

# **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"

# The Curriculum 2025-2026

# 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 yet adhering to local values and traditions.

# **Core Values:**

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

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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 andphysical 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**

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

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 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 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 formalassessments 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 theoverall progress and attainment results to modify lessons and the curriculum to improve student outcomes.

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# Learning at DIPS: The Common Core State Standards (CCSS)

At Dubai International Private School (DIPS), we use the **Common Core State Standards (CCSS)** in **English/Language Arts** and **Mathematics**. These standards were created to give all students—no matter where they live—the same strong foundation for success in school, college, and future careers.

#### What Are the Common Core Standards?

- Clear and Consistent Goals The same high expectations for every grade, from Kindergarten to Grade 12.
- **Focus on Skills that Matter** Reading, writing, speaking, problem-solving, and math reasoning.
- **Preparation for the Future** Ensures students are ready for college, careers, and life.

# Why CCSS Matters for Your Child

- Builds critical thinking and problem-solving skills.
- Encourages communication and collaboration.
- Helps teachers track student progress with clear benchmarks.
- Provides **real-world learning connections** so students see why their work matters.

#### At DIPS, CCSS Means...

- **Strong Literacy** daily practice in reading, writing, and speaking.
- Strong Math Foundations mastering number sense, reasoning, and problem-solving.
- Step-by-Step Growth standards build on each other across the grades.
- **Prepared Graduates** ready to succeed in university, careers, and a global world.

The **Common Core Standards** give DIPS students the skills, knowledge, and confidence they need to achieve their dreams and thrive in the 21st century.

# Science at DIPS: The Next Generation Science Standards (NGSS)

At Dubai International Private School (DIPS), we follow the **Next Generation Science Standards (NGSS)** from the State of California. These standards make science learning exciting, meaningful, and connected to real life.

#### What Makes NGSS Different?

## Hands-On Learning

Students don't just memorize facts. They show what they *can do* with their knowledge through projects, experiments, and investigations.

# Three Dimensions of Learning

Each science lesson includes:

- 1. **Practices** doing science through experiments, problem-solving, and questioning.
- 2. **Core Ideas** learning the big concepts in life, physical, Earth, and space sciences.
- 3. **Connections** linking science ideas to each other and to math and reading skills.

#### Clear Pathways

The standards build step by step from grade to grade, preparing students for advanced science courses and for future careers in technology, health, and innovation.

# Why NGSS Matters

- Helps students become critical thinkers and problem-solvers.
- Builds skills for the **21st century workplace**.
- Ensures all students have access to quality science learning.
- Connects directly to real-world issues like the environment, technology, and engineering.

# At DIPS, NGSS Means...

- Engaging lessons that spark curiosity and creativity.
- Opportunities for every child to succeed in science.
- A strong foundation for lifelong learning and future studies.

# **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.

The mandated Ministry of Education Curriculum guides every grade level's curriculum. https://www.khda.gov.ae/CMS/WebParts/TextEditor/Documents/Curriculum\_Requirements for Private Schools in Dubai Eng.pdf

#### **UAE 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 concepts of 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 School Graduation.

# **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).

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The following Advanced Placement (AP) courses are offered at the high school level for the 2025- 2026 Academic Year:
AP Biology
AP Calculus "AB"
AP Chemistry
AP Physics
AP Microeconomics
AP Macroeconomics
AP Computer Science

#### STEM and Innovation across the Curriculum

At DIPS, Innovation is defined as the practical application of ideas that result in meaningful projects, services, processes, and practices aimed at improving quality of life and work. From Kindergarten through Grade 12, our approach to innovation is designed to nurture creativity, critical thinking, and problem-solving across all phases. By embedding innovation into daily learning, students are empowered to generate original ideas, strengthen their 21st-century skills, and prepare themselves to thrive in a rapidly changing world. The rationale for embedding Innovation into the curriculum is aligned with: The UAE Centennial Plan 2071, which positions excellence in education as a driver for future careers in Artificial Intelligence, Space Science, Health Sciences, and Digital Engineering.

The mission, vision, and strategic goals of DIPS, KHDA and NEASC recommendations from previous inspections. Innovation at DIPS is more than a subject, it is a teaching and learning approach that fosters collaboration, inquiry, and exploratory learning.

Students apply Science, Technology, Engineering, and Mathematics (STEM) concepts through hands-on, experiential opportunities, while also benefiting from the integration of Artificial Intelligence (AI) across all phases of the curriculum.

The use of AI as best practice not only enhances personalized learning and problem-solving but also aligns directly with the forward-looking goals of Dubai Education 2033 and the UAE's national innovation strategy.

Recognizing the importance of STEM, AI, and sustainability, DIPS has made them central priorities.

Since the 2022–2023 academic year, a comprehensive Innovation Program for Phases 3 and 4, together with afterschool STEM activities for Phases 1 and 2, has been implemented. These initiatives equip students with advanced technological skills, foster creativity, and engage them in addressing real-world environmental challenges, making sustainability and digital fluency integral to their educational journey.

