# RAISING STUDENT ACHIEVEMENT EVERY DAY, EVERY WAY 

## ELEMENTARY SCHOOL

## Class Guide

PREK-KGII
The primary assumption of the PreK-KGII program is that learning is meaningful and long lasting when it is based on a student's experiences, and when it arises from that which the with opportunities to observe their world, gather information and formulate conclusions in all academic disciplines.

The first year at Dunecrest American School is a crucial one in building self-confidence, independence and responsibility. Forming friendships, dealing with a variety of social situations, and discovering the joy and excitement of learning in a challenging but nurturing environment are primary goals.

Although a large body of measurable skills is acquired in PreK KGII, it is important to note that less tangible achievements are of equal value. Students grow in their commitment to tasks, learn to work independently, and learn to respect and appreciate the ideas of others as well as building on their sense of right and wrong. Not incidentally, they learn to navigate their way through the school with a sense of selfassurance.

## ENGLISH - PREK-KGII

The English program provides rich and varied experiences in each of the four interrelated language skills: listening, speaking, writing and reading. We recognize that there are many ways in which students learn how to read. Our program builds on what the students already know about oral and written language and takes into account each student's earning style, interests, motivation and level of maturation. Carefully structured activities involve the students in functional language experiences and provide opportunities for literacy development in a stimulating and non-pressured way.

Creative dramatics, block building, "sharing time", and outdoor play are some of the ways PreK-KGII students earn to formulate ideas and communicate with increasing confidence, clarity and richness of vocabulary. Critical thinking is expanded through guided group discussions and informal questioning, as is the ability to make associations, sort through details, and focus on the main idea. Placing labels around the room, having the students make lists and charts, and providing time for writing messages and etters demonstrate to PreK-KGII students that language is purposeful. Daily story time develops student's appreciation fooks and learning, while increasing comprehension and providing exposure to varied language patterns, vocab distinction skills; help develop phonic awareness and sight vocabulary and direct student's attention to reading strategies. Classrooms are well equipped with stimulating material for independent reading at various levels. Games and activities provide practice for memory development, phonics, visual perception, auditory distinction and motor skills.

We also provide the students with daily opportunities to
express themselves on paper. This may take the form of a picture that tells a story or it may include letters, partia words, or full words, if they are ready. The continuum of skills is appropriately wide at this stage. With practice, the
n estimating, making connections, discovering and creating patterns. These skills help to develop the logical and the flexible thinking needed in problem solving.
students become increasingly independent and comfortable experimenting with language and constructing rules of spelling in the context of their own interests and experiences PreK-KGII students are taught the correct formation of all the letters as they are introduced in lessons.

## MATHEMATICS- PREK-KGII

The mathematics program provides direct experiences using materials that allow the students to explore, formulate, test, discuss, and construct mathematical concepts. Students me to see the usefulness of math and its relevance to everyday situations through a wide variety of activities suited to their age, readiness and interests. Materials used include pattern-blocks as well as everyday objects.

Students address challenging practical problems and are introduced to concepts in the following areas: numbers, one-to-one correspondence, attributes and sets, numeral reading and writing, classification, comparisons, measurement. geometry, spatial perspective and relations, and place value. They are also introduced to the concepts of equal ity addition and subtraction, and to the symbols used to communicate this information. Students continuously strengthen their skills


SOCIAL STUDIES - PREK-KGII
At Dunecrest American School, we consider social studies to be the integrated study of the social sciences and humanities o promote civic competence. It is our goal to help young pis the ability to make informedand reas denocratic society in

The basis of our social studies program is the idea that conversations and exploration stimulate the student's Curiosity about the world around them. Creativity and curiosity are encouraged and fostered. While the acquisition f new knowledge is important, our program is primarily oriented around the development of concepts, such as the dea that there are similarities and differences among people everywhere, that they are interdependent, and that they are responsible for their environment.

## SCIENCE- PREK-KGI

At the heart of the Early Childhood Center and Elementary School science program is the desire to acquaint our students with the many ways in which science influences
"Fantasy
is a necessary
ingredient in living, it's a way of looking at life

## through the wrong end of

## a telescope."

Dr. Seuss
our lives. We offer a variety of learning experiences, including hands-on laboratory investigations, class discussions, integrated use of technology, cooperative learning groups, ndependent study, and research projects culminating in fieldwork. Early Childhood Center and Elementary School science students are encouraged to be observant, record, predict, draw conclusions, and create experimental designs and prototypes. The children use all of these to enhance their investigations and to help them articulate and defend their heories. Also, we want our students to grasp the importance science as a way of examining, protecting and preserving our world. It is our hope that they will use their knowledge of science and its methods to solve problems in a manner that is both effective and ethical.

