

# AcadeMir Preparatory High School "Expect Excellence"

## **Educational Program**

The school's curriculum will focus on clear and measurable expectations for student learning and will address the core subject areas of English/Language Arts, Mathematics, Social Studies, Science, and elective course offerings such as (e.g., Foreign Languages, Career Technical Education; "STEAM", Performing and Visual Arts, etc..). The curriculum will continuously reflect high-quality instruction and implement research-based strategies, innovations, and activities that facilitate achievement for all students, given differentiated instructional support. The school will utilize the Miami Dade County Public Schools Student Progression Plan, including amendments made from time to time as the guideline for the progression and implementation of the school's curriculum and instruction. Additionally, the School will utilize researched-based and state-approved instructional materials that will be aligned with the FLDOE course codes and inclusive of the framework provided by State in Course Content Outlines. Furthermore, the School will utilize Curriculum Pacing Guides, to pace instruction for each core academic area, and to ensure course material is taught sequentially, consistently, in a rigorous format, and can be fully addressed in the time given. The school will seek to expand each student's foundation within each core subject, including providing high-level, rigorous coursework to build upon the preceding acquired knowledge to ensure students are not only college and career-bound but also college and career ready. The school will provide quality instruction, high expectations, and consistent standards-based curriculum for all students, in alignment with AcadeMir Preparatory High School 's mission, vision, and core values. Through the implementation of Florida's B.E.S.T Standards and research-based instructional strategies, the school will strive to prepare students for college and career readiness and to be active participants in a global community. AcadeMir Preparatory High School's curriculum will provide for appropriate instruction based upon the B.E.S.T Standards for English Language Arts and Mathematics, and the Florida State Science Standards (FSSS) for Science, Social Studies (2021), and Physical Education (2014), and the 2011 Next Generation State Standards for World Languages, as detailed by the Florida State Department of Education. The curriculum objectives for AcadeMir Preparatory High School, are as follows:

- Implementation of a relevant and rigorous curriculum that meets the needs of all students, through the implementation of research-based instructional strategies.
- Use of formative and summative data to determine student mastery/progress and utilized to make sound instructional decisions.
- Implementation of an Instructional Framework utilizing the Gradual Release Responsibility Model.
- Integration of technology to enhance the teaching and learning process and the innovative use of technology (Teacher instructional videos with home access; digital collaboration with teacher moderation; teachers connecting school to home with digital lessons, and more vibrant lessons with the use of technology)

- Provision of extended learning opportunities to support student learning
- Improve student motivation and behavior by focusing on Socio Emotional Learning, and Positive Behavior Systems
- Providing opportunities for parental involvement
- Focus on college and career readiness
- Communication: Share ideas and clarify understanding
  The following is an overview of the core curriculum and courses that will be offered at the school. However, other core courses may be offered as electives, in response to student needs and interests, to benefit the students. The courses and requirements outlined in this document are subject to change in response to the Sponsor's Student Progression Plan as well as any legislative and state mandates.

## English Language Arts/Reading and Writing

Students will master the Florida B.E.S.T Standards for English Language Arts (ELA) through continuous infusion of reading and writing skills in all subject areas. The school will implement the district pacing guides as the guide for pacing and scope and sequence to ensure that students gain adequate exposure to an increasingly complex range of texts and tasks as they progress. ELA instruction will require students to interact with each other and to apply learning to real-life situations. A variety of technological tools will be used in the classroom, and the curriculum will focus on teaching students how to critically reflect and analyze text. The English Language Arts program will reflect critical and creative thinking and include expectations overarching skills that run through every component of Language Arts like Foundations, Reading, Communications and Vocabulary. The writing standards focus on communicating through writing, communicating orally, following conversations, researching and creating and collaborating To build a foundation for college and career readiness, students need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveying real and imagined experiences and events. The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, apply to many types of writing, other skills are more properly defined in terms of specific writing types: arguments, informative/expository texts, and narratives. The expectation is that students learn to appreciate that a key purpose of writing is to communicate clearly to an external audience, and they begin to adapt the form and content of their writing to accomplish a particular task and purpose. It is also important that students develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, teachers will be expected to provide students with significant opportunities and time to write, producing numerous pieces over short and extended time frames, create and collaborate with classmates and conduct oral presentations throughout the year. In accordance with FLDOE requirements, student's needs, interests, and in compliance with the Sponsor's Student Progression Plan; students will be required to take four credits of English to graduate, these courses include English I, II, III, and IV or English I, II, III, IV through ESOL. Students who meet eligibility for advanced courses can also take Advance Placement (AP) courses which also correlate and replace English III and/or English IV.