This integrated focus on innovation, AI, STEM, and sustainability equips students with the essential skills of critical thinking, creativity, and adaptability while inspiring them to become responsible global citizens. By preparing learners for emerging careers in technology, engineering, AI, and green industries, DIPS ensures its graduates are future-ready and positioned to make a lasting, positive impact on their communities, the nation, and the world.

# 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 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 understandingsacross 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, listen to 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 other areas 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 studentsare 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**

At DIPS, we recognize that in addition to mastering 21st-century skills and preparing for life beyond graduation, student well-being is a central priority that aligns with the UAE's vision for holistic education. Our teachers and leaders understand that Social-Emotional Learning (SEL) is essential for nurturing self-awareness, self-control, resilience, and positive relationships skills that are vital for success in school, work, and life.

Strong social-emotional skills enable students to manage challenges with confidence, develop self-discipline, regulate emotions, and build healthy connections with others. These skills not only support academic achievement but also contribute to long-term happiness and meaningful participation in society.

At DIPS, SEL and student well-being are embedded throughout the curriculum, daily lessons, events, and activities, ensuring that every child feels supported, valued, and empowered. In the Early Years, well-being and SEL are also part of the Home Learning routine, helping families work in partnership with the school to instill balance, resilience, and positive habits from the very start of a child's learning journey. By prioritizing student well-being, DIPS contributes to the UAE's national commitment to raising generations who are not only future-ready but also emotionally healthy, compassionate, and responsible global citizens.

# **Course Overviews**

# **Phase 1: Kindergarten**

In KG1 and KG2, DIPS places a strong emphasis on each child's personal growth, positive social interaction, and the development of a confident self-identity. Learning is approached through a holistic, discovery-based model that nurtures curiosity and creativity. This stage builds the essential foundation for a successful and enjoyable school journey.

# **Kindergarten English Language Arts**

At DIPS, Kindergarten English follows the **California Common Core State Standards (CCSS)**, providing students with a strong foundation in language, reading, and communication skills. Instruction emphasizes both oral and written language development, helping students become confident early readers and communicators.

#### **Language Development**

Students practice grammatically correct speaking and writing, including the correct use of capitalization, punctuation, and spelling. Vocabulary grows through exposure to words with multiple meanings and through learning how words connect within sentences.

#### **Reading and Phonics**

Phonics instruction helps students sound out words while reading. Children engage with emergent-reader books, where they answer questions about the plot, key ideas, and details. They also learn to explain the relationship between text and illustrations and compare different books on the same topic.

#### **Comprehension and Collaboration**

Students participate in group reading and collaborative discussions on age-appropriate topics. They develop the ability to listen actively, answer and ask questions, and request clarification when needed.

#### **Writing and Expression**

By the end of Kindergarten, students should be able to tell stories using a combination of drawings, written words, and spoken language. They begin to understand how to organize ideas and express themselves clearly.

# **Kindergarten Mathematics**

The Kindergarten Mathematics program at DIPS follows the **California Common Core State Standards**. Instruction focuses on two key areas: developing an understanding of whole numbers and exploring shapes and spatial relationships.

Students learn to recognize and write number names, count and compare objects, and build place value knowledge using numbers 11–19. They begin to understand that **addition means putting together** and **subtraction means taking apart**. Measurement skills are introduced as students compare attributes such as length, height, and weight.

In geometry, children identify, analyze, compare, and create shapes, using precise mathematical language to describe relative positions (e.g., above, below, in front, behind). This foundation supports logical reasoning and prepares students for more complex mathematical concepts.

# **Kindergarten Science**

Aligned with the **Next Generation Science Standards (NGSS)**, Kindergarten Science at DIPS introduces students to the natural world through hands-on, discovery-based learning.

Students explore their five senses by describing textures, observe Earth and space by learning about gravity, the Sun, moon, and stars, and recognize patterns such as day and night. They classify objects by properties, investigate how things change over time, and experiment with pushes and pulls to understand the concept of force.

In physical science, students are introduced to sound and the movements that create it. In life science, they identify plants and animals, describe their basic needs, and recognize plant parts.

Through observation, inquiry, and exploration, Kindergarten science nurtures curiosity, encourages critical thinking, and establishes a strong foundation for future scientific learning.

# **Kindergarten UAE Social Studies**

The Kindergarten Social Studies program at DIPS, aligned with the **UAE Ministry of Education Standards**, introduces young learners to the concepts of family, community, culture, and the world around them. The curriculum builds a sense of belonging and national identity while fostering curiosity about people, places, and traditions.

# **Civic and Cultural Understanding**

Students learn what it means to be part of a family and how families may differ. They explore the importance of holidays and celebrations, discovering their meaning and significance. Lessons also focus on being a good citizen, understanding community rules, and respecting differences among groups.

#### **Economic Awareness**

Children are introduced to the concepts of money, work, and the different types of jobs people do in society.

#### **Historical and Geographical Awareness**

Students begin to understand the concept of time by describing events as today, yesterday, and tomorrow. They are introduced to simple maps, learning basic symbols and directions. They also explore landforms, bodies of water, and weather patterns.

