



# **Dubai International Private School (Al-Quoz)**

DIPS, in partnership with parents and community, strives to ensure all students are digitally literate, lifelong learners, productive citizens and nurture their well-being in an inclusive learning environment.



"Empowering Minds, Inspiring Hearts, Shaping the Future" "تمكين العقول، إلهام القلوب، تشكيل المستقبل"

(Al-Qouz Branch)

# The Curriculum 2024-2025

# **Vision:**

DIPS, in partnership with parents and community, will strive to prepare everystudent to be digitally literate, a lifelong learner, a productive citizen, and nurture their well-being in an inclusive learning environment.

# **Mission:**

DIPS is committed to providing education following international standards yetadhering to local values and traditions.

# **Core Values:**

Integrity, Responsibility, Respect, Excellence and Citizenship (IRREC)

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# **Contents**

### The Curriculum

- Contact Information
- Curriculum Overview
- Curriculum Monitoring Process
- Assessments
- About the Common Core State Standards
- Next Generation Science Standards
- Arabic, Islamic, Social Studies and Moral Education
- High School Graduation Requirements
- Electives and Pathways
- Stem and Innovation across the Curriculum

# **Approaches to Teaching and Learning**

- Concept Based Conceptual Instruction
- Cross Curricular Learning
- The Daily 5 Literacy Program
- 21 Century Skills
- Social Emotional Learning

# **Courses by Phases**

- Phase 1 Kindergarten
- Phase 2 Elementary
- Phase 3 Middle School
- Phase 4 High School
- Special Subjects and Electives
- ICT
- Extra-Curricular Activities
- Curriculum Resources

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# **Curriculum Overview**

Dubai International Private School Al Qouz offers an American Curriculum in core subjects aligned with the California Common Core State (CCSS) and the Next Generation Science Standards (NGSS) to students of all nationalities and abilities. DIPS is fully accredited by NEASC and COGNIA.

In Arabic, Islamic, Social Studies and Moral education students are taught through the UAE Ministry of Education curriculum. Students graduate with the American High School Diploma. A select few Advance Placement (AP) courses are available to students in high school.

At DIPS, each child's needs are met through a variety of methods, strategies, and instructional techniques and we understand their appropriate fit into the curriculum. We aim to look at curriculum, instruction, and assessment as an integrated whole. Our curriculum implementation is achieved through a combination of published curriculum materials, which include digital and physical resources, and with teacher created materials that are aligned with the California CommonCore, the Next Generation Science Standards, and the UAE Ministry of Education standards. Teachers use the best practices and approaches to meet the needs of all our learners and to ensure successful student outcomes in all subjects.

# **Curriculum Monitoring Process**

### • Curriculum Alignment

School leadership regularly monitors the curriculum for vertical and horizontal alignment using the Atlas Rubicon school management system. We ensure when and what type of skills, content and activities are covered during the school year at specific intervals. This ensures no overlaps or gaps around content and skills being taught, as well as making certain students are not assessed too frequently or infrequently, and that students are taught the required standards for each grade levelthroughout their school career.

### Curriculum Monitoring and Review

Curriculum materials and resources are reviewed bi- annually by the Senior Leadership Team tohelp make informed decisions about necessary changes or adaptations while remaining current with best educational practices.

### Lesson Plans

Our lesson plans always include Common Core, NGSS or MOE standards, an objective that is derived from the stated standard, a method of instructional steps to complete the objectives, and an effective measurement tool to assess students.

### Lesson Plan Review

Lesson plans are put through an ongoing, multi-tiered review by the instructional leadership team. Section leaders and Heads of Departments. After these review forms are completed, instructional leaders have the option to schedule a conference with the teacher if they believe that the lesson plan is in desperate need of an immediate fix or if they simply would like to improve upon the curriculum based on a noticeable missing link.

### Assessment

Teachers at DIPS use formative assessments such as Exit tickets, CFU (thumbs up,verbal cues), Rubrics for writing, science, and other project-based assignments, inaddition to a wide array of strategies for differentiation during the lessons.

DIPS believes that 'Assessment for Learning' is a process of gathering information about students' knowledge, skills and understanding in order to inform teaching. Itcan be used as an ongoing part of the curriculum, or it may take place at key stagessuch as end-of-year exams.

The purpose of AFL is not just to test what a student knows but also to help teachersplan their lessons so that they are more effective. Moreover, frequent progress monitoring is done between benchmarks to determine the current instructional approaches, differentiation, and other necessary interventions to support the students' overall achievement.

In addition to tracking progress and attainment through internal assessments, our formal assessments include criterion referenced and norm referenced assessments.

Some of the regularly implemented external exams include SAT, CAT4, TIMSS, PISA, CPAA, MAP and MAP Fluency and NGRT. The data from these assessments help to measure the overall progress and attainment results to modify lessons and the curriculum in order to improve student outcomes.

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### **About the Common Core State Standards**

"The state-led effort to develop the Common Core State Standards was launched in 2009 by state leaders, including governors and state commissioners of education from 48 states, two territories and the District of Columbia, through their membership in the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). State school chiefs and governors recognized the value of consistent, real-world learning goals and launched this effort to ensure all students, regardless of where they live, are graduating high school prepared for college, career, and life.

The standards are informed by:

- The best state standards already in existence
- The experience of teachers, content experts, states, and leading thinkers
- Feedback from the public

State education standards have been around since the early 1990s. By the early 2000s, every state had developed and adopted its own learning standards that specify what students in grades3-8 and high school should be able to do. Every state also had its own definition of proficiency, which is the level at which a student is determined to be educated at each grade level and upongraduation. This lack of standardization was one reason states decided to develop the CommonCore State Standards in 2009. The development of the Common Core State Standards is a successstory of meaningful, state-led change to help all students succeed.

During the development process, the standards were divided into two categories:

- First, the college- and career-readiness standards, which address what studentsare expected to know and understand by the time they graduate from high school.
- Second, the K-12 standards, which address expectations for elementary school through high school.

The college- and career-readiness standards were developed first and then incorporated into the K-12 standards in the definitive version of the Common Core we have today. The National Governors Association (NGA) and the Council Chief State School Officers (CCSSO) received 10,000comments on the standards during two public comment periods. Many of the comments from teachers, parents, school administrators, and other citizens concerned with education policy helped shape the definitive version of the standards.

Today's students are preparing to enter a world in which colleges and businesses are demandingmore than ever before. To ensure all students are ready for success after high school, the Common Core State Standards establish clear, consistent guidelines for what every student should know and be able to do in Math and English/Language Arts from kindergarten through 12th grade. The standards were drafted by experts and teachers from across the country and aredesigned to ensure students are prepared for today's entry-level careers, freshman-level collegecourses, and workforce training programs. The Common Core

Standards focus on developing the critical-thinking, problem-solving, and analytical skills students will need to be successful. They also provide a way for teachers to measure student progress throughout the school year and ensure that students are on the pathway to success in their academic careers."

# **Next Generation Science Standards (NGSS)**

DIPS follows the state of California's NGSS Science Standards. "The Next Generation Science Standards (NGSS) are designed from prior science standards in three essential ways. https://www.nextgenscience.org/

- 1) Performance. Prior standards document listed what students should "know" or "understand." These ideas needed to be translated into performances that could be assessed to determine whether students met the standard. Different interpretations sometimes resulted in assessments that were not aligned with curriculum and instruction. The NGSS has avoided this difficulty by developing performance expectations that state what students should be able to do to demonstrate that they have met the standard, thus providing the same clear and specifictargets for curriculum, instruction, and assessment.
- 2) Foundations. Each performance expectation incorporates all three dimensions from the Framework— a science or engineering practice, a core disciplinary idea, and a crosscuttingconcept.
- 3) Coherence. Each set of performance expectations lists connections to other ideas within the disciplines of science and engineering, and with Common Core State Standards in Mathematics and English Language Arts." Performance Expectations Performance Expectations are the assessable statements of what students should know and be able to do. Some states consider these performance expectations alone to be "the standards," while other states also include the content of the three foundation boxes and connections to be included in "the standard."

The writing team is neutral on that issue. The essential point is that all students should be held accountable for demonstrating their achievement of all PEs, which are written to allow for multiple means of assessment.

The NGSS is a framework of science standards for all students, and all students are expected toachieve proficiency with respect to all the performance expectations in the NGSS. A second essential point is that the NGSS performance expectations should not limit the curriculum. Students interested in pursuing science further (through Advanced Placement or other advanced courses) should have the opportunity to do so. NGSS performance expectations provide a foundation for rigorous advanced courses in science or engineering that somestudents may choose to take. A third point is that the performance expectations are not a set of instructional or assessment tasks. They are statements of what students should be able to doafter instruction.

### **Arabic, Islamic, Social Studies, Moral Education**

**Arabic, Islamic, and Social Studies** are all taught in Arabic to first language speakers of Arabic. The subjects are taught in English to students for whom Arabic is not their first language. For non-Muslims, Civics is taught in English during the Islamic class period.

Every grade level's curriculum is guided by the mandated Ministry of Education Curriculum. <a href="https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen">https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen</a> <a href="https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen">https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen</a> <a href="https://www.khda.gov.ae/cms/mea/">https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen</a> <a href="https://www.khda.gov.ae/">https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen</a> <a href="https://www.khda.gov.ae/">https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requiremen</a> <a href="https://www.khda.gov.ae/">https://www.khda.gov.ae/<a href="https://www.khda.gov.ae/">https://www.khda.gov.ae/<a

### **Social Studies**

https://globalsleepover.com/wp-content/uploads/2017/08/UAE-National-Education-and-Social-Studies-Standards.pdf

**Moral Education** is taught in English but is guided by the Ministry of Education Curriculum. https://moraleducation.ae/curriculum/#pedagogy

The Moral Education Program (MEP) covers four pillars of teaching and learning: character and morality; the individual and the community; civic studies; and cultural studies. The program blends academic content with an exploration of character and ethics. It was designed as a progressive series of units to be taught over twelve years of schooling from grade 1 to grade 12.

The foundation of the program commencing in grade 1, introduces students to the conceptsof fairness, caring, and honesty, family, and friendship as well as heritage. Continuing through to grade 4, students are taught interlinking units from the character and morality, individual and community and cultural studies pillars.