The PreK-KGII science program consists of a variety of simple and exciting experiments organized through the three basic concepts of Earth, Alr, and Water. Students are introduced to projects chosen to complement the Prek-KGII social studies program of basic needs (food and shelter). The children contribute what they already know about a given topic, talk about what they would like to know, make predictions, and engage in experiments and create projects that involve their creativity and their developing gross motor skills.

SOCIAL-EMOTIONAL DEVELOPMENT - PREK-KGII

The PreK-KGII program is oriented in the development of interpersonal skills. Crucial among these are: understanding and respecting others, being aware of similarities and differences, and introduct, comesin pror in GRADE 1

Grade one is an exciting year where our goal is to teach a solid foundation of the basic skilis as we cultivate the student's natural curiosity. This is intended to help and inspire them to
become more independent academically. We understand that young students love to draw and create, and so we learning. Our halls and walls will be filled with literary, scientific and mathematical artistic explorations.

## ENGLISH - GRADE 1

The primary goals of the English program in grade one sto instill in our students a love of reading, to help them appreciate reading as a source of both information and peasure, and to give them the skills necessary to beco acommodate

Instruction takes place in whole group, small group, and in one-to-one settings. Students are exposed to a variety of reading materials including classic and contemporary works from children's literature, as well as selections from various eading series. Informational texts, chapter books, and poetry are all read and discussed. Teaching materials and strategies re many and varied to accommodate the range of learn tyles, and they are aimed at using and building existing tudents' various strengths and enhancing their exst spelling and word recognition. Building upon the pre-existing ndividual strengths of our students, we expand their range of reading strategies so they can approach new material with growing confidence and independence.

Our writing program complements our reading program, as student's first successful reading experience often come from being able to read his or her own written and spoken words. By exploring language, students learn about their own thinking and about how to make their thoughts accessible oothers. As such, there is a continued focus on correct formation of letters with the goal of increasing the writing fluency. The students enjoy a variety of teacher-directed and open-ended writing experiences. First graders write in notebooks and journals, and also in Writing Workshop sessions. The students make and record observations, write etters, and engage in beginning research activities. The students are encouraged to experiment with the various writing forms, such as poetry and How-To books. Our grade one authors are encouraged to share their stories with the class in a supportive atmosphere. The context of the student's own writing provides us with ample opportunities or interpreting and reinforcing the basic conventions of our anguage and of print. We use the student's developmental speling as a springboard into the beginnings of standardized spelling by noting patterns, through the use of word families, and through the use of formal reinforcement work with beginning, ending, and medial consonants and vowels. In each class, we build a spelling list of common sight words; these words are reinforced in simple dictation exercises, through word work manipulation and in games.

## MATHEMATICS - GRADE 1

Mathematics is an integral part of everyday life in grade one. Building upon mathematical skills and conceptual

explorations begun in PreK-KGII, the students are encouraged to continue to use manipulative materials to discover patterns and relationships and to discover the uses of grouping as a way of working with larger numbers. We begin by exposing students to physical representations of numbers as amounts, then move towards graphic images of these values, and finally make the connection of these to the abstract symbols of numbers and operations. The students are encouraged to take risks as they apply their knowledge and skills to experiment with various solutions to open-ended tasks. Students are asked to explain their problem-solving strategies so that their mathematical thinking becomes clear to them. In this way, the process and the thinking become as mportant as the end result. Students are also introduced to systematic problem-solving techniques.

Our grade one math curriculum includes the following: solidification of place value concepts, flexibiity with number relationships, written addition and subtraction of whole numbers, counting and grouping, and continued work on place value, and word problems. The students participate a variety of non-standard and standard measurement activities, tell time to the hour and half hour, solve problems that involve monetary values of dollars and cents, and explore simple geometry. Arithmetic concepts are presented and reinforced with appropriate technology applications; educational games and tie-ins are frequent.