Through stories, discussions, and hands-on activities, Kindergarten Social Studies helps children build early knowledge of history, geography, economics, and UAE national identity, laying the foundation for global awareness and civic responsibility.

# **Phase 2- Elementary**

At DIPS, we recognize that hands-on experiences and active engagement are essential in cultivating lifelong learners. In Grades 1 through 5, the curriculum emphasizes the development of foundational skills across all subject areas while gradually introducing higher-level thinking to challenge and inspire students. Instruction is guided by scientifically backed best practices, including the Concept-Based Curriculum and Instruction (CBCI) model, which deepens understanding and nurtures curiosity. In literacy and mathematics, students benefit from the Daily 5 and Daily 3 center-based approaches, ensuring consistent practice, differentiated learning, and student choice. Through these methods, our goal is to foster independent learning skills, critical thinking, and a genuine love for learning that extends beyond the classroom.

# **Grade 1 English Language Arts**

Grade 1 builds on early literacy skills, helping students grow as confident readers and writers. Students apply phonics to read with fluency and accuracy, while learning to use complete sentences, correct grammar, capitalization, and punctuation.

Reading instruction focuses on understanding characters, settings, and story events. Students retell stories, identify main ideas, and begin making text-to-text and text-to-self connections. Group reading and class discussions strengthen comprehension and listening skills.

Writing progresses from simple sentences to short narratives, opinion pieces, and informative texts, supported by illustrations and clear organization.

#### **Grade 1 Mathematics**

The Grade 1 Mathematics program, aligned with the California Common Core State Standards, emphasizes four main areas of learning.

#### 1. Developing Addition and Subtraction Skills:

Students build a solid understanding of addition and subtraction within 20, recognizing the relationship between the two operations and applying strategies to solve problems.

#### 2. Understanding Place Value:

Learners explore how numbers relate to one another by grouping them into tens and ones, laying the groundwork for understanding the base-ten system.

# 3. Exploring Measurement and Time:

Students begin to understand concepts of length and linear measurement, use standard units, and learn how to tell and write time to the hour and half hour.

#### 4. Identifying and Creating Shapes:

Learners explore the attributes of two- and three-dimensional shapes, learning to create, combine, and recognize them in various orientations.

The program encourages hands-on exploration, pattern recognition, and reasoning skills to build confidence and a strong mathematical foundation.

#### **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 UAE 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 English Language Arts**

In Grade 2, students develop greater independence in reading and writing. They read both literature and informational texts, identifying main ideas, supporting details, and comparing characters and stories. Vocabulary grows through prefixes, suffixes, and use of reference tools. Reading fluency continues to improve, with students reading aloud with accuracy and expression. Writing expectations expand to include longer narratives, opinion essays, and informational reports. Students learn to revise and edit their work, focusing on clarity, grammar, and spelling.

#### **Grade 2 Mathematics**

In Grade 2 Mathematics, learners explore and make sense of numbers, shapes, and measurements through hands-on activities and real-world connections. Aligned with the **California Common Core State Standards**, the program helps learners strengthen their mathematical thinking and confidence across four main areas:

#### 1. Understanding Place Value:

Learners deepen their understanding of the base-ten system by counting in fives, tens, and hundreds. They discover how each digit in a number represents thousands, hundreds, tens, or ones, building a strong foundation for larger numbers.

#### 2. Developing Addition and Subtraction Fluency:

Learners practice adding and subtracting within 1,000, using a variety of strategies—including mental math—to solve problems efficiently. They begin to see how numbers can be broken apart and recombined to make calculations easier.

#### 3. Measuring and Comparing:

Learners explore standard units of measurement and learn why consistent measurement matters. Using tools like rulers and measuring tapes, they measure objects, compare lengths, and apply their skills to real-life situations.

#### 4. Exploring Shapes and Spatial Thinking:

Learners identify and describe two- and three-dimensional shapes by observing sides, corners, and angles. They also experiment with combining and separating shapes, preparing for future concepts such as area, volume, and symmetry.

Throughout Grade 2, students are encouraged to explore, question, and explain their reasoning as they develop problem-solving skills and a deeper understanding of how mathematics connects to their everyday world.

#### **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 UAE 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 English Language Arts**

Grade 3 marks the shift from "learning to read" to "reading to learn." Students engage with more complex texts, identifying themes, cause-and-effect relationships, and points of view. They begin using evidence from texts to support their ideas. Vocabulary grows through the study of root words, prefixes, and suffixes. Fluency supports comprehension of longer passages. Students write multi-paragraph opinion essays, informative reports, and narratives with descriptive details. They also plan, draft, revise, and edit their work to improve clarity and structure. Oral presentations and active participation in discussions further strengthen communication skills.

#### **Grade 3 Mathematics**

In Grade 3 Mathematics, learners take an active role in exploring key mathematical ideas aligned with the **California Common Core State Standards**. Through hands-on activities, problem-solving, and real-world applications, they build confidence and deepen their understanding of math concepts across four main areas:

#### 1. Multiplication and Division:

Learners discover how multiplication and division work by grouping objects, creating arrays, and using visual models. They practice finding missing numbers in equations and apply these skills to everyday situations, such as sharing items equally or finding totals.