# **High School Graduation Requirements**

DIPS meets all California High School Diploma Guidelines and includes credit requirements and personalized learning requirements. Students must pass all classes with a "D" or better to gain credit. Most international and local colleges require grades of "C" or better in all core content classes for academic admissions. Twenty-one (21) mandatory class credits, plus five and a half (5.5) elective credit classes, for a total of 26.5 credits are required for graduation. Most of the courses are one academic year in duration. \*\*Arabic language is a required course for all 9th grade students. All students holding an Arab passport must take Arabic every semester throughout High School as per KHDA regulations. \*\*All Muslim students are required to take Islamic Education every semester as per KHDA regulations. \*\*Arab Nationals and/or Muslim students must take 4 credits of Arabic, and 2 credits of Islamic. KHDA Guidelines for High SchoolGraduation.

### **Electives**

Elective courses are mostly offered in the High School.

In Elementary and Middle School, students have the option to choose between the French language and ICT. All elective courses are taught according to the relevant adopted standards. For example, Honors Science elective courses follow the NGSS, while Calculus and Math-related courses follow the Common Core State Standards. Advanced placement courses follow the CollegeBoard standards. (See the PDF file on the DIPS Website).

The following Advanced Placement (AP) courses are offered at the high school level for the 2024-2025 Academic Year:

- 1. AP Biology
- 2. AP Calculus "AB"
- 3. AP Chemistry

### STEM and Innovation across the Curriculum

DIPS defines Innovation as: the practical implementation of ideas to bring about new and useful projects, services, processes, and practices, usually designed to improve overall quality of life and work.

The approach to innovation in Grades K-12 is designed to enhance students' Innovative and creative skills across all phases to enhance students' achievement by building a practice of innovation and creativity across all phases and providing opportunities for students to generate their own ideas and develop their 21st-century skills so that they are future-ready.

The rationale of embedding Innovation into the curriculum is centered on:

- The UAE's Centennial Plan (2071) for excellence in education as a vital enabler for students aspiring to pursue the study of Artificial Intelligence, Space Science, Health Sciences and Digital Engineering.
- Dubai International Private School (DIPS) mission, vision, and priority goals.
- KHDA and NEASC recommendations during prior inspections.

By successfully embedding Innovation across the curriculum, as well as in the Teaching and Learning approaches, DIPS strives to enhance students learning skills such as collaboration, and exploratory learning allowing them to confidently apply Science, Technology, Math, and Engineering through experiential opportunities.

At DIPS, integrating STEM education has been recognized as a key priority to foster innovation, creativity, and sustainability across all subjects and grade levels. In line with this commitment, at the start of the 2022-2023 academic year, DIPS introduced a comprehensive Innovation program for Phases 3 and 4, along with afterschool STEM activities for Phases 1 and 2. These initiatives are designed not only to cultivate critical thinking and technological skills but also to promote sustainability by encouraging students to engage with real-world environmental challenges, making sustainability a core element of both the curriculum and the broader school experience.

The focus on STEM education and sustainability at DIPS offers numerous benefits to students. By integrating innovation and sustainability into the curriculum, students develop critical thinking, problem-solving, and creativity, which are essential skills for navigating the complexities of the modern world. The hands-on STEM activities and Innovation program expose students to real-world challenges, particularly environmental and sustainability issues, empowering them to think about long-term solutions. This approach not only enhances academic performance across subjects but also prepares students for future careers in growing fields like technology, engineering, and green industries, fostering responsible global citizens who are equipped to make a positive impact on their communities and the planet.

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# **Approaches to Teaching and Learning**

### **Concept Based Conceptual Instruction**

DIPS has adopted the Concept-Based Curriculum Instruction and believes that it is aligned withour Vision and Mission, is three dimensional and enables our students to transfer knowledge inorder to make meaning in the real world. CBCI is an approach to the curriculum and lesson planning that moves away from subject-specific content and emphasizes "big ideas" that weavethrough multiple subject areas or disciplines. For example, in a CBCI classroom, students may study the big idea of "change" in a variety of areas, from patterns in mathematics, to civilizations in social studies, to life cycles in science. In a concept-based curriculum, students acquire and process information through the conceptual level of thinking, so that they acquire knowledge and develop skills but also understand and therefore transfer knowledge to real life applications.

CBCI prepares students for the 21st century by encouraging them to think at a higher level and understand the so what of what they are learning.

According to educational theorist, H. Lynn Erickson, conceptual thinking requires the ability to critically examine information; relate to prior knowledge; see patterns and connections; draw out significant understandings at the conceptual level; evaluate the truth of the understandings across time or situations; and, often, use the conceptual understanding to creatively solve a problem or create a new product, process, or idea.

### **Cross-Curricular Learning**

DIPS believes that cross -curricular education is an approach to teaching and learning that integrates multiple subject areas into a single lesson. It encourages students to make connections between different disciplines and apply their knowledge in a meaningful way. It also helps to develop critical thinking skills, as students are required to analyze and synthesize information from different sources. Cross curricular education can be used to create engaging and meaningful learning experiences for students. This approach to learning goes hand in hand with the Concept Based Conceptual Instructional approach.

### The Daily 5 Approach to Literacy

DIPS believes that the Daily 5 Approach to Literacy developed by American educators, Joan Moser and Gail Boucher is the most effective method of teaching Literacy for our Elementary students in Grades KG-5. The system has five components- read to self, read to someone, listento reading, work on writing and word work. Students are taught explicitly how to work within each component to achieve success. In addition to the five components, there is designated Teacher time where the teacher will do Guided Reading or work on prescribed phonics and otherareas of literacy development with a group of students. The overarching aim is that students develop stamina and can work independently for up to 20 minutes in each area; thus, improving their learning and 21st Century skills. During this process students begin to have more choice in their learning, become independent readers, develop a love of reading, while teachers can differentiate instruction to meet the needs of all students while also diagnosing, and track and monitor students' progress closely.

### The Daily 3 Approach to Math

Math Daily 3 in Grades 1-6 is a center-based framework for structuring math time so students develop deep conceptual understanding, mathematical proficiency, and a true love of mathematics. This framework is adapted to the curriculum and state standards.

### 21st century skills

At DIPS developing students' 21st century skills are a priority. We aim to ensure our students are equipped to succeed beyond graduation in all areas of life with the set of skills needed in the information age. The three categories of skills are:

- Learning Skills: Critical Thinking, Creative Thinking, Collaborating, Communicating
- Literacy Skills: Cultural Literacy, Information Literacy, Media Literacy, Technology Literacy
- Life Skills: Flexibility, Initiative, Social Skills, Productivity. Leadership

### **Social Emotional Learning**

In addition to 21st Century skills and preparing our students for a successful life beyond graduation, DIPS teachers and leaders understand that Social-emotional learning (SEL) is the process of developing self-awareness, self-control, and interpersonal skills that are vital for school, work, and life success. People with strong social-emotional skills are better able to cope with everyday challenges and benefit academically, professionally, and socially. From effective problem-solving to self-discipline, from impulse control to emotion management and more, SEL provides a foundation for positive, long-term effects on children, adults, and communities.

Such school life, events, activities, and lessons are embedded with SEL into the curriculum. In the Early years SEL is also a part of the Home Learning routine.

# **Course Offerings**

# **Phase 1 Kindergarten**

In KG 1 and 2, DIPs prioritize the child's personal development, healthy socialization, and establishing a positive self-concept. Fundamental skills are taught in a holistic discovery-based approach to learning, establishing a crucial foundation for a successful school experience.

### **Kindergarten (Language Arts)**

Following the California Common Core State Standards for Kindergarten English, this class demonstrates grammatically correct speaking and writing, along with correct capitalization, spelling, and punctuation while writing. Students' vocabulary is improved upon by clarifying words with multiple meanings and how words in a sentence relate to each other. The students will learn phonics to sound out words while reading. The students will be exposed to emergent- reader books and asked to answer questions about the plot, key ideas, and details of the story.

Students will be able to explain relationships between texts and illustrations, compare two different books on the same topic, and participate in group reading activities. By the end of the class, students should be comfortable holding collaborative discussions about age-appropriate topics, be able to answer questions about a story read aloud to them, be comfortable asking for help or clarification on a topic and be able to tell a story through a combination of text, drawings, and spoken words.

### **Kindergarten (Mathematics)**

This course is aligned with the California Common Core Standards for Kindergarten mathematics. The math course for this grade focuses on two main ideas. First, showing, relating, and using whole numbers. Second, describing shapes and spaces. To accomplish these two main goals students will learn to know number names, count objects, and compare numbers. They will focus on using the numbers 11-19 to build an understanding of place value. The students will understand that addition means putting together, and subtraction means taking from or apart. The students will practice describing and comparing measurable attributes such as height and weight. The students will also practice identifying, analyzing, comparing, and creating shapes. They will also use appropriate terms like the ones below, and in front of them to describe the relative location of an object.

### **Kindergarten (Science)**

This course is aligned with the Next Generation Science Standards for Kindergarten science. Science in KG provides an overview of the senses, including describing the textures of different substances. The students will explore the Earth and space by learning what gravity is and its effect on objects. Students identify the moon, Sun, and stars, and they learn the differences between day and night. The students are taught how to describe and explain the differences between different objects using the properties of an object. Students practice using categories to organize different objects and learn that objects change in many ways over time. Pushes and pulls are discussed to introduce the idea of force to the students. Sound and the movements that cause it are also explained. Finally, the students will explore biology by determining if a living being is a plant or an animal. They will describe the parts of a plant and what plants and animals require to live.

### **Kindergarten (Social Studies)**

Following the UAE Ministry of Education Standards for Kindergarten, the class focuses on several big ideas which cover History, Geography, UAE National Identity and Economics. The students will learn what it means to be a part of a family and why they are different from other family members. They will learn about why we celebrate holidays and what they mean. The students will learn how to be a good citizen and will learn about how different groups might have different rules. Money will be explained as well as the concept of work and the types of work that people might do. The students will learn about the concepts of time, today, yesterday, and tomorrow to describe events. They will start learning how to read maps, along with the common symbols and directions found on one. Finally, the students will learn about landforms, water, and weather.