## SOCIAL STUDIES - GRADE 1

The goal of the grade one social studies program is to help students understand that forming groups is a basic human need and that groups have identities and particular functions Students will learn about patterns of change and continuity, elationships between people and events through time, and various interpretations of these relationships. Students will discover causes and effects of interaction among societies, icluding trade, systems of international exchange, war, and diplomacy. Students will learn about the interactions and elationship between human societies and their physical environment. Students will explore cultural and intellectual developments and interactions among societies. Students will question why societies create and adopt systems of governance and how they address human needs, rights, responsibilities and citizenship. Students will understand fundamental economic principles and ways in which economies are shaped by geographic and human factors.

Students will understand how societies have influenced and been influenced by scientific developments and technologica evelopments. An essential goal of this program is to move students toward being able to independently make choices Explorations are further supported with literature and handson projects.

## SCIENCE - GRADE 1

In grade one several topics are presented during the course of the academic year. We will begin the year with discussing science and what the role of a scientist is in this field. In nearly ll of the class activities, the students are asked to observe and record their discoveries and share them with classmates during discussions. Students refine their observation and recording skills through the use of drawing.

SOCIAL EMOTIONAL DEVELOPMENT GRADE 1

Developmentaly, first graders are noving beyond a primarily egocentric view of the world. Through stories, role-playing, lass discussions and direct teaching, we foster respectfu and kind treatment toward menbers of our immediate and extended community. As the year begins, our conversations ocus upon navigating the normal ups and downs of friendship. Later in the year, our study of family structures excites and satisfies their growing curiosity about the diversity of the world around them

ART

First graders are introduced to the fundamentals of art First graders are introduced to the fundamentals of art
with a special emphasis on line and shape. Basic color theory is introduced, as students identify the primary and secondary colors, ultimately making their own basic color wheel. Following color, texture is introduced, and students earn to identry and create different types of texture on a uildin skills as it is about creativernab bed to use therima dynamic and fluid process of creating

## MUSIC - GRADE 1

The grade one program focuses on developing the student's pitch-matching and rhythm skills, as well as learning to read simple music notation. This stresses the two basic music oncepts studied throughout the year: rhythm and melody. In lass, group and partner dances, games and body percussion exercises help develop coordination and social skills. The students have opportunities to perform throughout the year.

PHYSICAL EDUCATION - GRADE 1

Students in grade one begin to refine locomotor skills and further develop fundamental non-locomotor and manipulative skills in sport games, dance and gymnastics. and principles and $\begin{aligned} & \text { to link understancepts and principles to }\end{aligned}$ heir movement As students increase their understanding of movement they gain a deeper understanding of how the body moves. Students continue to develop socially as they work safely alone and in a group. The natural enjoyment of physical activity is reinforced and complemented by a variety

## GRADE 2

Grade two students are ready to start building upon the firm foundation of skills they have acquired and developed in PreK to grade one. While we recognize that students are individuals and that they develop at different rates, we know that second raders can and do assume a more active role in becoming capable responsible and independent students.

We continue to emphasize individual strengths while enlarging each student's repertoire of strategies and proaches to foundational skills. As in grade one, we allow students time to artistically explore each area of the urriculum, using their creativity and love of exploration to great advantage. It is wonderful to see the strides the students make as they take off on their own.

ENGLISH - GRADE 2
The basic aim of the grade two English program is to further enhance each student's ability and desire to listen intently, to speak articulately, to read fluently and to write clearly. Growth n any form of communication is often influenced by individua developmental factors and a wide range of achievement levels is both normal and ever changing.

As in grade one, reading instruction is taught using methods and settings that complement the student's learning styles. We utilize a variety of methods and materials because we understand that students learn in different ways. We firmly believe that students derive the greatest benefit from being exposed to a diverse range of reading experiences, and we judiciously choose and take what is best in each of the teaching methods.
Our students read in small groups, as a whole class, and in one-on-one situations. Reading selections are chosen from a wide variety of high-interest materials, both fiction and informational texts, that represent a broad spectrum
of developmental and readiness levels. The students are encouraged to actively observe, view, listen, talk, reason, question, discuss, interview, comment, report, reflect, predict, evaluate, create and share their views on the materia they are reading. Supplemental activities reinforce specific skills that have been introduced through the readings. We continue to provide opportunities for all kinds of artistic and expressive literary extension projects.