# 2. Fractions as Numbers:

Learners begin to see fractions as meaningful parts of a whole. They explore unit fractions and understand that the same fraction can look different depending on the size of the whole.

## 3. Measuring and Finding Area:

Learners investigate area by covering shapes with square units and comparing different surfaces. They come to understand that area is a measurable attribute of two-dimensional shapes and learn to connect it to multiplication.

# 4. Describing and Comparing Shapes:

Learners identify and analyze shapes based on their sides, angles, and other properties. They use what they know about fractions to describe parts of shapes, developing spatial reasoning and geometric vocabulary.

Throughout Grade 3, students are encouraged to think critically, explain their reasoning, and explore mathematical relationships through inquiry, collaboration, and creative problem-solving.

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#### **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- UAE 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- English 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**

Students strengthen their understanding of number operations with multi-digit multiplication and division. They develop deep knowledge of fractions by comparing, ordering, and finding equivalents, and begin performing addition and subtraction with like denominators. Decimals are introduced to the hundredths place, where students practice reading, comparing, and performing basic operations. Geometry focuses on classifying figures, recognizing types of lines and angles, and calculating perimeter, area, and the volume of rectangular prisms. Students also read and interpret bar graphs and line plots, while problem-solving and reasoning are emphasized through real-world applications and mental math routines.

#### **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 - UAE 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- English 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**

Learners extend their mastery of fractions to include multiplication and division of fractions and mixed numbers, applying them in problem-solving contexts. They also strengthen skills with decimals to the thousandths place, focusing on place value, rounding, and operations. Whole number operations move into multi-step applications. In geometry, students graph points on the coordinate plane, classify figures based on properties, and calculate volume. Data handling expands into line graphs, tables, and probability, while reasoning and critical thinking are emphasized to prepare for middle school algebra.

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#### **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- UAE 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 stimulate 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.

#### **English 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.

# **English Language Arts- 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.

#### **English 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 year emphasizes ratios, rates, and percent applications, laying the foundation for proportional reasoning. Students study integers and rational numbers, extending the number line to negative values. Algebraic thinking develops through evaluating expressions, writing equations, and solving one- and two-step equations and inequalities. Geometry covers area of polygons, volume of prisms, and surface area of solids. In statistics, students calculate mean, median, mode, and range, and explore measures of variability. Probability is introduced through simple experiments, making connections between data and chance.

Mathematics 2- Grade 7 Students deepen proportional reasoning through percent problems, scaling, and real-life applications such as tax, discount, and simple interest. Algebra expands into solving multistep equations and inequalities and understanding proportional and linear relationships. Geometry emphasizes properties of circles, scale drawings, and angle relationships. Students also calculate surface area and volume of three-dimensional figures. Probability includes compound events and simulations, while statistics builds toward understanding samples, populations, and measures of variation. By the

end of Grade 7, students are applying abstract reasoning with confidence.

**Mathematics 3 (Grade 8)** Grade 8 bridges middle school and high school mathematics. Students work with exponents, roots, and scientific notation to represent very large and small numbers. Algebraic reasoning includes solving systems of linear equations, analyzing slope as rate of change, and comparing linear and nonlinear functions. Geometry covers transformations, congruence, similarity, and the Pythagorean theorem, along with calculating volume of cones, spheres, and cylinders. Statistics focuses on scatterplots, associations, and lines of best fit, preparing students for Algebra I and Geometry.

#### Grade 6 - Science

This course introduces students to the foundations of Earth and Life Science, aligned with the Next Generation Science Standards. In Semester 1, students explore Earth's systems by investigating the water cycle, atmospheric and oceanic circulation, weather patterns, and regional climates. They also examine energy transformations—how heat flows, how energy causes change, and its role in Earth's systems.

In Semester 2, the focus shifts to living systems, beginning with cells as the basic unit of life and extending to the structure and function of major animal systems (respiratory, digestive, circulatory, skeletal, muscular, and nervous). Students also explore plant systems, including parts, groups, and photosynthesis.

Throughout the year, students apply the scientific method to design experiments, strengthen their problem-solving skills, and use models to explain complex processes. They communicate their understanding through structured scientific writing using the A.C.E. format (Answer, Cite, Explain).

#### **Grade 7 – Science**

Aligned with NGSS, Grade 7 Science emphasizes inquiry and connections between life, Earth, and physical sciences. In Semester 1, students study ecosystem interactions, resource availability, and biodiversity. They then shift into properties of matter, including states of matter, atomic structure, molecules, and chemical reactions. Students also develop math-in-science skills such as graphing and unit conversions.

In Semester 2, the curriculum highlights geological and environmental processes. Students analyze weathering, erosion, deposition, the rock cycle, and natural hazards such as earthquakes and volcanoes. They also investigate resource use and climate impacts. Later in the year, life science concepts are revisited through cells, photosynthesis, cellular respiration, and cycling of matter in organisms, before culminating with a deeper study of chemical reactions and equations.