# **Phase 2- Elementary**

In Grades 1 through 5 the curriculum centers on the basic skills in all subject areas and introduces higher-level thinking skills to challenge students understanding and stimulate their interests through the Concept-Based Curriculum Instruction approach, and in literacy and Math through the Daily 5 and Daily 3 center-based approach to learning. At DIPS, our aim is to develop independent learning skills while also having a love of learning for life.

### **Grade 1 (Language Arts)**

In first grade English, following the California Common Core Standards, students develop foundational reading, writing, speaking, and listening skills. They practice retelling stories, identifying key events, and answering questions about texts. Students learn to distinguish between books that tell stories and those that provide information and recognize who is telling a story. They explore phonics, syllables, and word sounds to improve reading fluency and comprehension. Additionally, students begin writing opinion, informative, and narrative pieces, and engage in collaborative writing projects that involve basic research.

### **Grade 1 (Mathematics)**

In 1st grade math, aligned with the California Common Core Standards, students focus on four key areas. They build a strong foundation in addition and subtraction within 20, understanding the relationship between the two operations. Students also explore how numbers relate to each other, learning to group numbers into tens and ones. Additionally, they begin to understand linear measurement, length units, and how to tell and write time. Lastly, students explore the attributes of shapes, learning to create and combine shapes, and recognize them in different orientations.

### **Grade 1 (Science)**

This 1st grade science course, following the Next Generation Science Standards, introduces students to key scientific concepts through the 5E model (Engage, Explore, Explain, Elaborate, Evaluate) and the Engineering Design Process. Students actively engage with the world around them by using their five senses and practicing the scientific method to observe and ask questions. They learn to differentiate between living and non-living things, studying plants, animals, and their environments, as well as human body systems. In Earth science, students explore weather, erosion, earthquakes, and the cycles of day and night. They also study matter and its three states. Incorporating the Engineering Design Process, students are encouraged to identify problems, brainstorm solutions, and design simple models, helping them apply

their scientific knowledge to real-world challenges. This process fosters creativity and problem-solving as they explore the relationship between science and engineering.

### **Grade 1 (Social Studies)**

Social Studies centers on the themes of History, Geography, UAE National Identity, and Economics. Students will build on the big ideas taught in kindergarten social studies, bringing new ideas forward. Students learn about different types of families, how they can be similar and how they can be different. The students also learn about how families interact, and the rules that families follow. The students then hear about how learning happens, both at school and at home. Next the students learn about how both children and parents work, where they work, and how money is used in our culture. The differences between wants and needs are explained, along with how people get what they want and how needs and wants to have changed over time. The class then focuses on choices that are made by people, how to make good choices, and important choices made in history. The students will then learn how to read maps and will discuss the different places that families can live in in the UAE and in other countries. The students will learn about our natural resources and how we must take care of our resources to protect the environment. The first UAE families are discussed, particularly Bedouin families and their stories. Finally, the students learn about the holidays we celebrate and observe.

### **Grade 2 (Language Arts)**

This 2nd grade English Language Arts course, aligned with the California Standards, focuses on developing students' reading, writing, speaking, and listening abilities. Students will enhance their comprehension by asking and answering questions like who, what, where, why, and when, while also exploring how rhythm, structure, and point of view contribute to the meaning of stories. In writing, students will learn to express opinions, explain tasks, and craft narratives. They will strengthen language skills through the use of collective nouns, irregular plurals, adjectives, adverbs, and proper grammar conventions such as capitalization, commas, and apostrophes. Additionally, students will practice speaking and listening by participating in discussions, asking thoughtful questions, and sharing stories with clarity and precision.

### **Grade 2 (Mathematics)**

This 2nd grade mathematics course, aligned with the California Common Core Standards, focuses on four key areas. First, students will deepen their understanding of base-ten notation, including counting in fives and tens and recognizing that digits in multi-digit numbers represent amounts of thousands, hundreds, tens, or ones. Second, they will build proficiency in addition and subtraction, working with numbers up to 1,000 and developing mental math strategies for adding and subtracting in tens or hundreds. Third, students will learn to use standard units of measurement, understanding their importance and practicing with tools like rulers. Finally, they will explore and analyze two- and three-dimensional shapes by counting sides and angles, laying the groundwork for concepts such as area, volume, similarity, and symmetry.

### Grade 2 (Science)

This 2nd grade science class, aligned with the Next Generation Science Standards, uses the 5E model (Engage, Explore, Explain, Elaborate, Evaluate) and incorporates the Engineering Design Process to deepen students' understanding of key scientific concepts. Building on prior knowledge, students explore the basics of force, gravity, and magnetism, while expanding their understanding of the states of matter and how substances change from one state to another. They will also study plants and animals, learning how they move, obtain food, and protect themselves. Additionally, students review the functions of vital human organs and learn how to maintain a healthy body through proper nutrition, exercise, and hygiene.

Students will explore Earth's motion, the moon, stars, and weather patterns, as well as the effects of slow and fast land changes, including fossils. Through the Engineering Design Process, they will identify problems, brainstorm solutions, and create models, applying their scientific knowledge to solve real-world challenges and fostering hands-on problem-solving skills.

### **Grade 2 (Social Studies)**

Social Studies centers on the themes of History, Geography, UAE National Identity, and Economics in the UAE. Students learn how significant figures, events, and developments have impacted and played a role in constituting other communities in the UAE and region over different eras and in different places. They will understand patterns of stability and transition over time and relationships between people and events along with explanations of such relationships. Students develop knowledge of the earth, its properties, and how such properties are related to human interactions. They learn how the impact human societies have on the physical surrounding environment.

Students gain a sense of belonging and loyalty to the UAE and adherence to its values and ethics through understanding the factors that have contributed to the formation of UAE identity. They learn the basis of different forms and duties of the government and the roles of society members. Students will learn about economic principles and systems, how markets operate, and the role of the government in the development of the national and global economy.

### **Grade 3 (Language Arts)**

This 3rd grade English Language Arts course, aligned with the California Common Core Standards, focuses on enhancing reading, writing, and communication skills. Students will learn to distinguish between literal and nonliteral language and analyze how chapters, scenes, and stanzas contribute to the overall structure of a story. In writing, students will practice using linking words and phrases to show sequence and conduct short research projects to build knowledge. Communication skills are developed through participation in discussions, where students will follow social rules like staying on topic, respecting others' viewpoints, and linking their comments to the conversation. While reading informational texts, students will identify main ideas, understand academic vocabulary, and use maps and photographs to enhance comprehension. Additionally, they will explore the importance of rules and laws, understand citizenship and symbols of the UAE, and learn how people solve problems and celebrate holidays together.

### **Grade 3 (Mathematics)**

This 3rd-grade mathematics course, aligned with the California Standards, emphasizes four key areas. First, students will build an understanding of multiplication and division through activities involving equal-sized groups, learning to solve problems by finding unknown products and factors with single-digit numbers. Second, they will explore fractions, focusing on unit fractions, and understanding that fractions represent parts of a whole relative to the size of the whole. Third, students will learn about area as a property of two-dimensional shapes by measuring how many smaller units fit within a shape. Lastly, they will describe and compare two-dimensional shapes, using their understanding of fractions to express part of a shape's area as a fraction of the whole.

### Grade 3 (Science)

This 3rd-grade science course, aligned with the Next Generation Science Standards, incorporates the 5E instructional model (Engage, Explore, Explain, Elaborate, Evaluate) along with the Engineering Design Process. Students will investigate a variety of scientific concepts, such as forces, interactions, weather, and ecosystems. They will engage with hands-on activities, exploring topics like the effects of balanced and unbalanced forces, the properties of weather patterns, and the interdependence of living organisms in ecosystems. Throughout the course, students will apply the Engineering Design Process by identifying

problems, brainstorming solutions, and constructing simple models to address real-world challenges. This process encourages critical thinking and problem-solving as students deepen their understanding of how science and engineering work together to explain natural phenomena and solve practical problems.

### **Grade 3 (Social Studies)**

With a focus on UAE geography history, people and economy students will learn about significant figures, events and developments and their impact on other communities in the region. They will understand relationships between people and events and make connections between human societies and the physical environment. Students will gain a sense of belonging to the UAE and adherence to its values and ethics, while also learning about government forms, duties, and roles of society members. They will also understand the basic economic principles of markets and the government's role in the national/global economy.

### **Grade 4 (Language Arts)**

This 4th-grade English class, aligned with the Common Core State Standards, requires students to read for at least twenty minutes daily, with a reading log to track their progress. To foster a love for reading and writing, students will complete ten book reports throughout the year. Each unit includes two vocabulary lessons, grammar instruction, reading various types of literature, and writing skill development. Students will enhance their reading abilities by connecting prior knowledge to new texts, identifying first- and secondhand accounts, reading nonfiction, and making predictions about story events. Writing practice will focus on paraphrasing, essay writing, storytelling, playwriting, and crafting persuasive essays. Students will be encouraged to visualize what they read and write, draw connections between texts and ask thoughtful questions to deepen comprehension.

### **Grade 4 (Mathematics)**

This 4th-grade mathematics course aligns with the California Common Core Standards and focuses on three key areas. Students will use addition, subtraction, multiplication, and division to solve real-world problems, reviewing multiplication and division facts and developing strategies for mentally calculating products and quotients. They will also learn to use variables in solving these problems.

In addition, students will expand their understanding of place value up to 1,000,000, recognizing the relative sizes of each place. They will apply appropriate methods for estimating and calculating products and dividends. Students will explore fractions by finding equivalent fractions, converting mixed numbers to improper fractions and vice versa, and comparing fractions. They will understand the relationship between decimals and fractions and learn to compare and order decimals.

Furthermore, students will use place value and base-ten numerals to represent, compare, round, add, and subtract whole numbers. They will review measurement concepts, including length, weight, mass, capacity, and time, and practice converting measurements within the same system. Students will calculate the perimeter and area of rectangles and learn to analyze and classify geometric figures based on their properties. They will study the characteristics of two-dimensional shapes to solve problems related to symmetry. Finally, they will represent and interpret data using various plots and identify angles, lines, polygons, symmetric figures, and lines of symmetry.

