatching technique using white pencil on black paper: "Find the creatures lurking within (your imagination)"

* Contour line portrait series

* Cubist inspired collage of drawn features

* Small-scale pen and ink drawings with watercolor on white paper

* Expressionist landscape using acrylics and tissue paper

* Expressionist oil pastel self-portrait on dark paper

* Charcoal portrait on sanguine with white chalk

* Cityscape perspective drawing and painting or interior of a building

* Self-portrait in the style of an historical painter

* Repaint an historical masterpiece, but alter it to make a contemporary scene

* With a partner, photograph parts of yourself. Be photographed and make a drawing from the images. Alternately, use mirrors.

AP Drawing Concentration Ideas, 2nd Semester may include:

* Expressive landscapes based on personal experience of a particular space

* A personal/family using content & style of still-life images

* Interpretive self-portraiture and figure studies with distortion & exaggeration

* Interior/exterior architectural spaces with perspective, structure, light

* Figurative projects combining animal and human subjects

Planned Field Trips may include: Trip to LACMA and/or the Getty Center

End of the Year Showcase: **Gallery Night** with Ms. Hise and the Multi-Media Academy

SAMPLE STUDENT WORK

SELF PORTRAIT

Downtown Magnets HS Field Trips

At DMHS, we offer many field trips & off-campus opportunities for students to learn more about their particular pathway and also engage in meaningful learning experiences that provide real world opportunities. Here is just a sampling of some of the field trips we have offered in the past:

Business & Finance

- Learning internships at CRBE, KLCS TV and Radio station, and as office technicians at downtown Los Angeles Unified School District headquarters

- Job shadowing at various companies around downtown LA

- Afterschool courses at University of Southern California (USC) focusing on business, finance and accounting

Fashion

- Opportunities to visit the fashion industry in downtown Los Angeles

- Shopping trip to Michael Levine fabrics (each student creates a fashion piece, budgets for it, and spends $100 in purchasing materials to create their signature fashion piece for the spring fashion show)

- Fashion runway show students Display their fashion creations (occurs every year in early spring)

- Visit California Market & the fashion district in downtown LA

Engineering Students

- Visit Harvey Mudd College to learn about school offerings & interact with students

- Trip to Pasadena ice skating rink (learn how physics and ice-skating interrelate!)

- Visit to Griffith Park Observatory learning firsthand about space science

Multi-Media

- Opportunities to visit Computer Graphics facilities & work with blue screen

- Royce Hall at UCLA to see theatrical and artistic performances

- Walking tours of Downtown LA using cameras to capture live images & visit galleries and museums: MOCA, Annenburg Space for Photography, Getty, etc.

Other field trips have included Cabrillo State Park, visits to the aquarium, a walking tour of Chinatown, visiting City Hall, day trips to the Hyperion water treatment facility, college campus tours for seniors, Weekend trips to Dixie State University, and Mount Zion National Park! **Come down DOWNTOWN and see what the buzz is about!**

Downtown Magnets Campus Clubs & Activities

DMHS offers many diverse and exciting opportunities to participate in clubs & activities. For a complete list visit: http://www.downtownmagnets.org/

ACADEMIC DECATHLON A rigorous program where sudents master ten subjects & compete as a team vs. 64 LAUSD schools. Meets during Advisory. Topics vary from year to year. If interested, see Mrs. Willis (B8). Learn about various academic topics that will help you in all of your classes, even in College and add Academic Decathlon to your college application. Many Aca Deca graduates have gone on to awesome colleges: Yale, UC Berkeley, and UCLA.

ASB LEADERSHIP Led by California teacher-of the year, Mr. Jocz, learn how to be a student leader and participate in and create student activities. The Associated Student Body actively represents opinions of the student body. Committed to promoting democratic ideals, school spirit, and campus unity, ASB encourages involvement of students in extracurricular activities and preserving school-wide traditions while having a whole bunch of fun! Talk to Mr. Jocz or an ASB student leader today!

DEBATE Debate is a 5-credit course meeting during advisory & after school twice a week. To join debate, students must speak with **Ms. DePaolo** or **Mr. Chao**, the debate coaches. You will compete at local Friday & Saturday debate competitions (3 per semester) You will participate in a one-week summer debate camp at USC in August and have an opportunity to travel the city and state-wide as a debater. Come on down and see what the buzz is about – It has something to do with many championships!

ROBOTICS Learn how to use technology to create robots that than compete in various city competitions. A great opportunity to build with team members – Achieve your vision! See Ms. Kelley for more details.

CULTURAL & OTHER CLUBS DMHHS is a bully-free zone and we actively teach and incorporate tolerance into our curriculum here. Join one of the following clubs to engage yourself culturally and spread peace and positivity:

ASIAN CLUB	HOUSE OF REPRESENTATIVES
BLACK STUDENT UNION	GAY STRAIGHT ALLIANCE (G.S.A.)
GAMING CLUBS	KAIBIGANG PILIPINO CLUB
FEMALE YOUTH EMPOWERMENT	YEARBOOK

…OR MAYBE YOU WANT TO BE A LEADER AND START YOUR OWN CLUB!

Career Ready Industry Recognized Certifications

Academy of Information Technology: Media Arts Strand

Adobe Photoshop Certification

Academy of Information Technology: Computer Science

Cisco CyberSecurity

Academy of Engineering

AutoDesk Inventor

Academy of Fashion Design and Merchandising

Gerber Fashion Design Sofware

Academy of Finance

Microsoft Office Specialist