The course integrates the engineering design process to foster innovation and problem-solving, while reinforcing science writing with the A.C.E. format. By the end of the year, students demonstrate their ability to connect physical and biological principles to real-world applications.

#### **Grade 8 – Science**

This course provides students with a rigorous exploration of physical science concepts, framed within NGSS. In Semester 1, students investigate forces and motion, including Newton's Laws, collisions, and engineering applications. They also study electric and magnetic forces, as well as waves, focusing on their properties, energy transfer, and interactions with matter.

In Semester 2, the focus extends to light as a wave, exploring how it behaves, reflects, and transmits.

Students then transition into life science connections, such as genetic engineering, heredity, and natural selection. Finally, the year concludes with astronomy, where students examine the Earth-Sun-Moon system, lunar phases, eclipses, and seasons, building an understanding of Earth's place in the universe.

Through inquiry-based learning and the 5E instructional model (Engage, Explore, Explain, Elaborate, Evaluate), students engage in experiments, modeling, and the engineering design process. Writing and communication of scientific reasoning remain a central skill, reinforced through the A.C.E. format

#### **UAE Social Studies (Grade 6)**

The UAE Social Studies program for Grade 6 is designed to deepen students' understanding of the nation's history, geography, culture, and civic values while connecting them to global contexts. The curriculum emphasizes the heritage and traditions of the UAE, the role of its leaders, and the country's development in areas such as innovation, sustainability, and global citizenship. Students explore geography to understand the UAE's environment and resources, examine economic growth and the country's position in the world, and study civic responsibility and identity. Through inquiry-based learning, projects, and critical thinking tasks, Grade 6 learners develop skills in analysis, research, and collaboration, while cultivating pride in Emirati identity and awareness of the UAE's vision for the future.

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

The Grade 7 UAE Social Studies program builds on prior knowledge by guiding students to examine the UAE's past, present, and future within a broader regional and global framework. Learners study the history of the Arabian Peninsula, the formation of the UAE, and the contributions of its leaders, while also exploring themes such as trade, exploration, innovation, and sustainable development. Geography is integrated to help students understand natural and human systems, the environment, and the UAE's strategic position in the world. Civic education encourages responsibility, cultural appreciation, and active citizenship. Through research, inquiry projects, and critical discussions, students strengthen skills in problem-solving, analysis, and collaboration, while gaining a deeper appreciation of Emirati identity and the nation's vision for continued progress.

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

The Grade 8 UAE Social Studies program takes an interdisciplinary approach, encouraging students to integrate knowledge from history, geography, economics, civics, and environmental studies. Using technology and diverse sources, students gather and analyze information, form explanations and opinions, and engage in discussions that promote critical thinking and communication skills. A major historical focus is the rise of Islam, the Rashidun Caliphate, and early Islamic conquests, where students examine how people, events, and developments shaped societies across eras. Geography and environmental studies help them understand the relationship between human societies and the physical environment, while civic education fosters belonging, loyalty, and adherence to UAE values and ethics. Learners also study governance, economic systems, and the government's role in national and global development. By exploring the vision of the UAE's Founding Leader and his role in strengthening cooperation within the region and beyond, students gain insight into diplomacy, sustainability, and global interdependence, becoming thoughtful citizens prepared to contribute to the UAE and the wider world.

# **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 evaluated 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.

# **Grade 9 Algebra I and Geometry**

In Grade 9, students engage with Algebra I and Geometry simultaneously. In Algebra I, they study linear, quadratic, and exponential functions, factoring and solving quadratics, and solving systems of equations and inequalities. They also work with polynomials, radicals, and rational expressions, using algebraic and graphical methods to solve real-world problems. Geometry reinforces congruence and similarity, transformations, and coordinate proofs. Students study triangles, quadrilaterals, and circles, applying the Pythagorean theorem and trigonometric ratios to solve problems. Logical reasoning and proof are introduced, helping students develop mathematical precision.

#### **Grade 10 Algebra II and Geometry**

In Grade 10, students advance into Algebra II while continuing with Geometry. Algebra II includes polynomial, exponential, and logarithmic functions, rational equations, and sequences and series. Students also work with complex numbers and learn to apply algebraic models to science, business, and technology. Geometry expands to analytic geometry with conic sections (parabolas, circles, ellipses, hyperbolas) and coordinate methods. Trigonometry is introduced in more depth, including trigonometric functions, identities, and applications to real-world measurement. Students also extend their understanding of three-dimensional geometry, focusing on surface area, volume, and cross-sections. This integration of algebra and geometry prepares them for advanced algebra and precalculus.

#### **Grade 11 Algebra II and Trigonometry**

Students refine and extend the concepts from Algebra II. They study higher-degree polynomial and rational functions, logarithmic and exponential modelling, and inverse functions. Trigonometry becomes a major focus, with students exploring graphs of trigonometric functions, proving and applying identities, solving trigonometric equations, and applying laws of sines and cosines. Analytic geometry deepens through detailed work with conic sections. Probability and statistics expand into binomial probability, normal distributions, and regression analysis. Students practice real-world modelling and problem-solving while preparing for standardized tests such as the SAT and EMSAT, and for the transition into Calculus.