### **Grade 4 (Science)**

This 4th-grade science class is aligned with the Next Generation Science Standards and incorporates the 5E instructional model (Engage, Explore, Explain, Elaborate, Evaluate) along with the Engineering Design Process. The curriculum covers a range of scientific topics, building on prior knowledge while introducing new concepts. Students will begin by reviewing matter, its states, atoms, elements, and the properties of

matter, including the unique characteristics of metals, acids, and bases. They will learn to differentiate between molecules, compounds, and mixtures. The course will also cover the solar system, the Earth's movements, and Galileo Galilei's contributions to astronomy. Students will investigate minerals and the various types of rocks, exploring the rock cycle and understanding the distinctions between renewable and nonrenewable resources. They will examine the life cycles and characteristics of plants and animals and discover different forms of energy we can harness from the environment, such as solar, heat, wind, and water. Additionally, students will explore human senses, including how we hear, speak, and perceive colors. They will study the principles of electricity and magnetism, their applications, and their interrelationships. The curriculum will cover concepts of speed, velocity, and acceleration, along with the laws of motion and their real-world applications. Students will investigate the purpose and types of machines, focusing on compound machines encountered in everyday life. They will also explore the practical applications of scientific knowledge and technology. Finally, students will review the scientific method, designing and conducting their own scientific investigations to apply what they have learned.

### **Grade 4 (Social Studies)**

With a focus on UAE geography, history, people and economy, students will learn about the significant figures, events and developments and their impact on other communities in the region. They will understand relationships between people and events and make connections between human societies and the physical environment. Students will gain a sense of belonging to the UAE and adherence to its values and ethics, while also learning about government forms, duties, and roles of society members. They will also understand the basic principles of markets and the government's role in the national/ global economy.

# Grade 5 (Language Arts)

This 5th-grade English Language Arts class is designed to align with the California Common Core State Standards. Students are expected to read for at least 30 minutes each day and maintain a reading log to track their reading time. Additionally, they will complete 10 different book reports to foster a deeper understanding of the stories they read. Throughout the 18 chapters of the course, students will engage in two vocabulary lessons per chapter, enhance their grammar skills, and practice reading various types of literature while developing essential writing abilities. Students will focus on making inferences, utilizing context clues, and extracting information from texts. To strengthen their writing skills, they will learn to express opinions, compose letters, incorporate literary devices, and explore word relationships in poetry. Furthermore, students will practice comparing similar texts to enhance their analytical skills. The primary objective of this class is to cultivate proficient readers and skilled writers.

### **Grade 5 (Mathematics)**

This 5th-grade mathematics course is aligned with the California Common Core Standards and focuses on three essential areas. First, students will develop proficiency in adding and subtracting fractions, interpreting numerical expressions, and applying the order of operations. They will learn to find equivalent fractions, convert mixed numbers to improper fractions and vice versa, compare fractions, and perform multiplication and division of fractions. Additionally, students will explore the relationship between fractions and decimals, reading, writing, comparing, ordering, and performing computations with decimals, including addition and subtraction to the hundredth place. Second, students will expand their understanding of division to include two-digit divisors and decimal operations, mastering multi-digit addition, subtraction, multiplication, and division along the way. They will also learn about volume as a property of three-dimensional space, estimating and measuring volume effectively.

Third, students will convert between customary and metric units for length, weight, and capacity, read and interpret measurement data, and use cubic units to determine the volume of rectangular prisms and irregular solids. Furthermore, they will review key geometric terms to name and compare different shapes, identify points on a coordinate plane, and classify two-dimensional shapes, including triangles and quadrilaterals.

### **Grade 5 (Science)**

This 5th-grade science course is aligned with the Next Generation Science Standards and incorporates the 5E instructional model (Engage, Explore, Explain, Elaborate, Evaluate) along with engineering design solutions. Students will explore a variety of scientific disciplines to deepen their understanding of the world. The course begins with a review of the scientific method, guiding students through the steps to design and conduct effective experiments.

Students will investigate space science, learning about galaxies, our solar system, and the planets. They will explore Earth's water cycle and the factors influencing weather. In life science, students will study how environmental changes drive the evolution of plants and animals, while also examining the major systems of the human body and their parallels in plants.

In physical science, students will delve into the atomic theory, the states of matter, and how matter undergoes change. They will explore energy conservation, types of energy transformations, and practical applications of electricity. The course will also include an introduction to forces and Newton's laws of motion. Throughout, students will engage in hands-on activities and design challenges, applying engineering principles to solve real-world problems and reinforcing their understanding of scientific concepts.

### **Grade 5 (Social Studies)**

Students learn how significant figures, events, and developments have an impact and play a role in constituting other communities in the region over different eras and in different places. They will understand patterns of stability and transition over time and the relationships between people and events. They learn how the earth, its properties, and how such properties are related to human interactions. They will develop an understanding of interrelations between human societies and the physical surrounding environment. Students gain belonging and loyalty to the UAE country and society, and adherence to the values and ethics through understanding the factors that have contributed to the formation of UAE national identity. They will also learn the basis, different forms and duties of the government and the roles of society members. Students will learn about the economic principles and systems, how markets operate, and the role of the government in the development of the national and global economy.

# **Phase 3 - Middle School**

In grades 6-8 the curriculum continues to build on higher-level thinking skills to challenge students understanding and stimulating their interests through the Concept-Based Curriculum Instruction approach. There is emphasis on making connections to real life by transferring knowledge, as well as developing the 21st century skills of creativity, collaboration, and communication. At DIPS, our aim is that Middle School students learn to take risks, are motivated to learn, and demonstrate responsibility and independence.

### Language Arts 1 (Grade 6)

The 6th-grade English Language Arts course aligns with the California Common Core Standards, focusing on developing students' skills in reading, writing, speaking, listening, and language. In reading, students will learn to analyze how textual evidence supports their interpretations and understand how character responses shape the plot. They will explore how the meaning of words shifts depending on their context and analyze how specific sentences contribute to the development of themes or plots. Students will compare the experience of reading a text with listening to or watching its live performance.

In writing, students will work on producing clear argumentative, informative, and narrative texts, focusing on developing their ideas with proper grammar and language. They will practice revising and editing their work and learn to conduct research using credible sources to support their writing with evidence.

To improve their speaking and listening skills, students will organize their ideas logically and present them using multimedia elements, ensuring strong speaking techniques like eye contact and clear pronunciation. They will also collaborate effectively with peers, adhering to discussion rules. Throughout the course, students will demonstrate a solid command of the English language, including proper pronoun use, punctuation, and spelling, while following A.C.E. (Answer, Cite, Explain) writing formats.

Language Arts 2 (Grade 7) Grade 7 English follows the California Common Core Standards for 7th-grade English Language Arts and focuses on the key areas of reading, writing, speaking and listening, and language. The course is designed to help students become confident readers and writers across all subjects.

In reading, students will deepen their ability to determine the central ideas of a text and support their analysis with textual evidence. They will enhance their skills in analyzing how an author structures their text and the purpose behind the chosen point of view. Additionally, students will learn to compare and contrast different forms of a text, including written and multimedia versions, and evaluate how various authors approach similar topics.

In writing, students will continue to build their skills in writing argumentative, informative, narrative, and research-based texts. They will focus on producing clear, well-organized writing with a style appropriate for the topic. Students will also learn to incorporate technology for producing and publishing their work, including linking and citing sources properly. They will further develop their research skills by gathering evidence from multiple texts to support their own writing.

In speaking and listening, students will practice asking thoughtful questions that stimulate group discussions. They will learn how to adjust their viewpoints based on new information and ideas shared by peers. Additionally, students will practice public speaking by delivering presentations that include relevant descriptions, facts, and details to support their viewpoints.

In language, students will continue to refine their understanding and application of the English language. This includes proper use of phrases, clauses, and a variety of sentence structures. They will also work on writing conventions, such as using commas to separate coordinate adjectives. Throughout the course, students will demonstrate their growing command of grammar and writing mechanics.

Language Arts 3 (Grade 8) Grade 8 English follows the California Common Core Standards for 8th-grade English Language Arts and focuses on developing students' skills in reading, writing, speaking, listening, and language to help them become confident and proficient in all subject areas.

In reading, students will refine their ability to identify the main ideas of a text and analyze it by citing specific lines, events, or dialogue. They will continue using context clues to determine the meaning of words and expand their understanding to include figurative and connotative meanings.

Students will learn to compare different types of texts and evaluate how these differences impact the meaning. They will also explore how point of view influences a text's tone and connotations. By the end of the course, students will be able to read and comprehend various types of literature appropriate for their grade level.

In writing, students will enhance their ability to write argumentative, informative, narrative, and research essays. They will focus on clear, well-organized writing with style and tone that suit their topic. The course emphasizes peer feedback, guiding students to revise and improve their work. Students will also develop research skills, learning how to use credible and diverse sources to gather information. The proper use of citations and paraphrasing will be a key focus. Additionally, students will learn to support their arguments and opinions with evidence from texts in a logical and coherent manner.

In speaking and listening, students will learn to engage in meaningful, collaborative discussions and analyze information from a variety of media formats. They will evaluate the reasoning and claims presented by speakers and develop their own logical arguments. Students will practice presenting their ideas in clear and structured ways, following the A.C.E. (Answer, Cite, Explain) format to support their points with evidence. They will also demonstrate mastery of formal English when making presentations or engaging in discussions.

Throughout the course, students will strengthen their language skills by continuing to refine their understanding of English grammar, usage, and writing conventions. They will apply these skills to both written and spoken communication, ensuring they can express themselves effectively and accurately.

### Mathematics 1 (Grade 6)

This course aligns with the California Common Core Standards for 6th grade mathematics and focuses on four essential areas:

# Statistics Reviwed by D.M. 10.202

Students will develop an understanding of statistical variability and formulate statistical questions. They will learn to summarize and describe distributions of numerical data and display data using various plots, including dot plots and histograms, while providing quantitative measures of center.