High School Courses	Grade	Credit
English I English I Honors & Honors Gifted English I through ESOL	9	1
English II English II Honors & Honors Gifted English II through ESOL	10	1
English III English III Honors & Honors Gifted English III through ESOL AP English Language	11	1
English IV English IV Honors & Honors Gifted English IV through ESOL AP English Language or AP English Literature & Gifted	12	1
Intensive Reading Tier 3 Intensive Reading 1 Intensive Reading 2	9 - 10	1
Intensive Reading Tier 2 Intensive Reading 1 Intensive Reading 2	9 - 10	1
11th Grade Reading Retakers Intensive Reading 3	11	1
12 <sup>th</sup> Grade Intensive Reading Retakers	12	1
ACT Reading Prep**	11-12	.5

Courses marked \*\* will be an elective (in addition to the required English course). As part of the school's program, these elective courses will assist 11<sup>th</sup> and 12<sup>th</sup> grade students in college application process providing exposure to college readiness and preparing students for ACT verbal practice.

AcadeMir Preparatory High School will put emphasis upon student potential, and therefore the courses will address student's needs and will begin at the student's level (remediation, proficiency, enrichment), consistently moving towards attaining the level of mastery, encouraging students to pursue the most rigorous and challenging academic program they can handle, while students who are struggling and/or underachieving are gently guided and/or assisted towards achieving proficiency and mastery through remediation via a targeted intensive remediation program and taught using supportive learning strategies. As a result, students will be better prepared for success and college and career readiness. This will be accomplished through learner-centered individualized support, and through the following:

- Intensive Reading Courses will be in addition to the required English/Language Arts courses for students who have been identified in need of remediation because they fail to demonstrate an ability to read on grade level as measured by the previous year's screening and progress monitoring data as determined by the F.A.S.T plan. The school will have a progress-monitoring plan through RtI/MTSS and students identified will be provided intensive intervention, immediately following the identification of the deficiency. The school will thereby implement the Sponsor's state-adopted Comprehensive Evidence-Based Reading Plan (CERP) to meet the needs of students. The CERP includes strategies for students who are reading at grade level or higher and, independently, or below grade level. To that end, following S.1008.25 (5)(a), students will continue to be given intensive intervention until the reading deficiency is remediated. 11-12 Graders below grade level will take the Retakers Course, which is designed to address their specific needs.
- ESOL Students ESOL/English Language Learners (ELLs) will be placed in two ESOL courses as applicable to both the student's grade level and language proficiency.
- English I, II, III, or IV -content course scheduled by grade level; and
- Developmental Language Arts Through ESOL Language proficiency course scheduled by English Proficiency Level 1-4. If levels need to be combined, the Developmental Language Arts Through ESOL placement may be the best combination of mixed language level courses (ESOL levels 1/2 or 3/4).

#### **Mathematics**

AcadeMir Preparatory High School will implement the Florida B.E.S.T. Standards for Mathematics) as the base for instruction. The B.E.S.T Standards for Mathematics describes the mathematical skills and concepts all students need for college and career readiness. The Mathematical Content Standards describe what students should be able to do, while the Standards for Mathematical Practice: describe

how Mathematical Content Standards should be approached. The Standards for Mathematical Practice are the same at each grade level however, students will engage with and master new and more advanced Mathematical ideas as they progress through each grade (Mathematical Content Standards). Accordingly, the Mathematical Practice Standards will be taught in conjunction with the Content Stands at each grade level. Teachers will pace instruction using the Sponsor's Curriculum Pacing Guides by subject or grade level, that aligns with the state adopted textbook to the standards to provide the timeline for instruction and ensure the course material is taught sequentially, consistently, and in a challenging format. Math courses will provide instruction and promote academic excellence in basic mathematical skills: Number Sense and Operations, Algebraic Reasoning, Geometric Reasoning and Data Analysis and Analysis and Probability. Formative and progress monitoring mathematical assessments will be incorporated into classroom practice to provide teachers with the necessary data needed to adjust teaching and learning. In accordance with regulations at the State and Sponsor's Student Progression Plan (SPP), four years of Mathematics are required for high school graduation. The minimum four-year recommended course sequence will include: Algebra I, Geometry, Algebra II and one additionally rigorous Mathematics course will fulfill this graduation requirement. All students will have equal access to accelerate their academic progress, students who wish to pursue an advanced academic program will be provided with Honors and/or Advanced courses The School will utilize an individualized approach for the proper placement of the students in their courses, considering test scores, academic history, and both state and district requirements to inform placement decisions. This will be accomplished through learner-centered individualized support, and through the following:

• Students in need of Intervention/Remediation - Students will have one of their electives replaced with a required Intensive Mathematics class as specified in the Sponsor's SPP. The intensive class will support the regular class; Teachers of the regular classes will provide data to the intensive teacher to remediate topics that students have not mastered. Intensive math courses will provide intensive Math instruction to prepare students for their EOCs. For 9<sup>th</sup> and 10<sup>th</sup> students who have failed to pass the Algebra 1 course and need remediation to retake the Algebra 1 EOC will be concurrently enrolled in Foundational Skills in Mathematics (Algebra 1/Geometry for RTKS) to receive academic support in their core class.