Our students participate in many writing experiences. They keep journals, they have regular Writing Workshop times, and they conduct beginning levels of research writing both in social studies and in independent projects. We encourage the students to use writing as a tool for thinking and communicating in all areas of study.

Grammar, punctuation, and editing and organizing skills are taught within the contexts of the students own writing in order to make these rules clearer and more meaningful. Formal reinforcement, increased practice, and the use of writing as a springboard into learning in a broader context begin to bring our students to a greater understanding of the conventions of print. Spelling is presented in a variety of ways both individualized, within the confines of writing experiences, and in a more general, structured approach. Second graders continue to learn about phonics and spelling. The students learn to recognize blends, digraphs, suffixes, syllable types and word families. Correct spelling is emphasized throughout all areas of student work.

## MATHEMATICS - GRADE 2

The grade two math program relates math to everyday life experiences whenever possible. We continue to build upon the conceptual and practical skills mastered in grade one, with the intention of assuring greater depth and complexity of understanding of number sense. For instance, the relationships between addition and subtraction re discussed as the children expand their knowledge o numerical operations. The groundwork in grouping and place double-digit addition and subtraction with regrouping Students are also introduced to multiplication, division, and basic fractions through interesting activities that help them apply the concepts to real life situations. Our students are taught important math concepts including the properties of numbers, geometry and spatial relations, time measurement, money patterns and relationships, and problem solving. Explorations take place in whole clas and in small differentiated group situations, as well as on an individual basis.

The students play hands on games to develop and increase mathematical understanding and computational skills to solve structured and more open-ended tasks. We collect data and construct a variety of diagrams and graphs in order concepts in a visual way. We use a variety of mathematical
methods and teacher-created materials, as well as published materials for both presentation and reinforcement. As with all areas of learning, we strive to tailor our program to approach earning from many different angles.
Writing is also an important part of our math program. Writing their own word problems, drawings to explain strategies and show problems worked out, helps them to verify their own thinking.

## SOCIAL STUDIES - GRADE 2

Grade two students start the year learning about communities and how to be good citizens. Students learn about the ancient and compare the similarities and differences of both, as well as comparing them to modern civilization. Our students take part in research projects.

## SCIENCE - GRADE 2

Grade two students participate in a broad range of hands-on and interactive classroom activities

SOCIAL- EMOTIONAL DEVELOPMENT - GRADE 2
he topics of fair treatment of community members continue to be explored through literature and activities that provide positive models of behavior for the students to emulate. Students have class visits from the school counselor who comes and discusses many different topics and teaches them techniques to deal with emotions and problem situations in class, at school and at home

ART - GRADE 2
Grade two students continue to build on many of the concepts they were introduced to in grade one. Line, shape and color continue to be of primary importance. Students explore these concepts, utilizing the knowledge and skills they gained in grade one, while also deepening their engagement through challenging painting and collage projects thatcenter around a theme of pattern and textiles. Skills learned nc working through a multi-step project.

## MUSIC- GRADE 2

Grade two students continue to develop skills in singing music reading, moving to a steady beat, and music listening. Class acticies iciuce learning mukicutural songs, read ence and exploring timbre melody and rhym through leyin a variety of rhythmic and pitched instruments. playing a variety of rhythmic and pitched instruments. portunity to share their accomplishments during their classes

PHYSICAL EDUCATION - GRADE 2
Students in grade two begin their progression towards locomotor skill patterns. They vary movement patterns and
begin to combine skills in sport games, dance, and gymnastic activities. Progress is apparent in skill development and in understanding key elements of fundamental movement skills, including understanding movement concepts, healthrelated fitness concepts, and the benefits of physical activity. Students work cooperatively and responsibly in groups and are capable of resolving conflicts.

## GRADE 3

Grade three is a year of great leaps as children move from a focus on the acquisition of essential skills that dominate instruction in the early years to an emphasis on the application of those skills. Although there is still ample time devoted to skill acquisition in reading, writing, and mathematics, our goal is to guide students to see skills in these areas as tools that enable them to gain unlimited amounts of information, to understand literature more deeply, to ask essential and probing questions, and to begin to direct their own learning.