### Geometry

Students will learn to calculate the area of various shapes, including parallelograms, triangles, trapezoids, and circles. They will apply their knowledge to solve real-world and mathematical problems involving area, surface area, and volume.

### **Number System**

Students will become fluent in dividing multi-digit numbers and multi-digit decimals by whole numbers. They will learn to use positive and negative numbers to represent real-world quantities, compare and order integers, plot rational numbers on a number line, and understand absolute values. They will also practice plotting ordered pairs of rational numbers on a coordinate plane.

### **Ratios and Percentages**

Students will shift from reasoning about a single quantity to reasoning about two quantities. They will recognize a ratio as a multiplicative comparison of two quantities rather than an additive comparison and understand it as a joining of two quantities in a composed new unit that preserves the multiplicative relationship. Additionally, they will model percent and convert between percent, fractions, and decimals, enabling them to find a percent of a quantity and determine the whole from a percent.

### Algebra

Students will learn to find the Greatest Common Factor (GCF) and the Least Common Multiple (LCM) of two whole numbers. They will use the distributive property to express sums of whole numbers with a common factor as multiples of sums of whole numbers without a common factor. Additionally, students will interpret and compute quotients of fractions, solve word problems involving fractions, and compare, order, multiply, simplify, and divide fractions and mixed numbers. They will also understand exponents and be able to write and evaluate expressions involving exponents.

### Mathematics 2 (Grade 7)

This course is aligned with the California Common Core Standards for 7th-grade mathematics and emphasizes the following key areas:

#### **Statistics**

Students will learn to utilize measures of center and variability to analyze numerical data from random samples. They will investigate chance processes and develop, utilize, and evaluate probability models.

# **Number Operations**

### **Ratios and Proportions**

Students will analyze proportional relationships to solve real-world and mathematical problems. They will also use proportions and percentages to address various practical and mathematical scenarios.

### Algebra

Students will model real-world problems using equations and apply algebraic rules to solve these equations effectively. Students will apply and extend their previous knowledge of fraction operations to effectively add, subtract, multiply, and divide rational numbers.

### Geometry

Students will engage in geometric constructions, understand, and apply theorems related to circles, and translate between geometric descriptions and equations for conic sections.

### Mathematics 3 (Grade 8)

This course aligns with the California Common Core Standards for 8th-grade mathematics and concentrates on the following areas:

### **Statistics**

Students will explore frequency, measures of center, outliers, histograms, box plots, and the line of best fit.

### Geometry

Students will study transformations, similarity, and congruence, as well as reasoning and proofs related to given diagrams.

### **Functions**

Students will learn how to create, solve, and graph relationships between functions.

### Algebra

Students will determine slopes and intercepts in linear equations involving one and two variables.

### Earth Science (Grade 6)

Aligned with the Next Generation Science Standards for 6th-grade science, this course explores various scientific disciplines, including physical science, ecology, and climatology. Students will learn about the role of scientists and distinguish between scientific theories and laws. After reviewing the scientific method, they will design and conduct their own experiments.

Students will discover the composition of matter and atoms, gaining proficiency in reading the periodic table. The class will cover concepts related to force and motion, including Newton's laws of motion, as well as different forms of energy and how energy is measured.

Ecology will be introduced as students examine abiotic and biotic factors within ecosystems. They will explore the historical context of cell discovery and the fundamentals of cell theory, alongside a review of major organ systems to understand the organization of living organisms.

In Earth science, students will investigate the water cycle and the rock cycle, deepening their knowledge of how these processes shape our planet. They will also study climate and the formation of weather patterns, as well as the composition and function of the atmosphere.

Throughout the course, students will practice writing aligned with English Language Arts standards, using the A.C.E. (Answer, Cite, Explain) format to effectively communicate their understanding of scientific concepts.

### Life Science (Grade 7)

This course aligns with the Next Generation Science Standards for 7th-grade science, focusing primarily on life sciences while incorporating discussions on scientific inquiry and energy. Students will begin by reviewing the nature of science and learn how to design effective experiments. They will apply the scientific method to explore questions relevant to their lives.

The curriculum will cover sound and light, exploring concepts such as the reflection of light and the properties of materials that either allow light to pass through or block it. Students will then investigate energy transformations, alongside the first and second laws of thermodynamics. Next, the course will delve into the rock cycle and the various types of rock, emphasizing their significance in understanding Earth's history. Students will study geological processes, including earthquakes and volcanic activity, to learn how and why the Earth changes over time. In the study of ecosystems, students will explore their capacity to support life, the factors that affect this capacity, and the ways ecosystems can be harmed. They will examine interactions among organisms, focusing on biodiversity and symbiosis, and understand the flow of energy through ecosystems by interpreting food chains and food webs.

Additionally, students will learn about the evolution of organisms and species over time, particularly through the lens of natural selection and adaptation to environmental changes. The course will culminate with an exploration of heredity and reproduction, including the use of Punnett squares to predict offspring traits. Throughout the course, students will practice writing in alignment with English Language Arts standards, utilizing the A.C.E. (Answer, Cite, Explain) format to effectively communicate their understanding of scientific concepts. The engineering design process will also be integrated into the curriculum to foster problem-solving skills and innovative thinking.

### **Physical Science (Grade 8)**

This course aligns with the Next Generation Science Standards for 8th-grade science and provides an indepth exploration of physical sciences, including chemistry, physics, and astronomy. Students will begin by reviewing the nature of science and the steps of the scientific method, setting a foundation for their inquiry-based learning. Through the 5E instructional model—Engage, Explore, Explain, Elaborate, and Evaluate—students will first engage with the concept of matter, examining its phases. They will explore the structure and organization of atoms, learning how and why atoms bond to form compounds and molecules. The course will differentiate between mixtures and solutions, describing the characteristics of each. Students will investigate various types of chemical reactions and delve into the concepts of radioactivity and radioactive isotopes, gaining an understanding of how exposure to radiation varies with distance and time. The curriculum will cover different forms of energy and the processes of energy transformation, alongside an exploration of work and simple machines in relation to forces and motion. Additionally, students will examine the properties of magnetism and electricity, understanding their interrelationship. They will learn about the distinctions between temperature and heat, including how heat is transferred through different mediums. The nature of light will also be a key focus, as students discover why some materials absorb light while others reflect it. The course will include a review of photosynthesis, tracing the historical understanding of this crucial biological process. Finally, students will explore the universe, investigating stars, the sun, and various theories regarding the origin of the universe. Throughout the course, students will engage in the engineering design process to tackle real-world problems, fostering creativity and problem-solving skills. They will also practice writing according to ELA standards, utilizing the A.C.E. (Answer, Cite, Explain) format to effectively communicate their scientific understanding.

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### Social Studies (Grade 6)

Using an interdisciplinary approach, students will utilize technology and other sources to collect data and information on various topics. Students prepare explanations and opinions for discussion, reach conclusions and critique and transfer knowledge to the broader context. They will also develop an understanding of how different disciplines can interact in real-world situations. Additionally, students will work collaboratively with peers to investigate and discuss topics related to the curriculum. Through this process, they gain valuable skills in research and communication while fostering critical thinking. Ultimately, students will become more thoughtful citizens as they apply their knowledge and experience in the study of the UAE and the world around them. Students learn how significant figures, events, and developments have an impact and play a role in constituting other communities in the region over different eras and in different places. I Grade 6 the central focus is Africa and Asia, and different beliefs, the rise of ancient civilizations; they will learn about geographical significance of neighboring societies such as Persian, Indian, and Arabian, and learn about the achievements that ancient societies contributed to the region and the world. They will understand patterns of stability and transition over time and the relationships between people and events. They learn how the earth, its properties, and how such properties are related to human interactions. They will develop an understanding of interrelations between human societies and the physical surrounding environment. Students gain belonging and loyalty to the UAE country and society, and adherence to the values and ethics through understanding the factors that have contributed to the formation of UAE national identity. They will also learn the basis, different forms and duties of the government and the roles of society members. Students will learn about the economic principles and systems, how markets operate, and the role of the government in the development of the national and global economy.

# World History (Grade 6)

This course uses English Language Arts Standards to teach historical content. The course begins with a short review of geography and how to read maps correctly. The rest of the class focuses on ancient civilizations, their cultures, and their histories. The students first learn about the very first civilizations such as the Sumerians and the Babylonians. Next the students learn about ancient Egypt, including the old, middle, and new kingdoms. They will then learn about ancient Israelites, including the lost tribes of Israel. The students then learn about ancient Greece and its impact on architecture, athletics, and medicine. Ancient India will be discussed next along with the idea of caste as a cornerstone of a civilization. The students will also learn about ancient China and the various dynasties and their impact. Ancient Africa is also studied, particularly the great cities of Timbuktu and Zimbabwe. Finally, the students will learn about ancient Rome. They will learn about the daily life of Romans, the culture of the time, and the fall of Rome. Students will practice writing using ELA standards as well as the A.C.E. (Answer, Cite, Explain) format in response to DBQ (Document Based Questions) prompts.

### **Social Studies (Grade 7)**

Using an interdisciplinary approach, students will utilize technology and other sources to collect data and information on various topics. Students prepare explanations and opinions for discussion, reach conclusions and critique and transfer knowledge to the broader context. They will also develop an understanding of how different disciplines can interact in real-world situations. Additionally, students will work collaboratively with peers to investigate and discuss topics related to the curriculum. Through this process, they gain valuable skills in research and communication while fostering critical thinking. Ultimately, students will become more thoughtful citizens as they apply their knowledge and experience in the study of the UAE and the world around them. Students learn how significant figures, events, and

developments have an impact and play a role in constituting other communities in the region over different eras and in different places. The central focus will be the rise of Islam, the Rashidun Caliphate and how it evolved over time including the early Islamic conquests. They will understand patterns of stability and transition over time and the relationships between people and events. They learn how the earth, its properties, and how such properties are related to human interactions. They will develop an understanding of interrelations between human societies and the physical surrounding environment. Students gain belonging and loyalty to the UAE country and society, and adherence to the values and ethics through understanding the factors that have contributed to the formation of UAE national identity. They will also learn the basis, different forms and duties of the government and the roles of society members. Students will learn about the economic principles and systems, how markets operate, and the role of the government in the development of the national and global economy. They will be able to explain the leadership role of the Founder in strengthening cooperation links between the Arabian Peninsula countries and the world. Students learn the significance of the global consequences if countries do not respond to the international resolutions on environment protection.