Advanced/Gifted - The School will also address the needs of advanced learners at all grade levels, via rigorous and relevant coursework offered to students, who by outstanding abilities, are capable of high performance and require a variety of educational programs beyond those normally provided by the regular school program. Some of these options may include enrolling in honors courses, gifted program courses, and dual enrollment (for eligible students).

The following Mathematics courses will be offered per FLDOE requirements and student's needs and interests.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
Diploma Designation	Grade 9	Grade 10	Grade II	Grade 12
	Alashus 1 and	Coometury AND	Aloobaa 2	Mathematics for
Regular (Merit)	Algebra 1 and	Geometry AND	Algebra 2	
	Foundational Skills in	Foundational Skills in	36.1	College Algebra
	Mathematics (Grade 9)	Mathematics 9-12	Mathematics for	35.1
	., , , , , , , , , , , , , , , , , , ,		College Statistics	Mathematics for
	Algebra 1A and Algebra 1B			College Statistics
				Probability and
				Statistics honors
Regular (Scholar)	Algebra 1A and Algebra 1B		Algebra 2	AP Statistics
		Geometry		
	Algebra 1		Mathematics for	Dual Enrollment
	0		Data and Financial	Courses (D.E.)
			Literacy Honors	
				Precalculus Honors
				Probability and
				Statistics Honors
Advanced (Scholar)	Algebra 1 Honors	Geometry Honors	Algebra 2 Honors	Probability and
	_			Statistics Honors
				Precalculus Honors
				D.E. Courses
				AP Statistics
ccelerated (Scholar)	Geometry	Algebra 2	re-Calculus Honors	Discrete
				Mathematics
	Geometry Honors	Algebra 2 Honors		Honors

Algebra 2 Honors	Precalculus Honors	Probability and Statistics Honors	Calculus Honors
	AP Statistics	Calculus Honors  AP Statistics	AP Statistics AP Calculus AB
		AP Calculus AB  D.E. Courses	D.E. Courses

#### **Instructional Materials**

The school plans to use state-adopted instructional materials, including Digital software and multimedia, for Mathematics, to differentiate between the regular and advanced curriculum. The school will use the curriculum materials adopted by the district.

#### Science

The Science curriculum will be aligned with the Florida State Science Standards. AcadeMir Preparatory High School will deliver a science curriculum that will prepare students to achieve mastery of the Florida Science State Standards (FSSS) by providing cutting-edge science instruction and utilizing instructional strategies and varied resources to deliver the curriculum. Students will participate in weekly hands-on science

investigations, exposing students to the scientific process and scientific thinking. Teachers will provide opportunities for emphasis on text-specific complex questions and give emphasis on students' supporting answers based upon evidence from the text and provide extensive opportunities for research to increase content literacy by providing reading and writing opportunities throughout each of the science courses. The school will have a fully equipped science lab to allow students to engage in hands-on activities, collaborate, explore, and investigate the steps to the scientific method through inquiry-based learning. APHS will have a dedicated, applied project-based way of teaching and learning that will allow students to understand and appreciate the relevance of their work to their own lives. And the world around them. The school will use the Sponsor's Curriculum Pacing Guides which are aligned to the FSSS, and the state adopted textbooks, to deliver course content (as per the FLDOE course content guidelines), to pace instruction for each academic area, and to ensure the course material is taught sequentially, consistently and in a challenging format. Teaching scientific literacy skills and processes will not occur separately from the teaching of content, instead, teachers will embed the literacy skills in the content by developing lessons mindfully and engaging students in the following ways:

- Quantitative and qualitative observations
- Investigation and thoughtful questions
- Design and conduct experiments and other types of investigations
- Collect and analyze data
- Make logical predictions and offer reasonable explanations
- Explore possible conclusions
- Communicate their understanding

In accordance with FLDOE and the Sponsor's Student Progression Plan, students are required to complete a minimum of three high school science credits for graduation. The minimum three-year recommended course sequence will include Physical Science, Biology I, and Chemistry or Physics.

However, it will be recommended that students continue to take at least one additional science course from elective lists. The Science program has been designed to serve students of all ability levels and all students will have access to a variety of opportunities that will support and/or accelerate their academic progress. Students who wish to pursue an advanced academic program will be provided with Gifted (as applicable), Honors, Advanced courses, and Dual Enrollment. The following Science courses will be offered per FLDOE requirements and students' needs and interests.

High School Science Courses				
9th Grade	10th Grade	11 <sup>th</sup> Grade	12th Grade	
Physical Science	Biology I	Chemistry I	Physics I	
Physical Science Honors	Biology I Honors or	Chemistry I Honors or Chemistry Honors Gifted	Physics I Honors or	
*Biology I Honors	Biology I Gifted or	Anatomy and Physiology	Physics Honors Gifted Anatomy and Physiology	
	*Chemistry I Honors		Anatomy and Physiology Honors	
			An approved DE, AP Science EQ requirement for graduation	

<sup>\*</sup>Students that have taken Physical Science Honors in the 8th grade.