#### **Grade 12 Calculus**

Students on the Calculus track begin with limits and continuity, learning how functions behave as values approach specific points. They progress to differentiation, mastering rules of derivatives and applying them to optimization, related rates, and motion problems. Integration follows, with students solving definite and indefinite integrals and applying them to problems involving area under curves, volumes of solids of revolution, and accumulation functions. The course culminates in the Fundamental Theorem of Calculus, linking derivatives and integrals. This rigorous pathway prepares students for university-level STEM fields.

This course aligns with the California Common Core Standards for high school mathematics and extends students' understanding of algebraic concepts while introducing advanced topics that prepare them for pre-calculus and beyond. Students will explore functions in depth, including linear, quadratic, exponential, logarithmic, radical, polynomial, rational, and trigonometric functions, learning to represent them symbolically, graphically, and numerically. They will analyze the behavior of functions, including transformations, domain and range, and inverse relationships, while applying these models to real-world problems. In algebraic reasoning, students will solve complex equations and inequalities, including systems of linear and nonlinear equations, and apply factoring, completing the square, and the quadratic formula to solve polynomial equations. Through trigonometry, students will investigate the unit circle, radian measure, periodic functions, and trigonometric identities, while solving equations and modeling periodic phenomena. In statistics and probability, students will extend their understanding of data analysis by interpreting probability distributions, evaluating statistical claims, and applying concepts of normal distribution. Additionally, students will engage with sequences and series, including arithmetic and geometric progressions, and explore introductory concepts in matrices and complex numbers. By the end of the course, students will have developed advanced problem-solving skills, critical reasoning, and algebraic fluency necessary for success in higher-level mathematics and STEM fields.

#### 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 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. 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.

#### Grade 12 - Mathematics for Business

Students may alternatively take Mathematics for Business, which applies algebra, functions, and statistics to real-world financial and economic problems. Topics include simple and compound interest, annuities, amortization, depreciation, and investment modeling. Students use systems of equations and matrices for business applications, and analyze cost, revenue, and profit functions. Probability and statistics are applied to forecasting, data interpretation, and risk management. Case studies and projects connect mathematics to decision-making in economics, management, and finance, preparing students for higher education in business and related fields.

#### **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 & 12 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, 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

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 first-year student, 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.

#### **Grade 11 – Physics**

This course introduces students to the fundamental principles of physics, aligned with NGSS and designed to strengthen EmSAT readiness. In Semester 1, students develop scientific skills in measurement, accuracy, precision, and graphing, then apply vectors to describe motion in one and two dimensions. They explore free fall, projectile motion, and Newton's Laws, building a strong foundation in mechanics.

In Semester 2, the course expands to work, energy, and conservation of energy, followed by momentum and impulse. Students also investigate oscillations and waves, culminating with the study of geometrical optics, including reflection and refraction of light.

Throughout the year, students engage in inquiry-based investigations, model real-world systems, and practice multi-step problem solving. Emphasis is placed on connecting mathematical reasoning with physical concepts, supported by structured scientific writing using the A.C.E. format (Answer, Cite, Explain).

#### **Grade 12 - Honors Physics**

Honors Physics challenges students with an accelerated and rigorous exploration of advanced physics concepts, emphasizing quantitative reasoning and mathematical modelling. In Semester 1, students study electric forces and fields, electric circuits, magnetism, and electromagnetic induction, applying their knowledge to practical and theoretical contexts.

In Semester 2, the focus shifts to circular and rotational motion, torque, and fluid dynamics, followed by an introduction to atomic structure and quantum theory. Students analyse real-world applications of physics, integrating problem-solving strategies with laboratory investigations.

The course is designed to prepare students for higher education in STEM fields by developing precision in derivations, problem-solving speed, and experimental design. Students communicate their understanding through technical writing, data interpretation, and oral presentations, ensuring mastery of both content knowledge and scientific practices.

# **Grade 12 – AP Physics (Calculus-Based)**

This course follows the College Board AP Physics C framework and provides a university-level, calculus-based exploration of physics. In Semester 1, students master kinematics, dynamics, circular motion, work, energy, momentum, rotational dynamics, and oscillations, supported by calculus-based derivations and problem solving.

In Semester 2, the focus turns to electricity and magnetism, including electric fields, Gauss's law, electric potential, capacitance, DC circuits, magnetic forces, electromagnetic induction, and inductance. Students also explore advanced applications through LC and LR circuits and prepare extensively for the AP Physics C exam.

The course places a strong emphasis on inquiry-based labs, experimental justification, and calculus applications. Students learn to construct scientific arguments, analyse experimental uncertainty, and apply multiple representations (graphs, equations, free-body diagrams) to solve complex problems. By the end of the year, students are prepared for the AP Physics C: Mechanics and AP Physics C: Electricity & Magnetism exams, earning the opportunity for university credit.