### U.S. History (Grade 8)

This course uses English Language Arts Standards to teach American History content. This course focuses on the history of the United States from exploration and colonization to reconstruction after the Civil War. It also covers an overview of economics and civics. The students will learn about the different European colonies formed in America and will compare the characteristics of different colonies. They will learn about the American Revolution and the founding principles of the United States. The students will study the westward expansion of the country and its national and international causes. They will learn about the causes of the Civil War, the major battles of the war, and its effect on the country. The students will then learn about the types of economy and what type of things will impact economies. Finally, the students will learn about what it means to be a citizen and the rights and responsibilities that come along with citizenship. Students will practice writing using ELA standards as well as the A.C.E. (Answer, Cite, Explain) format in response to DBQ (Document Based Questions) prompts.

### **Social Studies (Grade 8)**

Using an interdisciplinary approach, students will utilize technology and other sources to collect data and information on various topics. Students prepare explanations and opinions for discussion, reach conclusions and critique and transfer knowledge to the broader context. They will also develop an understanding of how different disciplines can interact in real-world situations. Additionally, students will work collaboratively with peers to investigate and discuss topics related to the curriculum. Through this process, they gain valuable skills in research and communication while fostering critical thinking. Ultimately, students will become more thoughtful citizens as they apply their knowledge and experience in the study of the UAE and the world around them. Students learn how significant figures, events, and developments have an impact and play a role in constituting other communities in the region over different eras and in different places. The central focus will be the rise of Islam, the Rashidun Caliphate and how it evolved over time including the early Islamic conquests. They will understand patterns of stability and transition over time and the relationships between people and events. They learn how the earth, its properties, and how such properties are related to human interactions. They will develop an understanding of interrelations between human societies and the physical surrounding environment. Students gain belonging and loyalty to the UAE country and society, and adherence to the values and ethics through understanding the factors that have contributed to the formation of UAE national identity. They will also learn the basis, different forms and duties of the government and the roles of society members. Students will learn about the economic principles and systems, how markets operate, and the role of the government in the development of the national and global economy. They will be able to

explain the leadership role of the Founder in strengthening cooperation links between the Arabian Peninsula countries and the world. Students learn the significance of the global consequences if countries do not respond to the international resolutions on environment protection.

# **Phase 4 - High School Core Subjects**

In Grades 9-12 our aim is to prepare students for university and beyond. Additionally, students are offered AP choices though The College Board's AP college-level classes in a wide variety of subjects. Students are encouraged to engage and participate in co-curricular activities, while also further developing their 21st century skills.

### English I- (Grade 9)

The 9th grade English course establishes the foundation for the study of composition and literature. Ninth Graders are both tested on and expected to establish these habits for success not only in English but in their other classes. The study of composition begins with a focus on grammar (parts of speech, parts of sentence, phrases, and clauses) as well as punctuation and agreement rules. Students will practice writing in various sentence patterns; they will also write.

letters, paragraphs, and multi-paragraph essays, practicing narrative, descriptive, expository, and argumentative modes of discourse. The study of vocabulary takes an etymological approach so that students learn to build meaning rather than memorize definitions. Literature samples each of these genres: short story, essay, poetry, drama, and novel.

### English 2- (Grade 10)

This course emphasizes the use of world literature to be read widely and critically in alignment with the Common Core Standards. The world literature book is arranged into short stories, dramas, poetry, and non-fiction from around the world and different time periods. 10th grade English builds upon the writing skills of grade 9 with the construction process of the well- wrought theme (3-5 paragraphs) as the major goal. Included are elements of unity, coherence, and emphasis; inductive and deductive reading; and four types of themes: exposition, narration, description, and argumentation. Vocabulary building continues with the study of roots, prefixes, and suffixes. Students also learn and apply to their own writing the Modern Language Association (MLA) requirements for documentation. Formal grammar instruction continues from ninth grade. American literature from the Colonial Period to the present is surveyed in chronological and/or thematic units.

### English 3(Grade 11)

The focus this year is on the history, culture, and major writers of different eras of American Literature. Students are expected to respond critically to written assignments and class discussions. Creative writing is examined this year, and students will be expected to explore and develop crafting skills and strategies for writing various types of essays, character sketches,

poems, and short stories. In addition, there will be elements of research discussed, and research writing developed. Emphasis will be placed on following the Common Core Standards, the writing process: prewriting, drafting, revising, editing, and publishing. Students will also develop testing strategies to assist in preparation for the SAT.

### English 4 (Grade 12)

With an early focus on preparation for the PSAT, students continue their study and application of grammar (specifically verb usage, parallel structure, effective coordination/subordination of ideas), and effective essay writing. Writing assignments demonstrate literary analysis as well as synthesis of multiple sources according to correct MLA documentation. Students practice not only strategies for timed writing but also steps to the writing process. Vocabulary study continues with a text different from that used in English 1 and English 2. A survey of British

literature includes the earliest English epic Beowulf, readings from Chaucer's The Canterbury Tales, Shakespeare's Macbeth, as well as samplings from the works of Donne, Milton, Blake, Eliot, Yeats, and others at the teacher's discretion.

### Algebra 1- & Geometry (Grade 9 & 10)

This course offers students the opportunity to study Algebraic concepts, using Common Core Standards as a guide, to attain an increased level of mastery of the material. Topics covered include all Algebra 1 concepts such as addition, subtraction, multiplication, and division of real numbers, solving one and two-step equations in one and two variables, the laws of exponents, polynomials, factoring, algebraic fractions, graphing, problem solving, and rational numbers.

Students' skills continue to be developed through structured practice and consideration of concepts from a variety of perspectives. Study skills and increased student responsibility are developed as well as a deeper sense of mathematics and critical thinking through more one-on-one time with the instructor and a more concrete teaching style to learning the mathematical concepts taught.

In Geometry students learn geometry concepts from Euclidean and algebraic perspectives using the Common Core Standards as a guide. Students engage in activities which require them to identify, analyze, and solve problems involving the following topics: segments, angles, triangles, quadrilaterals, polyhedral, circles, spheres, transformations, if-then statements, and proofs. Course work includes studying how geometry relates to algebra through an exploration of analytical geometry and its graphs. The course emphasizes the need for students to comprehend the abstract and symbolic nature of geometry.

### Algebra 2 & Geometry (Grade 10)

This course offers students the opportunity to study advanced algebraic concepts using Common Core Standards while further developing the student's understanding of algebraic & geometric methods. All concepts of Algebra 2 are emphasized including quadratic equations, polynomials, logarithms, exponential functions, analytical geometry and its graphs, and the complex number system. Problem solving skills, study skills, and student responsibility are also emphasized throughout the course.

### Calculus (Grade 12) & AP Calculus

This course provides students with one semester of differential calculus and one semester of integral calculus in alignment with Common Core Standards. Students who successfully complete this course will have studied the equivalent of a first semester of college calculus, less the proof. In addition, they are challenged to develop time management skills, engage in critical thinking, and become mathematically literate. Functions, limits, derivatives and their applications, integrals and their applications, and related topics will be covered. Students are exposed to a variety of testing formats including short answers, multiple choice items, and free response questions. Emphasis is placed on critical thinking and not rote procedures or memorization. The course requires approximately four to eight hours per week of work outside of class. AP Calculus AB focuses on students' understanding of calculus concepts and provides experience with methods and applications. Using big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), the course becomes a cohesive whole, rather than a

collection of unrelated topics. The course requires students to use definitions and theorems to build arguments and justify conclusions. The course features a multimodal approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to developing important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Teachers and students should regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

### **College Course Equivalent**

AP Calculus AB is designed to be the equivalent of a first semester college calculus course devoted to topics in differential and integral calculus.

### Prerequisites.

Before studying calculus, all students should complete the equivalent of four years of secondary mathematics designed for college-bound students: courses that should prepare them with a strong foundation in reasoning with algebraic symbols and working with algebraic structures. Prospective calculus students should take courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions. In particular, before studying calculus, students must be familiar with the properties of functions, the composition of functions, the algebra of functions, and the graphs of functions. Students must also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeros, intercepts, and descriptors such as increasing and decreasing). Students should also know how the sine and cosine functions are defined from the unit circle and know the values of the trigonometric functions at the numbers  $0,\pi6,\pi4,\pi3,\pi2$ , , and their multiples.

### Statistics and Probability (Grade 11) Not offered AY 2024-2025

Statistics acquaint students with the major concepts and tools for asking statistical questions, collecting, and analyzing data, and drawing conclusions from them. Using Common Core Standards as a guide, students will work on projects involving developing their own questions, gathering, and analyzing data they collect. The topics covered will include describing data numerically and graphically, simulating events with probability, observing distributions in outcomes, methods of inference, and correlation and regression of data. Computers and calculators will allow students to focus deeply on the concepts involved in statistics.

### Biology (Grade 9)

Using the Next Generation Science Standards as a guide, this course is primarily centered around the study of life, exploring the major kingdoms and their interaction with each other, as well as the environment. Levels of development from simple to complex, ranging from cells to systems, will be studied. This course will include classifications, real life connections, and tips to remember content. Hands-on Laboratory and S.T.E.M. (Science Engineering Technology Math) projects will enhance the understanding of concepts through contact with the organisms being studied.

### **Biology - Honors (Grade 11) Elective**

This course is designed for the students who may be interested in pursuing a career in the biological or medical field. This academically rigorous course, guided by the Next Generation Science Standards, will build upon topics covered in Biology. The course is an introductory anatomy and physiology course (cross-curricular link), covering all the organ systems, associated disorders, etc. This is a content heavy course, with a variety of lab demonstrations/activities, and students are expected to display excellent study habits and mature, involved classroom behavior in order to succeed. Students should be able to use high-level cognitive skills to connect content across the course as each unit builds on the previous units. This class will demonstrate some of the learning and assessment expectations of a 1st or 2nd year college biology program.