#### Social Sciences

AcadeMir Preparatory High School will implement a program that fosters in students not only the knowledge and skills needed to understand current political and social issues but also provide them with a voice. Social Studies education will provide students with an understanding of the democratic principles and ideals upon which good citizenship is founded and an understanding of the world beyond their borders.

The school's Social Science curriculum will focus on the mastery of the Next Generation Sunshine State Standards for Social Studies (NGSSS) as well as aligned with the course content descriptions provided by the state of Florida provided on CPALMS and in compliance with the Sponsor's Pupil Progression Plan. Social Science education will promote loyalty and love of country and community, and it will prepare students to participate intelligently in public affairs. The comprehensive Social Science program will emphasize content, concepts, and skills from the social sciences, the humanities, and, where appropriate, mathematics, and the natural sciences. Among the academic goals of the Social Science program, the school aims to encourage students' civic responsibility; promote high expectations for all students; promote understanding of social, political, and economic institutions; encourage student involvement in community service; focus on the identification of the potential solutions to local, national, and world problems. The school will support literacy via the Social Studies content: students will be engaged in a wide variety of complex texts, they will be asked to answer text-specific complex questions, and emphasis will be placed on evidence-based responses. Social science teachers will collaborate closely with language arts teachers, to support literacy. Students will engage

in research projects through project-based learning, and children will experience wide reading from complex texts, address text-specific complex questions, emphasizing students support their answers-based teachers will engage students in "essential questions" aimed towards teaching a large concept, deconstructing the same of its parts, and later rejoining the individual concepts to create a deeper understanding. The school will implement the Sponsor's instructional pacing guides, to ensure course material is taught sequentially, consistently, and in a challenging format and covers the necessary concepts, and ensure materials utilized are aligned to the NGSSS standards.

In Compliance with the FLDOE and Sponsor's Student Progression Plan, students will be required to successfully complete three annual courses in Social Studies. The Social Sciences program has been designed to serve students of all ability levels and all students will have access to a variety of opportunities that will support and/or accelerate their academic progress. Students who wish to pursue an advanced academic program will be provided with Gifted (as applicable), Honors, Advanced courses, and Dual Enrollment. The following Social Sciences courses will be offered per FLDOE requirements and student's needs and interests.

Social Studies Course Sequence			
9th Grade	10th Grade	11th Grade	12th Grade
World History World History Honors World History Honors Gifted		U.S. History Honors U.S. History Honors,	U.S. Government U.S. Government Honors U.S. Government, Honors, Gifted
		Student can also take DE/AP courses that meets the US History requirement for graduation	Economics with Financial Literacy Economics with Financial Literacy Honors,

#### **Advanced Academic Programs**

#### **Dual Enrollment**

APHS will offer advanced and accelerated coursework and dual enrollment for all students eligible for advanced courses and dual enrollment. Students entering high school on an accelerated path, will have the option to take advanced placement courses, participate in dual enrollment, and career technical education. This program is designed to challenge students academically and provide them a pathway to ultimately attain an associate in arts degree from Miami Dade College (MDC). Students participating in dual enrollment benefit from receiving exposure to a rigorous college program, and graduate from APHS having earned college credits, while still in high school. Students must meet the following requirements to Participate in Dual Enrollment:

- Earn a minimum of 11 credits prior to enrollment.
- Earn a minimum 3.0 un-weighted grade point average prior to enrollment (2.0 for technical dual enrollment).
- Obtain approval from parents and from the high school principal.

- Obtain minimum ACT, SAT or PERT placement scores prior to enrollment.
- Select courses from the approved list (For courses counting as electives toward the high school diploma)
- Satisfy with any required prerequisites.
- Maintain a 3.0 un-weighted GPA (2.0 in technical dual enrollment) in high school coursework and a 2.0 college GPA in order to continue in the program.
- The 3.0 high school GPA is inclusive of any Dual Enrollment College Courses taken.
- Conform to all School Board and post-secondary institution policies and procedures.

Students will have opportunities to enroll in the following courses:

**SLS 1101**: College Success: This course is designated to help the students transition into a college environment. It helps the student to develop successful academic and personal strategies in order to succeed both in and out of the classroom.

**SYG 1000:** Introduction to Sociology: A Survey course to introduce students to the science of human behavior. Includes basic concepts and theories as well as an examination of major social institutions, the dynamics and processes of social interaction, and the structure and organization of social groups. **PSY 2012 Intro to Psychology:** This course provides an overview of the field of psychology. Students will learn about the biological and environmental bases of behavior, and theories and concepts in such areas as personality, intelligence, learning, motivation, emotions and mental illness. Students will increase their knowledge about the brain-body connection and applied neurosciences.