## ENGLISH - GRADE 3

The grade three English curriculum continues to encourage and support in each child a love of literature and clarity of expression, both written and spoken. Its aims are to increase and strengthen the skills brought to the writing process, and to help students use their growing abilities in reading and writing to work successfully in other disciplines; including social studies, mathematics, and science. Throughout the grade three year, growing fluency in reading enables students to accurately read directions and exercise newfoun independence in the learning process. In grade three the emphasis shifts from learning to read to reading to learn.

The heart of the reading program is daily instruction in iteracy: reading, phonics and grammar, discussing, and writing about literature. The selections, which are primarily ovels and biographies, are chosen for their literary ment and for the diversity of their characters and settings. While作 is an emphasis on more in-depth and sophistic development and improvement of appropriate decoding skills and facility in oral reading. Time is also devoted to ndependent silent reading, to reading with peers in small groups, and to listening to books read aloud by the teacher

The grade three writing curriculum includes both personal writing and assigned expository writing. Students keep writer's notebooks about their own experiences, they write nswers to comprehension questions, they write about their writheres andertandings in math, and they ual empher seres and on continuing to master the mechanics of writing. Speling, punctuation, and sentence structure are taught and reinforced throughout the year.

## MATHEMATICS - GRADE 3

The grade three math program strengthens students' understanding of numbers, their ability to apply problem

solving strategies, and their independent grasp of computational skills. Students are encouraged to develop flexible, efficient, and accurate strategies to correctly apply the concepts, skills, symbols and vocabulary associated with mathematics. While learning mathematics, students are actively engaged and work with a variety of math materials and tools. Higher-order thinking skills including ogic, discovering patterns, and making connections are emphasized in conjunction with procedures and techniques. This diverse approach helps develop their conceptual understanding of mathematics while continuing to focus on the foundational skills they need to address increasingly complex problems.

The grade three mathematics program emphasizes developing a deep understanding of multiplication and division with a focus on mastery of facts. Students understanding and skill in the areas of fractions, geometry measurement, mental computation, and beginning work ivolving algebraic thinking and multi-step problem solving are deepened. Students continue to achieve proficiency in whole number computation (addition, subtraction multiplication, division) through regular practice and einforcement. Additionally, they have the opportunity to work independently and in collaborative groups to investigate avariety of mathematical concepts that help deepen their understanding of place value, estimation, measurement, and pattern recognition. Students are given frequent
opportunities to demonstrate their understanding both verbally and in writing.

## SOCIAL STUDIES- GRADE 3

The grade three social studies program focuses on the themes of movement and identity. By exploring their ow dentity as well as learning about the identities of those around them, students begin to understand that history is understood from multiple perspectives, experiences and or un tudents . in a derer fthe girart's plight Additionally third praders devote of the immigrants plight. Adaitionally, third graders devote lunber class ascussins lobaik rights and responsibilities we encourage them to beginto al independently use their strengths, talents, and interests to

## SCIENCE - GRADE 3

n addition to illustrating their observations and discoveries, grade three students are comfortable recording their experiments through writing. They are well versed in the lab
processes of investigation and experimentation, and they can set up their own experiments with materials provided. They are accustomed to sharing their ideas in classroom discussions. Additionally, they have become comfortable with the discrepancies and disagreements that often arise over the possible outcomes of experiments. Third grade scientists discover that there may be more than one answer or outcome to a problem or an investigation.

SOCIAL-EMOTIONAL DEVELOPMENT GRADE 3

Continuing to build on the work begun in earlier grades, we ocus on the development of caring and accepting attitudes within the school community through skits, iterature and discussions about teasing and bulying and respect for one another's differences and similarities. Classes and our curriculum focus on the skill of decision-making in the real world

## ART - GRADE 3

In grade three art class, students build on the concepts covered in grades one and two such as line, shape, color and texture. Additionally, they learn about value, tints, shades and observational drawing. Students also deepen their knowledge f color by studying the effects of complementary and harmonious colors.

## MUSIC - GRADE 3

The musical concepts established in earlier years continue to be cultivated in grade three. The students experience and deepen their understanding of such elements as rhythm, melody, harmony, form, and timbre through a more focused and comprehensive exploration. Concerts and performance opportunities continue to play a significant role in enhancing the students' solo and ensemble performance and listening skills.

PHYSICAL EDUCATION - GRADE 3
Skill development remains a central focus for students in grade three. Students refine, vary, and combine skills in complex situations and demonstrate more proficient movement patterns in sport games, dance, and gymnastic activities. They develop fitness knowledge and can relate egular physical activity to health benefits. They know safe practices, rules, and procedures and apply them with little or no reinforcement. Students work cooperatively with peers.