### AP Biology (Grade 12) Elective

Advanced Placement Biology is designed to offer students a solid foundation in college level introductory biology based on the belief that many students are ready for college work while still in high school. This course is aligned to the College Board AP Biology Curriculum Framework and is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

### **Chemistry (Grade 10)**

This laboratory course is designed to develop a foundation of the science of chemistry in order to achieve a greater understanding of the world. Using the Next Generation Science Standards as a guide, students are introduced to the various processes, activities, and concepts of chemistry with a cross-curricular mathematical approach. Current scientific developments will be examined along with their implication in today's world. The topics include but are not limited to the study of the atomic structure of matter, the periodic table, chemical bonding, and chemical equations.

### Chemistry -Honors (Grade 12) Elective

This laboratory course will prepare the college bound student with a depth of understanding of the fundamentals of Chemistry, which is defined here as the study of the properties of matter as a consequence of its structure and behavior. The course encourages the development of the students' abilities to think logically and clearly using a problem-based, computationally rigorous approach involving the use of both traditional and computer labs. The course is intended to be intense academic preparation for college level courses and the student should expect to spend at least four hours per week on individual study and review. Assessments on this course will use free response, multiple-choice, and problem-solving questions to better prepare students to take the SAT subject test in Chemistry, and other college placement exams. This course will focus on applying chemical principles to predict and explain chemical behaviors observed in research, industry, and everyday life, which will lead students to a better understanding of how the physical world impacts their lives and values.

### AP Chemistry (Grades 11& 12) Course Description:

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For most students, the course enables them to undertake, as freshman, second year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. This course is structured into six big ideas articulated in the AP

Chemistry curriculum framework provided by the College Board. A special emphasis will be placed on the seven science practices, which capture important aspects of the work that scientists engage in, with learning objectives that combine content with inquiry and reasoning skills.

### World Geography (Grade 9)

This course will introduce the student to the description, analysis, explanation and representation of natural phenomena such as: Earth- Sun relationships; Earth's representation on maps and in air photos; temperature, moisture, and pressure; air masses, fronts, and storms; and landform evolution by tectonic, erosion, and depositional forces This course is a systematic study of the elements of the physical environment (e.g. weather, climate, landforms, water, soil and vegetation), and an analysis of their interrelationships and patterns of world distribution

### World History (Grade 10) Elective

Students will study the fundamental cultures and events that have been particularly significant in the development of major civilizations from the first millennium on. The first semester will emphasize European Feudalism, the development of Islamic Empires, the dynastic traditions of China, Imperial Japan, and Native American societies. In the second semester, students concentrate on a thematic study of global history, highlighting the process of developing global economic systems, imperialism, industrialization, revolutions in politics, modern warfare, and 20th century society.

### Sociology (Grade 10) Elective

The objective of this course is to develop an understanding of human behavior and its role in society through the study of society, human social behavior, and social groups. Topics to be covered in this course include, but are not limited to 1) deviance, crime, and social control; 2) population and aging; 3) economic/social stratification; 4) collective behavior; and 5) marriage and families. The content is taught using English/Language Arts Common Core Standards. The student will be expected to incorporate current events into the study of these issues. Consideration will be given throughout the course to the study of geography and its influence upon individuals and events.

### **Business Foundations (Grade 11) Elective**

The course provides core content applicable to all aspects of business and encompasses the practical applications of management theory. Students will be introduced to fundamental management functions including planning, organizing, leading, and controlling from multiple perspectives. The course is designed with a skills-based approach and focuses on: the business environment, different types of business ownership, how to lead and manage a business, how to find, hire, and keep the best employees, how to use social media and technology to promote your business, how to manage your business financially. By the end of this course, students will be able to take courses such as finance and accounting having established a very sound background.

### Microeconomics (Grade 11)

Students cultivate their understanding of the principles that apply to the functions of individual economic decision-makers by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like scarcity and markets; costs, benefits, and marginal analysis; production choices and behavior; and market inefficiency and public policy.

### Macroeconomics (Grade 12) Elective

Macroeconomics is an introductory college-level macroeconomics course. Students cultivate their understanding of the principles that apply to an economic system by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies.

# **Special Subjects and Electives**

### **Accounting (Grade 12)**

The accounting course provides students with a comprehensive introduction to the fundamental principles and practices of accounting. Students will develop a solid understanding of the role of accounting in business, finance, and personal financial management. Through engaging coursework and real-world applications, students will gain the knowledge and skills necessary to accurately record, analyze, and interpret financial data.

### French (Grades 1-8, and 10)

What Is Taught in an Exemplary Language and World Engagement Program? The 5 C's: Communication, Culture, Connection, Comparisons, Community. The ability to communicate effectively and respectfully, with meaningful content and awareness of the specific cultural context. The understanding of the practices, products, and perspectives of the languages and cultures studied. The connections to other subjects, to the overall school vision and curriculum, to daily life, and to real and virtual communities. Making connections involves critical thinking and problem solving in the context of diverse perspectives while engaging in a wide variety of content. Comparisons to one's own culture, one's own learning, and one's own language or languages. It is in this context that the linguistic elements of grammar, vocabulary, syntax etc., become important, and where many deeper understandings that lead to global awareness and competence are explored. The interaction and collaboration from local to global within the school curriculum, in the world community and in lifelong learning. When learning and teaching are centered on culture, connections, communities, and comparisons, the results include deep and powerful knowledge that informs and builds communication from the simplest survival interactions to complex international negotiations.

### Health and Food High School (Grade 12) Elective

This course is designed to cover fundamental and current topics in healthy habits and wellness. This semester course focuses on the six dimensions of health: mental, physical, emotional, spiritual, intellectual, and social. Throughout the term we will cover areas of conflict resolution, injury prevention, alcohol and other drugs, community and environmental health, family health and mental and emotional health, nutrition, personal and consumer health, physical activity, and tobacco. This course provides a well-rounded exposure to a multitude of physical activities that prepare the student for a lifetime of good health.

### Physical Education (K-12)

An essential discipline, Physical education is an integral part of the educational program for all students. It teaches students how their bodies move, how to perform a variety of physical activities, the health-related benefits of regular physical activity, and specific skills that will allow them to adopt a physically active, healthy lifestyle.

It also provides learning experiences that meet the developmental needs of students. With physical education, students become confident, independent, self-controlled, and resilient; develop positive social skills; learn to set and strive for personal, achievable goals; learn to assume leadership, cooperate with others, and accept responsibility for their own behavior; and improve their academic performance.

### **Programming and Coding (High School) Grade 12 Elective**

Introduction to Coding covers a basic introduction to the principles of programming, including algorithms and logic. Students engage in hands-on programming tasks in the Python programming language as they write and test their own code using the approaches real programmers use in the field.

### **Visual Arts and Graphic Design Grade 10**

#### Visual Art:

The California Visual Arts Standards for high school focus on developing students' abilities in perception, creative expression, and critical evaluation of art, with an emphasis on historical and cultural context. Students learn to interpret visual elements, create original works, and critique art using appropriate vocabulary. They also make interdisciplinary connections between visual arts and other subjects, careers, and life experiences.

When integrating UAE artists and regional art, students will analyze and interpret works by local artists, such as Abdul Qader Al Rais and Hassan Sharif, and create their own art inspired by regional styles like Islamic geometric patterns and contemporary Middle Eastern art. They will explore how art reflects the UAE's cultural heritage and engage in critical discussions about traditional versus modern art, linking these insights to careers in the creative industries both locally and globally.

### **Graphic Design:**

This course introduces students to the principles and practices of graphic design, focusing on visual communication and creativity. Students will explore design elements such as typography, color theory, composition, and layout, while learning industry-standard software tools, with a special focus on Adobe Photoshop, Illustrator, and InDesign. The course includes in-depth Photoshop training for image editing, manipulation, and digital art creation. Through hands-on projects, students will develop skills in branding, logo design, and multimedia, preparing them for real-world design challenges. The course emphasizes critical thinking, creativity, and the importance of visual storytelling in digital and print media.

### **Course Objectives:**

- 1.Understand the fundamental principles of graphic design, including composition, color theory, and typography.
- 2.Develop proficiency in industry-standard design software, with a special focus on Adobe Photoshop for image editing and manipulation.
- 3. Create visually compelling designs that effectively communicate ideas and concepts to a target audience.
- 4. Apply design thinking processes to solve creative problems in branding, marketing, and multimedia.
- 5. Analyze and critique visual design projects, improving skills in aesthetics and visual communication.
- 6.Build a personal portfolio of diverse design projects highlighting a range of styles and techniques.
- 7. Understand the role of graphic design in shaping digital and print media.

### Information Communication Technology (ICT)

### Grade 1:

Students will develop coding skills with the easy yet powerful ScratchJr application.

They will explore various challenging hands-on activities and projects to enhance performance.

They will understand the fundamental programming concepts by creating simple loops and scripts.

Further they will discover the wonderful world of coding with meticulously curated content and fun activities like creating animations, collages, and games. They will Learn coding with Scratch Jr through interactive activities, mastering fundamental concepts through animations, collages, and games.

- Understand the concept of ScratchJr.
- Identify the events.
- Make the characters move.
- Learn to choose characters and apply backgrounds.
- Demonstrate the application of loops.
- Learn to add aesthetics and sound to animations.

#### Grade 2:

Students learn about computing devices and start their journey into the digital world.

They will get a head start in acquiring critical skills needed for common computer applications like MS Excel, MS PowerPoint, and Tux paint. Hands-on learning and effective plenaries will ensure deeper consolidation of knowledge and understanding. Students will learn and apply computing and digital skills with hands-on activities in MS PowerPoint, MS Excel, and Tuxpaint.

- Understand computing device types and external parts' functions.
- Learn application management: opening, closing, and minimizing.
- Practice safe login/logout procedures and keyboard/mouse usage.
- Explore the impact of technology and online safety measures.
- Create and open PowerPoint presentations, add slides, insert images/text, and apply designs.
- Use Paint Brush in Tux Paint, select colors, and use Color Fill.
- Learn stamp addition and project presentation in Tux Paint.

### Grade 3:

Dig iPro: Students will get started with advanced block-based coding in Scratch.