#### **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 1-10) French- Grade 1

This introductory course engages students in learning French through songs, games, stories, and interactive activities. Following the California World Language Standards, the focus is on listening and speaking, with students learning greetings, numbers, colors, classroom objects, family, and simple daily expressions. Cultural elements—such as French songs, children's games, and celebrations—are introduced to spark curiosity and global awareness. By the end of Grade 1, students demonstrate Novice-Low proficiency, responding to simple words and phrases and showing awareness of French-speaking cultures.

#### French- Grade 2

Building on the Grade 1 foundation, students expand their listening and speaking abilities while beginning to recognize written words and phrases. Vocabulary includes animals, foods, clothing, weather, and daily routines. Students participate in role-plays, short dialogues, and storytelling activities. Cultural lessons highlight French holidays, traditional foods, and basic geography of France and francophone regions. By the end of Grade 2, students reach Novice-Low to Novice-Mid proficiency, producing short, memorized phrases and beginning to read and write simple words.

#### French -Grade 3

Students strengthen their ability to communicate in short sentences while expanding their reading and writing skills. Vocabulary and grammar include classroom commands, transportation, sports, likes/dislikes, and present-tense verbs. Activities emphasize speaking practice through skits, surveys, and pair work. Students also explore French art, music, and children's literature. By the end of Grade 3, students achieve Novice-Mid proficiency, able to ask and answer simple questions, read short passages, and write basic sentences.

#### French -Grade 4

In Grade 4, students deepen their communication skills with greater attention to sentence formation, gender and number agreement, and verb conjugations in the present tense. Topics include school subjects, daily schedules, leisure activities, seasons, and simple cultural comparisons. Students engage with authentic texts such as menus, children's songs, and simple stories. Cultural focus expands to francophone countries in Africa, Canada, and the Caribbean. By the end of Grade 4, students reach Novice-Mid to approaching Novice-High proficiency, expressing personal preferences and writing short paragraphs.

#### French -Grade 5

Students transition from simple memorized phrases to more personalized communication. Vocabulary includes health, shopping, travel, community, and expanded family structures. Students practice present-tense verbs more systematically (regular -er, -ir, -re verbs and common irregular verbs) while learning basic sentence connectors. They read and respond to short stories and informational texts, while writing short descriptive paragraphs. Cultural comparisons highlight school life in France versus the U.S. and UAE. By the end of Grade 5, students demonstrate Novice-High proficiency, holding short conversations, comprehending short authentic texts, and writing brief descriptive passages.

#### French- Grade 6

Grade 6 students strengthen communication skills by broadening vocabulary and learning to use language for more functional purposes. Topics include travel, hobbies, city and village life, technology, and personal interests. Grammar work emphasizes subject-verb agreement, negation, and question words. Students practice listening comprehension through multimedia, engage in paired interviews, and create short projects. Cultural focus includes French cinema, sports, and traditions in francophone Africa. By the end of Grade 6, students approach Novice-High proficiency, confidently handling familiar contexts and beginning to create connected sentences.

#### French- Grade 7

This course pushes students toward more independent use of French. Vocabulary includes environment, celebrations, jobs, and personal goals. Grammar expands to include near-future tense (aller + infinitive), reflexive verbs, and object pronouns. Students conduct simple oral presentations, interpret longer reading passages, and write structured paragraphs. Cultural exploration emphasizes francophone diversity and current events. By the end of Grade 7, students achieve Novice-High proficiency, expressing ideas in a sequence of sentences and handling classroom discussions with support.

#### French -Grade 8

Grade 8 serves as a bridge to high school French. Students consolidate and extend prior knowledge, focusing on the present tense, near future, and introduction to the passé composé. Topics include health and wellness, media, global issues, and intercultural communication. Students create more elaborate oral and written projects, such as travel brochures, skits, and cultural comparisons. Authentic materials—short films, children's magazines, and simple news texts—are incorporated. By the end of Grade 8, students move into Intermediate-Low proficiency, writing multi-sentence paragraphs, engaging in extended conversations, and demonstrating intercultural awareness that prepares them for French 1 in high school.

French 1-Grades 9–10 French in Grades 9 and 10 provides students with foundational linguistic and cultural skills aligned with the California World Language Standards and the French curriculum standards. Instruction emphasizes the development of communication in all three modes—interpersonal, interpretive, and presentational—while also fostering cultural awareness and global competence. Students build proficiency in vocabulary, grammar, and pronunciation through real-world tasks, thematic units, and project-based learning. In keeping with both standards, learners engage with authentic French texts, media, and cultural practices, gaining insight into Francophone communities worldwide. By the end of Grade 10, students are expected to demonstrate emerging proficiency at the Novice-High to Intermediate-Low level, preparing them for advanced study in higher grades.

#### 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 & Drama- Grade 10

#### Drama:

This course develops students' creativity, communication, and collaboration through acting, improvisation, and stagecraft. Students explore dramatic literature, create and perform original scenes, and connect global and regional theatrical traditions with contemporary practice, building confidence and critical thinking while preparing for advanced study in the performing arts.