## GRADE 4

Grade four students strengthen and consolidate skills acquired in the earlier grades in reading, writing, critical hinking and mathematics. Through the grade four urriculu, students gain independence in locating, nalyzing, and using information. The curriculum assumes that students have mastered basic skills, and that they are curriculum.

## ENGLISH - GRADE 4

The grade four English program emphasizes the appreciation f literature and the acquisition of advanced skills in reading comprehension, research, and fluency. Students read a variety of novels, poetry, and informational texts in various ffacts are not ignored there is a growing importance
 placed on inerential andevalua conclusions and make predictions to analyze character and corione and a details leaned from the text The independence oained using reading as a powerfultol begu in grade three ains momentum in grade four as students learn to follow printed directions and to locate information in the text and Captions illustrations and graphs. Time is also devoted to olishing expression clarity and inflection in oral reading Students study and experiment with different genres of writing and they build their writing skills through assignments in expository descriptive, creative and narrative writing. The grade four writing curriculum continues to stress the development of ideas in clear. well-structured sentences and paragraphs. Fourth graders learn to write paragraphs with a central idea, a topic sentence, and supporting sentences. Formal teaching of spelling and grammar is continued, as well s an expectation to independently apply these skills to their daily work.

## MATHEMATICS - GRADE 4

The grade four program reviews, strengthens, and extends the student's understanding of a range of areas of mathematical concepts, and lays a strong foundation on which to build the student's confidence in his or her ability to solve problems in those areas. Areas of focus in grade four nclude achieving fluency with multi-digit multiplication and division algorithms; developing a deep understanding of fractions and factionalconcepts, in-depthexplorations in geometry, and fand skills in advanced problem solving.

Students are taught a variety of approaches for solving multi-digit multiplication problems. These strategies give students a solid understanding of how and why the standard multiplication algorithm works prior to being taught the Igorithm. A similar approach is used for division as the students' complete long division problems using a hands-on approach.

These strategies deepen the students understanding of the base-ten number system and allow them to more easily apply these strategies in other areas of mathematics A deep understanding of fractions is an integral part of he grade four curriculum. Fixed nubers, qudency, add lon sact and reinforced throughout the yea
n geometry, students analyze the attributes of two and three-dimensional shapes, lines, and angles. They use these foundational skills to define properties of geometric shapes and discover that some shapes can belong to more than one group or category. Measurement activities including the understanding of area of two-dimensional shapes are also a focus.

Throughout the curriculum, problem solving-strategies are given precedence. Students are given frequent opportunities o communicate their understanding both verbally and in writing. Beginning concepts of algebra are introduced.

## SOCIAL STUDIES - GRADE 4

in grade four, students study their host country, U.A.E. Topics of investigation include U.A.E.'s geography, history, anthropology. culture, government, and economy There is a arge focus on strengthening students' understanding of their wn identity while developing an appreciation for the cultural perspectives and experiences of others.

Development of effective research skills is an essential part of the grade four curriculum. Through guided, independent esearch and expository writing tasks, students acquire organizational and study skills such as note-taking, framing of essential questions, reading for information, and planning and presentation of a final product.

Throughout the year, students use maps as references that are designed to give specific information and use this knowledge to independently determine what type of map would be useful for a specific task and to independently glean information from these maps.

## SCIENCE - GRADE 4

n grade four science, students use the scientific method to actively inquire about and investigate the world around them. Students will develop background knowledge, as well as hone their ability to design and implement experiments, through the study of plant and animal ecosystems, force and motion, the relationship between the earth and other parts of the solar system, weather, and Earth's resources. A trong emphasis is put on understanding the relationships, similarities, and differences that exist in our lives.

## SOCIAL-EMOTIONAL DEVELOPMENT

 - GRADE 4Some of the topics of focus are establishing responsible community roles and appreciating varied family structures, and other aspects of identity development. Our goad is to similarities and differences that exist among us.

The more risks you allow children to take, the better they learn to take care of themselves.

Roald Dahl

ART - GRADE 4
In grade four art class, students build on the concepts covered in grade three such as ine, shape, color and texture. Additionally, they grow their knowledge about value, tints, shades and observational drawing. Students also deepen their knowledge of color by studying the effects of complementary and harmonious colors.