**MUK 1010:** Music Appreciation: This course is a listening and analysis class designed for students with no extensive training in music. It provides a foundation for intelligent and appetitive listening of music through an understanding of the ways in which music is put together the characteristics of various musical styles. Cultural, historical, aesthetic, and other influences in the development of various musical genres.

**CGS 1060: Intro to Comp Tech and Applications:** This course provides the technology skills required for personal, academic and professional success. Students will learn essential computing concepts and skills including mobile productivity, cloud services, security, ethics, general programming concepts, email, web, operating systems, and the use of an office suite.

**GEB 1011: Intro to Business:** The student will learn the major disciplines of business including general business, business ethnics, forms of business ownership, economics, management and leadership, human relations marketing, information systems, accounting, financial management, money and banking, and business law.

#### Advanced Placement (AP) Courses

Within the school's mission, we emphasize the goal of preparing our students for college and career readiness. As such, APHS will offer eligible students the following AP Courses.

Courses	9th Grade	10 <sup>th</sup> Grade	11th Grade	12 <sup>th</sup> Grade
AP World History	X			
AP Computer Science Principles	X	X	X	X
AP Computer Science A	X	X	X	X
AP Psychology		X	X	X
AP Human Geography		X	X	X
AP Spanish Language	X	X	X	X
AP Spanish Literature		X	X	X
AP Biology		X	X	X

AP Environmental Science	X	X
AP Human Geography	X	X
AP US History	X	
AP US Government		X
AP English Language	X	
AP English Literature		X

<sup>\*</sup>AP courses will be offered when applicable and to students who meet the requirements to participate.

# AcadeMir Preparatory High School Instructional Practices and Instructional Method Instructional Practices

APHS will implement the Florida B.E.S.T Standards in English Language Arts, and Mathematics, and the Florida Science State Standards (FSSS) for Science, 2021 Social Studies and 2014 Physical Education, and the 2011 Next Generation Sunshine State Standards for World Languages. This curriculum provides instructional goals, pacing guides or other state-aligned scope and sequence, and learning objectives for each grade and subject area. The instructional focus calendars are driven by student achievement and mastery through the application of the B.E.S.T Standards and NGSSS into real-world situations. The recurrent nature of assessment and instruction is highlighted in each classroom to keep student data current and to allow teachers to adapt instruction to meet each student's needs in real-time. APHS will enhance instruction in all disciplines by effectively executing one or more of the following instructional approaches. APHS will be supported through professional development to be able to successfully apply the research-based innovative methods(s) as follows:

#### **Instructional Methods:**

21st Century Learning Framework-Learning and innovation skills increasingly are being recognized as those that separate students who are prepared for a more complex life and work environment in the 21st century, and those who are not. A focus on creativity, critical thinking, communication, and collaboration is essential to prepare students for the future.

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Use of Information, Media, and Technology Skills

**Standards-Based Instruction**- Maintains focus on outcome measures to promote student achievement and ensure student achievement.

Interdisciplinary Instruction- Provides the link between subject areas, enhances real-world situations in learning, and increases achievement in all subjects (Math, Science, and Reading) **Gradual Release**-The Gradual Release of Responsibility for Learning model and approach help students attain mastery of concepts taught by what is referred to as the —I Do It —We Do It Together — You Do It Alone model whereby —I -the teacher presents the information by modeling the strategy to be used; we- the entire class, collaborates to work through the strategy together, and you, - the student, applies the strategy independently to demonstrate mastery and understanding.

**Project-Based Learning**-Students work individually at their pace, or in groups, students plan, implement, and evaluate projects that have real-world applications beyond the classroom, and develop problem-solving skills, first-hand investigation, reflective thinking and student self-assessment

**Engineering Design Process**-The design process is a systematic problem-solving strategy, with criteria and constraints, used to develop many possible solutions to solve or satisfy human needs or wants and to narrow down the possible solutions to one final choice.

#### 5 Steps to Engineering Design Process:

- 1. Ask-students ask questions, make observations, and gather information to define a simple problem.
- 2. Explore: students develop simple drawings to generate ideas of how to solve the given problem.
- 3. Model students develop a simple sketch to illustrate how the chosen concept will function to solve the given problem and develop a simple physical model.
- 4. Evaluate-Students analyze data from a test of two objects and compare the strengths and weaknesses of how each performs.
- 5. Explain: Students reflect on their design solution including one or two suggestions for

**Differentiated Instruction**-Standards-Based Instruction will be the goal of APHS, as such the school will provide a learning environment where all students will reach their maximum potential, through the implementation of differentiated instructional strategies that will connect students' individual learning needs to the standards. Teachers will use instructional time, to meet the needs of students, through standards-based instruction, while providing remediation and enrichment, during differentiated instruction.

Marzano's 10 High Yield Strategies-The following strategies will be implemented in the classroom, to increase rigor and engagement. Identifying similarities and differences; summarizing and note-taking; reinforcing effort and providing recognition; homework and practice; setting objectives and providing feedback; generating and testing hypothesis; Questions, cues, and advance organizers; Nonlinguistic representations; Cooperative learning.