#### **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.

# ICT Curriculum (Grades 1-8)

This section outlines the ICT curriculum for Grades 1–8, based on the California Computer Science Standards. Each grade builds progressively from foundational digital literacy and responsible technology use, to programming, app development, artificial intelligence, and real-world applications of ICT. The progression ensures students develop creativity, problem-solving, and digital citizenship skills.

#### Grade 1

Students are introduced to the foundations of technology, exploring the history of technology, basics of hardware and software, and online safety. They begin working with data and develop creativity through simple animation projects using ScratchJr.

#### **Key Learning Outcomes**

- Understand the concept of ScratchJr
- Identify events
- Make characters move
- Choose characters and apply backgrounds
- Apply loops
- Add aesthetics and sound to animations

#### Grade 2

Students expand curiosity by exploring the inside of a computer and safe online practices. They strengthen data use and presentation skills and are introduced to programming through animation and game development.

#### **Key Learning Outcomes**

- Understand computing device types and external parts' functions
- Manage applications: open, close, minimize
- Practice safe login/logout and keyboard/mouse usage
- Explore technology's impact and online safety
- Create and open PowerPoint presentations with images, text, and design
- Use Tux Paint with brushes, colors, and stamps
- Present projects using Tux Paint

#### **Grade 3**

Students deepen understanding of computing systems (inputs/outputs). They use data creatively in presentations, pictures, and videos, while respecting copyrights. Programming expands through advanced animation and game development with Scratch.

#### **Key Learning Outcomes**

- Draw characters and apply backgrounds
- Examine and interact with the Scratch interface
- Create pages and scenes
- Record sounds
- Apply the forever loop

#### Grade 4

Students transition into structured ICT concepts, studying digital connections, networks, and data sharing. They focus on data presentation, game-based problem solving with Scratch, and application programming using variables, algorithms, and debugging.

#### **Key Learning Outcomes**

- Identify input and output devices
- Apply troubleshooting techniques
- Use mouse and touchpad effectively
- Understand file systems, file types, and software
- Apply strong passwords and responsible online behavior
- Use browser tabs and hyperlinks
- Create, format, and save Word documents
- Insert and align images, frames, and captions
- Add shapes, text boxes, and color themes in PowerPoint
- Use Tux Paint for shapes, text, effects, and patterns

#### **Grade 5**

Students become 'Digital Defenders,' emphasizing responsibility and cyber protection. Data work includes collecting, analyzing, and sharing through surveys and forms. They explore databases and key/value pairs, while advancing in game design and AI concepts.

- Integrate interactions with pages and scenes
- Record sounds
- Use the forever loop
- Explore Artificial Intelligence
- Understand computer vision
- Learn sensing and perception
- Implement face sensing

#### **Grade 6**

Students advance into higher ICT stages, learning to secure online information, clean and present data, and develop polished games. They move into app development with algorithms, functions, parameters, debugging, and documentation, alongside productivity tools and 3D design.

#### **Key Learning Outcomes**

- Integrate hardware and software
- Perform touch typing and keyboard shortcuts
- Use search tools effectively
- Understand URLs and suffixes
- Compose and send emails
- Use MS Word lists, styles, themes, and icons
- Apply SmartArt in PowerPoint
- Design and print 3D models in Tinkercad

#### Grade 7

Students explore the wider digital world, focusing on the internet, digital security, and crowdsourcing. They learn to protect personal data, use information for digital art, and take first steps in Android app development. They also study the history of the web and its design evolution.

#### **Key Learning Outcomes**

- Demonstrate knowledge of Scratch
- Examine and interact with the Scratch interface
- Compare sprites and backdrops
- Create a complete program

#### **Grade 8**

Students become innovators, exploring data transmission, communication protocols, and predictive analysis. They advance in mobile app development with MIT App Inventor, integrating data storage and machine learning. The level concludes with interactive web development projects.

#### **Key Learning Outcomes**

- Understand network devices and troubleshoot issues
- Study computing technology evolution
- Perform touch typing
- Use browser bookmarks and transmit data
- Use email tools: reply, forward, attach documents
- Insert tables, styles, and borders in Word
- Design slides with templates and themes in PowerPoint
- Apply advanced Tinkercad tools for 3D design
- Develop and test websites with interactive elements

#### 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**

To nurture the whole child, we provide a wide range of extracurricular activities that inspire growth academically, socially, and physically. Throughout the academic year, students can participate in:

- Sports programs such as swimming, basketball, badminton, volleyball, and martial arts
- STEAM Activities and Innovation. Workshops that spark creativity, problem-solving, and teamwork through hands-on challenges and competitions
- Moral Education initiatives including visits to Senior Citizen Centers and attendance at real courtroom proceedings
- University and Career Fairs designed to empower students with voice, choice, and future-ready pathways
- Model United Nations (MUN) Club for Grades 11 & 12, where students develop leadership, diplomacy, and debate skills in global contexts
- International Campaigns such as Breast Cancer Awareness, marathons, and charity 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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