MUSIC - GRADE 4
The grade four classroom music curriculum builds and expands on all previous learning. Two and three part singing, creative movement, instrumental study and performance. long with listening activities provide students with a multifaceted array of musical experiences.

PHYSICAL EDUCATION - GRADE 4
n grade four, students make continuous progress across all fundamental motor patterns. Students create sequences in educational dances and gymnastics. They apply movement concepts and principles in individual movemen erformances, and tactical strategies in simple partne activities
Fitness assessment is appropriate at this grade level, and students make interpretations of the results of their assessments and set personal goals based on the results. Students exhibit responsible behaviors and they apply proper rules and procedures.

MIDDLE SCHOOL

## Program Overview

The Middle School program is intended to carry out Dunecrest American School's mission and, in so doing, to serve the needs of the student in grades five through eight. In particular, the program has been designed to help young people acquire knowledge and skills through discovery and conversation, to inspire a love of learning, and to develop individuals who are productive and fulfilled members of their communities.
Upon entering the Middle School in grade five, students begin the journey towards becoming more independent thinkers in grade eight, working hard along the way to acquire the skills and understandings necessary for success in the High Shool. During this journey, they gradualy take ownership of the learning process, buld and value friendships with peers and relationships with teachers, and come to appreciate their own individuality and their responsib the wider community.

The Middle School program is dynamic, challenging, and rich n the opportunities it presents students to connect with their eachers and with the material they will encounter. Teachers are specialists with young adolescence dare eor tempered by he middle grades student In additionto coenitive growth, he Middle Schel program allows teachers in partnership with parents and advisors, to also encourage mental, physical and ethical development.

As you read through this document, please do so with the knowledge that these course descriptions represent only a starting point in a conversation about the fullness of your child's experience as a Dunecrest American School student. Where this document, and any like it, will always fall short is in attempting to account for the significance of the ongoing conversations between our students and their teachers, the power of friendship, the excitement of discovery, the commitment of devoted parents, the joy of learning, or the consistency of student effort that more completely define and enhance the Dunecrest American School experience

## ENGLISH - GRADE 5

grade five, reading and writing skills continue to be taught in tandem. There is increased emphasis on content area learning and utilization of a variety of resources. The student will be able to read a variety of text genres in all subjects and will acquire information to answer higher level thinking questions, generate hypotheses, make inferences, support opinions, confirm predictions, compare and contrast relationships, and identify the main happenings critical to the story structure. The student will continue to develop an appreciation for literature by reading a variety of carefully chosen fiction and nonfiction age-appropriate selections. The student wil increase communication skils and create projects onine, in print andmedia. In Wring Workshop, he stud with writings to describe, entertain, explain, and persuade.

Teaching our students to identify key elements will contribute

o critical analysis of literature; comparing and contrasting, making judgments based on knowledge and understanding, and applying that knowledge to the real world. We emphasize vocabulary growth and the development of problem solving skills learned through literature analysis of problems, resolutions, and themes. The students will be responsible for discussion, questioning strategies and debrief particula novels explored throughout the year.

Writers workshops will be additional opportunities for students to develop their writing confidence, revising, editing and publishing skills. The specialized one-on-one tutorial groups provide students with personalized teacher feedback and an opportunity to further hone their abilities as young writers. The students will have time to build on expository essays, stories, poems, journal entries and a variety of creative book reports. The mechanics of writing, grammar, and keyboarding proficiency will be taught. Special attention will be devoted to parts of speech, sentence structure, phrases and punctuation as tools to help understand the structure of the English language.

SOCIAL STUDIES - GRADE 5
n this class, the students use online map sites as well as printed atlases to study the basics of world geography The framework of the course is the six national geography tandards. (1) the world in spatial terms, (2) places and environment and society, and (6) the uses of geograph.

## MATHEMATICS - GRADE 5

grade five, instructional time focuses on three critica areas: (1) developing fluency with addition and subtraction of ractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

## SCIENCE - GRADE 5

Through scientific inquiry and reasoning students develop their understanding of the world around them. Students cover concepts in four units: Life Science, Earth Science, Physical Science, and Space and Technology. They develop understanding of the scientific process through experimentation and exploration-based activities that allow them to investigate, hypothesize, work cooperatively, analyze and compare results, reach conclusions, and use their natural curiosity.