The curriculum has been designed and developed based on State-Sponsored Evidence-Based textbooks, programs, and practices. The school will implement the Sponsors' and the Florida Department of Education's scope and sequence, correlated pacing guides, approved textbook list, approved resources, and any other curriculum materials that have been approved and utilized successfully as indicated by student's academic achievement. The school will monitor the fidelity of the implementation of these programs to ensure student mastery of the standards.

## **Specialized Programs**

AcadeMir Preparatory High School (APHS) will offer students a choice of Four STEAM Academies (Medical Health Academy, Engineer and Robotics Academy, and a Visual and Performing Arts Academy), students will choose one of the three STEAM Academies.

#### Medical Health Academy

The mission of the Medical Health Academy is to prepare students for employment and post-secondary education in the health field. Classroom instruction is integrated with lab practice, clinical experiences, and job shadowing in selected health care settings. The academy includes four 1 credit courses. In ninth grade, students are expected to take Health Science foundations which are designed to provide

students with an in-depth knowledge of the healthcare system and associated occupations. In tenth grade students will be enrolled in Health Science Anatomy and Physiology which provides an overview of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. In eleventh grade students will be enrolled in Allied Health Assisting and learn how to handle day-to-day medical office activities, upon completion the student will be eligible to sit for the Certified Medical Administrative Assistant exam which qualifies as an industry certification. In twelfth grade, students take two .5 credit courses that provide coherent and rigorous content aligned with challenging academic standards and relevant technological knowledge and skills needed to prepare for further education and careers in the Health Science career cluster: Phlebotomist, and EKG Aide.

Grade	Course	Credit
9th Grade	Health Science Foundations	1 credit
10th Grade	Health Science Anatomy and Physiology	1 credit
11th Grade	Allied Health Assisting	1 credit
	Phlebotomist	.5 credit
12th Grade	EKG Aide	.5 credit

Students enrolled in the Medical Health Academy will also participate in the program Project Lead the Way (PLTW) Biomedical Science. Students will take on the same real-world challenges that our medical health professionals face. Students will work with the same tools used by professionals in hospitals and labs, while engaging in compelling, hands-on activities and collaborating to find solutions to problems.

- Year 1 (9th Grade)- Principles of the Biomedical Sciences
- Year 2 (10th Grade)- Human Body Systems
- Year 3 (11th Grade)- Medical Intervention
- Year 4 (12th Grade) Biomedical Innovation

#### **Engineering and Robotics Academy**

The Academy of Engineering and Robotics will provide a specialized four-year program designed to prepare students for higher education and become certified in industry leading to a rewarding career in Engineering Technologies and Information Technology. The Academy of Engineering and Robotics will have three career pathways, Informational Technology and Business and IT, and Engineering. Gaming and Simulation Foundation

Grade	Course	Credit
9th Grade	Computer Science Discoveries	1 credit
10th Grade	Java Development and Programming	1 credit
11th Grade	Web Development	1 credit
12th Grade	Applied Cybersecurity	1 credit

**Informational Technology** 

9th Grade	Computer Applications in Business 1-MOS-Microsoft Office Specialist Certification	1 credit
10th Grade	Computer Applications in Business 2-MOS-Microsoft Office Specialist Certification	1 credit
11th Grade	Digital Information Technology	1 credit
12th Grade	ICT Essentials 1	1 credit

#### **Business and IT**

9th Grade	Introduction to Engineering Design	1 credit
10th Grade	Principles of Engineering	1 credit
11th Grade	Digital Electronics	1 credit
12th Grade	Engineering Design and Development	1 credit

## Game/Simulation/Animation Programming

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as a Game/Simulation Designer, Game Programmer, and Game Software Developer in the Information Technology career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster. The content includes but is not limited to practical experiences in game/simulation conceptualization, design, storyboarding, development methodologies, essential programming techniques, and implementation issues. Specialized programming skills involving advanced mathematical calculations and physics are also integrated into the curriculum.

Grade	Course	Credit
9th Grade	Gaming & Simulation Foundations	1 credit
10th Grade	Gaming & Simulations Design	1 credit
11th Grade	Gaming & Simulation Programing	1 credit
12th Grade	Multi-User Game & Simulation Programing	1 credit

#### Engineering

In an effort to maximize student exposure to the latest technology and comply with new digital instructional material requirements, APHS will equip classrooms with multimedia, high-speed computers and other hardware including high-speed Internet access school wide. In addition to technology used in core and elective courses, APHS will apply for grants to provide students access to

various technologies (program computers, laptops, iPADS, school-website, SMART TV's, TV production equipment) to produce quality academic products and showcase their learning in each content area. Students will have opportunities to earn industry certification in the following areas:

#### Informational Technology

- o Computer Science Discoveries
- Gaming and Simulation Foundation 1 & 2
- o Computer Science Principles (AP Course)
- o Java Development and Programming or Computer Science A (AP Course)
- Web Development
- Applied Cybersecurity

#### • Business and IT

- o Computer Applications in Business 1-MOS-Microsoft Office Specialist Certification
- o Computer Applications in Business 2-MOS- Microsoft Office Specialist Certification
- o Digital Information Technology
- o ICT Essentials 1

#### Engineering

- Applied Engineering Technology I
- Applied Engineering Technology II
- Applied Engineering Technology III

Project Lead the Way Engineering, Vex Robotics, and Amazon Future Engineers will be implemented in the Engineering and Robotics Academy, to engage students in interdisciplinary activities like working with a client to design a home, programming electronic devices or robotic arms, or exploring algae as a biofuel source. These activities not only build knowledge and skills in engineering but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance. In Years 1 and 2 (9th and 10th Grade) students will focus on Applied Engineering - This program provides students with a foundation of knowledge and technically oriented experiences in the study of the principles and applications of robotics engineering and its effect upon our lives. The content and activities will also include the study of business, people, safety, and leadership skills. This program focuses on transferable skills and stresses the understanding and demonstration of science and numerical knowledge, tools for technology, machines, instruments, materials, processes, and systems related to robotics. In Year 3 and 4 (11th and 12th grade), students will focus on Informational Technology. This program offers a sequence of courses that provides the technical knowledge and skills needed to prepare students for further education and careers in the information technology cluster. It provides technical skill proficiency and includes competency-based applied learning that contributes to academic knowledge, higher-order reasoning, and problemsolving skills. It also includes work attitudes, general employability skills, technical skills, skills specific to the occupation, and knowledge of all aspects of the IT cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in IT positions.

#### Project Lead the Way

Four PLTW programs create our academy pathways in computer science, engineering, and biomedical science:

- Medical Detectives
- Principles of Biomedical Science
- Automation and Robotics
- AP Computer Science Principles

Through these programs teaches teach students to apply knowledge from a variety of subjects as they engage in hands-on activities, projects, and problems reflective of real-world scenarios and careers. In the process, students develop skills in problem-solving, critical, and creative thinking, and communication and collaboration. Over the last several years, numerous reports and external organizations have validated Project Lead The Way's success in engaging the hearts and minds of students. Studies show that students who participate in PLTW programs outperform their peers in school, are better prepared for post-secondary studies, and are more likely to consider careers in STEAM-related fields than are their non-PLTW peers. A study from Indiana University-Purdue University-Indianapolis found that high school graduates who participated in PLTW were three times more likely to major in a STEAM field than non-PLTW graduates, and PLTW participation was significantly related to their persistence into the second year of college. A six-year longitudinal study out of Texas State University concluded that PLTW students were more prepared for and attended Texas higher education institutions at a higher rate and also scored higher on the state's mathematics assessment (Van Overschelde, 2013). PLTW's K-12 pathways in computer science, engineering, and biomedical science engage students at an early age, equipping them with the knowledge and transportable skills they need to thrive throughout their education and careers. In 2015-16, PLTW programs reached students at more than 8,000 schools across the U.S.

## Visual and Performing Arts Academy

The mission of the Visual and Performing Arts Academy is to provide students with a comprehensive arts-based education. This academy uses multiple approaches to learning that addresses problem-solving skills, the creative process, and imagination through a focus on the fine arts. The Visual and Performing Arts Academy allows students to:

- Explore a wide variety of arts areas
- Focus in-depth on one area/skill
- Develop and express their talents through performance and presentation
- Create in a supportive, nurturing environment
- Experience the interconnection between art and the world around them

The Visual and Performing Arts Academy will offer students an in-depth exposure to the Arts through a rigorous, challenging curriculum. Curricula includes instruction in performance, exhibition, theory, and history in the Arts. Master Classes and performances will also be offered throughout the year. This program will offer students the skills necessary for success in higher education and the workplace through a comprehensive, hands-on focus in each course of study. The Academy consists of five strands: instrumental music, vocal music, dance, theater, and visual arts, and is a college preparatory program designed for highly motivated, talented students interested in a challenging program of indepth visual studies. The Art Program applicants will present a portfolio of independent artwork for review and participate in an admissions workshop session where they solve visual problems in drawing, composition, use of color and development of form. The artwork is evaluated using standard rubric. The portfolio is reviewed for the quality of independent creative activity, manual and technical skill, and objective drawing ability. Students wishing to enroll in instrumental music, vocal music, dance and theater will be required to audition.