They will enhance their logical-thinking and creativity by applying new coding fundamentals to create animation projects that build on one another. They will learn to add features like a timer and score to make your games more interactive. Also step into the amazing world of Artificial Intelligence and learn about the big ideas connected with it. Gain practical knowledge of the various aspects of AI in Computer Vision as you explore how it is transforming the world by automating systems and identifying objects like humans. They will learn coding with Scratch to create simple, fun games with features like timers and scores and gain knowledge of AI and its practical applications in computer vision.

Digi Champs: Students will Delve deeper into the concepts of web browsing, emailing, and search tools. Students will learn about the parts of a computer and their functions, emphasizing their utilitarian aspect. They will Explore and enhance your fundamental competencies in MS Word and MS PowerPoint as they make connections between theory and practice via a hands-on learning approach. Also, venture into the world of 3D modeling with Tinkercad, a web app developed to empower young innovators with foundational design skills. Moreover, they will learn about computer components, web browsing, emailing, and enhance their MS Office and 3D modeling skills with hands-on projects and challenges in MS Word, MS PowerPoint, and Tinkercad.

### Grade 4:

DigiPro: Students will design their own characters and build projects autonomously in Scratch.

They will Create digital animations including interactive stories and games using Scratch 3.0, breathing life into characters, that they you have only fantasized about until now. They will Learn the use of a Teachable Machine to develop Machine Learning models through intensive testing and analyzing. Moreover, they will Gain a deeper understanding of the Scratch software to create their first program, and also learn the basics of Machine Learning with the Teachable Machine.

DigiChamps: Students Gain a broader experience of the functionality of tools used to communicate over the internet. They will acquire a comprehensive view of network devices, their operations, technical issues faced while working with them, and troubleshooting. They will develop their Word and PowerPoint skills through guided inquiry and project-based learning. Moreover, they will learn about the tools and techniques required to work with Tinkercad. They will undertake additional challenges that will help to strengthen their conceptual understanding and its application to real world problems. Students will upgrade their internet communication skills and network device knowledge, and gain proficiency in Word, PowerPoint, and Tinkercad through hands-on and project-based learning.

### Grade 5:

DigiPro: Dive deeper into the programming world to master the art of developing interesting games in Scratch. Create responsive chatbots that travel between scenes. Learn more about Machine Learning through the use of the Teachable Machine. Create and train models for face detection, digital attendance, and mask detection systems. Also get started with Thunkable- a mobile app development platform developed for students to boost their programming and development skills and create their own mobile apps and games. Learn the fundamentals of game development in Scratch along with chatbot creation, enhance your Machine Learning skills with the Teachable Machine and learn to use Thunkable for mobile app development.

DigiChamps: Students will deepen their knowledge and understanding of computational systems. They will learn about the finer aspects of touch typing, file locations, extensions, and securing device access. They will the need and ways to be safe online. They will get exposed to new tools in Word, PowerPoint identify, and Tinkercad through sufficient practice and reflection that support the construction of new understandings. Moreover, they will attain a foundational understanding of MS Excel- a computing software.

### **Grade 6:**

DigiPro: Students will build up their knowledge and understanding of advanced techniques in Scratch as they incorporate complex concepts in animations and gaming. They will actively explore Artificial Intelligence (AI) with project-based instructions that enable them to create a chatbot- an automated program that communicates with users in the same way as humans. Apply your knowledge and skills to develop gaming apps in Thunkable and engage in meaningful challenges to build your creative capacity. Finally, they will master creativity and collaboration with advanced animation and game development with Scratch, chatbot creation with AI, and gaming app development with Thunkable.

DigiChamps: Students will build up their knowledge and understanding of computing systems as they engage in challenges and discovery of solutions. Learn more about data transmission protocols, browser add-ons, and several significant emailing features. They will actively engage in an inquiry-based process to understand the advanced methodologies and approaches in PowerPoint and Excel. They will also gain a foundational knowledge of Google Sites, deepening their emergent website designing skills through creation, active testing, and analysis.

Finally, they will understand computing systems with interactive challenges, covering data protocols, browser add-ons, emailing features, advanced PowerPoint and Excel techniques, and foundational Google Sites skills.

### Grade 7:

DigiPro: Students will master the essential and advanced concepts of programming in Python. They will start by running their first Python program and advance through crafting sophisticated programs, with a comprehensive focus on sequencing and iteration. Explore the development of complex algorithms that incorporate robust loops and conditional statements, enriching your coding repertoire. They will deepen their understanding of Python's versatile data structures, including lists, strings, and objects, and proficiently apply the accumulation pattern within these contexts. Learn the creation of a cutting-edge Albased application, meticulously designed to assist blind individuals in detecting and interpreting the emotions of others. They will also solidify their programming skills with project-based learning as they demonstrate the profound impact of technology in enhancing human lives. Lastly, they will Learn Python fundamentals, complex programming with loops, conditionals, lists and strings, and create an Al-based app to help blind people detect emotions.

DigiChamps: Students will interact with an engaging platform to gain proficiency in identifying issues with computing devices and troubleshooting. They will understand concepts like digital security, cloud computing, and safe browsing with lessons foregrounded with germane and logically connected instances. They will Practice and enhance their Word and Excel skills with suitable problem-solving and critical-thinking exercises. They will take their website designing skills to another level with a comprehensive unit on Google Sites as they collaborate and complete novel challenges, including publishing your own websites. Finally, they will learn about computing troubleshooting, digital security, cloud computing, safe browsing, Word and Excel skills, and website design through engaging activities.

### **Grade 8:**

Computer and Internet Essentials: Computer and Internet Essentials is an introductory course designed for students who have little or no prior experience with computers and the internet. The course covers the fundamental concepts and principles of computer science and technology, including computer hardware, software, the internet, and digital literacy.

Throughout the course, students will learn about the different components of a computer, including the central processing unit, memory, storage, and input/output devices. They will also learn about different types of software, including operating systems, application software, and basic programming concepts. Additionally, students will learn about the internet, including how it works, how to use it safely and responsibly, and the basics of web browsing and searching.

The course also covers the concepts of digital literacy, including how to use technology to communicate, collaborate, create, and share information. Students will learn about different types of digital media, including text, images, audio, and video, and how to use them to create and share content.

This course is intended for students who have little or no prior experience with computers and the internet and will provide them with the foundational knowledge and skills they need to use computers and the internet effectively and efficiently. Students will also learn about basic cybersecurity and safe online practices.

In this course, students will develop their problem-solving skills, learn to think abstractly and logically, and gain experience with the tools and techniques used by professional computer scientists and technology experts. The course is ideal for students who are interested in pursuing a career in computer science or related fields, or for those who simply enjoy the challenge and excitement of working with computers and technology.

In addition to the fundamental concepts and principles of computer science and technology, the course also covers the basics of Microsoft Office, a widely used set of productivity tools that include Word, Excel, PowerPoint, and Access. Students will learn how to create, edit, format, and save documents in Word, how to work with spreadsheets, create charts and perform basic calculations in Excel, how to create presentations and slide shows in PowerPoint, and how to create and manage databases in Access. These tools are widely used in a variety of professional settings and mastering them will provide students with valuable skills that will be useful in their future academic and professional endeavors.

### Grade 11:

Computer Science: Computer Science is an advanced course designed for students who are interested in pursuing a career in computer science or related fields. This course covers the fundamental concepts and principles of computer science, including algorithms, data structures, programming, and problem-solving. Throughout the course, students will learn to design, write, and debug programs using a high-level programming language, such as Java. They will also learn about fundamental data structures such as arrays, linked lists, and trees, and how to use them to solve real-world problems. Additionally, students will learn about algorithms, including searching, sorting, and recursion, and will explore the concepts of computational complexity and the limits of computation.

In addition to the fundamental concepts and principles of computer science, this course also covers the basics of HTML and Python programming languages. In the HTML section, students will learn how to create and structure web pages using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). They will also learn how to create and structure web pages using HTML5 and CSS3. In the Python section, students will learn how to write scripts using the Python programming language and will be introduced to its data structures, control structures, and libraries. These languages are widely used for web development and scripting, mastering them will provide students with valuable skills that will be useful in their future academic and professional endeavors.

### Grade 12:

Programming and coding: Visual Basic is a high-level programming language that is used to create Windows applications, web services, and other types of software. This course is designed to provide students with a comprehensive introduction to programming with Visual Basic, including the syntax and structure of the language, how to use various programming constructs such as loops and conditional statements, and how to design and implement user interfaces.

Throughout the course, students will learn how to create simple programs using Visual Basic, including console applications, form-based applications, and web services. They will also learn how to work with data, including how to create and manipulate variables, how to use data types and data structures, and how to work with databases. In addition, the course will cover advanced topics such as error handling, debugging, and working with external libraries and APIs.

The course is designed to be hands-on and interactive, with a strong emphasis on practical, real-world examples and projects. Students will work on individual and group projects throughout the course, gaining valuable experience in designing, coding, and debugging programs using Visual Basic.

The course is suitable for students who are new to programming and want to learn the basics of Visual Basic, as well as for students who have experience with other programming languages and want to expand their knowledge and skills in the field of software development. Upon the completion of this course, students will have a solid foundation in Visual Basic and will be able to create their own programs and applications using this powerful programming language.

# **Extra- Curricular Activities**

In order to develop the whole child, we offer extra-curricular activities that help them develop academically, socially, and physically. Below is a sample of our extracurricular activities provided throughout the academic year.

A variety of sports including (swimming, basketball, badminton, volleyball, and martial arts)

Innovation Workshops and Competitions; Little Engineers

Moral Education includes visits to Senior Citizen Centers and actual courtroom proceeds.

University and Career Fairs to give our students voice and choice.

International Campaigns, such as Breast Cancer Awareness, Marathons, and Walks for multiple causes.

# **Curriculum Resources**

DIPS believes that high-quality curriculum resources support teaching and learning. We have selected a wide array of digital curriculum resources that track and monitor student learning, but also are interactive and current with best practices. DIPS has a BYOD (Bring your Own Device) Policy (See the PDF file on the DIPS Website), and each child is provided with digital resources. You will find the link here (See the PDF file on the DIPS Website.

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