#### Art Program

In 9th grade Students develop and refine technical skills and create 2-D compositions with a variety of media in drawing, painting, plaster, wire, printmaking, collage, and/or design. Student artist's sketch, manipulate, and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. This course incorporates hands-on activities and consumption of art materials. In 10th grade will Students demonstrate proficiency in the conceptual development of content in drawing, painting, printmaking, collage, and/or design to create self-directed or collaborative 2-D artwork suitable for inclusion in a portfolio. Students produce works that show evidence of developing craftsmanship and quality in the composition. This course incorporates hands-on activities and consumption of art materials, and prep for AP Drawing in Junior year. In 11th grade students will focus online Quality, light/shading, rendering of forms, compassion, surface manipulation, the illusion of depth and mark making. Students will develop a 15-piece portfolio which will address a wide range of approaches and media. Included but not limited to: Painting, printmaking, mixed media. The range of the artwork will demonstrate exploration, planning and experimenting to make drawings. In 12th grade Students will focus on the understanding of design principles as applied to a 2D surface. Unity/Variety, Balance, Emphasis, Contrast, Rhythm/repetition, Proportion/Scale and Figure/ground relationships. Students will work on a 15-piece portfolio which will address purposeful decision-making about using the elements of art and principles of design in an integrative way. In AP 2D, students need to demonstrate an understanding of design principles as applied to a two-dimensional surface. Included but not limited to painting, drawing, collage, fabrics, inks, weaving, printmaking and photography.

Grade	Course	Credit
9th Grade	Two-Dimensional Studio Art II	1 credit
10th Grade	Two-Dimensional Studio Art III	1 credit
11th Grade	AP Drawing	1 credit
12th Grade	AP Studio Art 2D	1 credit

#### Dance

The Dance Academy Program will offer enriching opportunities for young performing artists in the field of dance by providing a learning environment that allows students to capitalize on their innate talent and passion for dance as an art form. The Dance Program provides the dance student with a well-rounded, comprehensive fine arts dance education that develops the student as an artist through opportunities to create, respond, and connect dance to personal and global experiences. Rigorous daily training in dance technique allows students to further develop their physical capabilities. Performance skills and artistry are further developed through required participation in annual performances. Master classes with guest artists from professional companies, choreographers, as well as faculty from colleges and universities are provided to all academy dance students. The Dance program will offer students a wide range of dance disciplines and methodologies. The dance curriculum is designed to offer students a strong technical base, to expand their knowledge of dance as an art form and to inspire passionate creativity in our students. Emphasis is placed on technique, dance history, health/nutrition, choreography and performance. The Dance courses are rooted in classical ballet training with instruction in modern, jazz, and contemporary dance.

Grade	Course	Credit
9th Grade	Dance Technique I	1 credit
10th Grade	Dance Technique II	1 credit
11th Grade	Dance Technique III Honors	1 credit
12th Grade	Dance Technique III Honors	1 credit
11th Grade	Dance Choreography/Performance 1	1 credit
12th Grade	Dance Choreography/Performance 2 Honors	1 credit

### **Broadcasting**

As part of the Visual and Performing Arts Academy, APHS will offer students a Broadcasting program, to expose students to the technical and creative aspects of a career in television, film production, social media, and broadcast journalism. Students will study the major components of what is involved in a broadcast/television production, such as scriptwriting, filming, editing, sound mixing, and recording. Using these skills, students will learn how to produce short films, PSAs, commercials, and other types of multimedia projects. Students will have the option to earn 2 industry certifications: Journalism and Media and Television Production Technology.

Grade	Course	Credit
9th Grade	Journalism 4	1 credit
10th Grade	TV Production 4 (TV Anchor)	1 credit
11th Grade	TV Production 5 (Sports and Entertainment)	1 credit
12th Grade	TV Production (Film)	1 credit

## Health, and Physical Education

The school will implement a physical education program that promotes physical activity, health education, and safety, to promote habits of healthy living. The school's goals include encouraging a healthy and active lifestyle throughout the school body; nurturing sportsmanship in all aspects of competition; widening each student's sporting experience and enjoyment; creating a passion for active recreation and sport; and assisting students in reaching their physical potential in a variety of sporting environments. Students will be required to complete 1 credit of physical education to meet their graduation requirements.

Grade	Courses	Credit
9th Grade	Personal Fitness	.5 credit
9 <sup>th</sup> Grade	Team Sports I	.5 credit
10th -12th Grades	Beginning Weight Training	.5 credit
10th - 12th Grades	Intermediate Weight Training	.5 credit

## Foreign Language

APHS will offer Spanish as foreign language options for students. Students will have the option of taking either language as an elective, and the opportunity to take both Advanced Placement Spanish and Advanced Placement French. Learning a second language will allow students to increase their future job opportunities, increase the number of people they can communicate with and will have more opportunities for college acceptance.

Grade	Courses	Credit
9-12	Spanish I for Non-Speakers and Spanish for Spanish Speaker I	1 credit
9-12	Spanish II for Non-Speakers and Spanish for Spanish Speaker II	1 credit
9-12	Spanish III for non-Speakers	1 credit
9-12	Spanish for Spanish Speakers III	1 credit
9-12	AP Spanish Language	1 credit
10-12	AP Spanish Literature	1 credit