The course is designed to help students make connections. ask questions, and, of course, increase their knowledge.

ART - GRADE 5
Working in drawing, painting, printmaking and/or collage students will often study works of important Twentieth Century artist. If time permits, the works studied may inspire additional projects aimed at exploring particular aspects of fine arts practice. All projects will be designed to encourage students to explore the expressive potential of various pproaches to art making. The goal is to advance beyond he skill level achieved in the Elementary School and to dea with interactive imagery and subject matter. The work of professional artists is studied and incorporated into projects. Students look at the pottery of other cultures and include these influences in their work.

## BAND - GRADE 5

Grade five band is a yearlong introduction course. An emphasis will be put on music theory to aid students in their instrumental development. Performances will occu periodically throughout the school year. Students are expected to practice regularly outside of class. After the completion of this course, students will be able to further their musical understanding in grade six band and the after school Jazz Band program.

## CHOIR - GRADE 5

Students focus on learning the difference between their read-voice and chest-voice. Students spend the majority of time learning how to match pitch. Part-singing is introduced. naddition to performing during Middle School special events, he ensembles perform at the winter and spring concerts. The repertoire that the ensemble prepares is diverse.

## PHYSICAL EDUCATION - GRADE 5

The program emphasizes the refinement of motor skills and their application to team and individual sports. Fitness is integrated throughout the general curriculum and is a majo with opportunities through sequential instruction and game experiences Basic sports skills and game rules are introduced and rinforced Concepts such as coperation teameffort and good sportsmanship are integrated into daily lessons. The students rotate through the following sport activity units: Tasketbal soceer swimming track \& field volteybal, strength volleyball, strength training, dance and aerobic exercises.

## TECHNOLOGY - GRADE 5

Ififth grade, students learn to utilize the Dunecrest American School network, Google Drive, email, and the Internet, in order to organize their digital life while developing technology skils that wils support their learning throughout the year. Students receive their first network accounts enabling them to access with several online web subscriptions for additional learning. Students develop basic computer skills using Microsoft Office, Google Docs, and iLife applications. They also learn basic coding further improving their media literacy skills. All skills are taught in the context of long-term projects.

## FRENCH - GRADE 5

This is a semester long course for beginners. Don't be intimidated by learning another language; we are going to have a lot of fun over the semester. By the end of the class, you will have a good, basic foundation of the language.

## SPANISH - GRADE 5

Hola! Introduction to Spanish is a semester long class fo beginners. This class is an introduction to the Spanis anguage and the cultures that speak this wonderful anguage. By the end of this class you will have a basic understanding of Spanish words and phrases,

## ENGLISH - GRADE 6

The grade six English curriculum seeks to build writing skills, an appreciation of literature, and an increased understanding and awareness of the scope and structure of spoken and written language. Students write a variety of stories, expository paragraphs and essays, personal essays, and poetry based on mythology, novels, short stories and poetry read in class. Grammar study and writing workshops are covered in grade five and focus especially on sentence elements, phrases and clauses including a study of transitive and intransitive verbs and direct and indirect objects.
The literature used in English six becomes increasingly sophisticated throughout the year, and students learn to address such concepts as setting, conflict, theme, character development and tone. Students are also required to complete reading assignments beyond course reading, which provides them with the opportunity to apply the academic skills they have acquired.

## SOCIAL STUDIES - GRADE 6

Grade six social studies will revolve around an exploration of world cultures. Students will be exploring the Wester Hemisphere (Canada, USA, Mexico, Caribbean, Central America, and South America) as well as Europe. This larger egion will be then further broken down into smaller sections and students will look in depth at the physical geography. cultures, climate, and the economic and political situations of these locations.

Some of the units studied will involve ancient and modern history to prepare students for future Social Studies courses. oncepts such as popular sovereignty, checks and balances and limited government will also be explored. Students will earn about media bias, political elections and compromise between governments. An introduction to the basic facets system, and how a viable economic system can affect the standard of living the employment rate and their future jo choices.

This course will also include what it means to be a responsible citizen of their country and the notion of global citizenship of the 21st century in order to prepare them for honest and ethical decisions of our changing world.

## MATHEMATICS - GRADE 6

Sixth grade mathematics is a concept and rules-based course that places continued emphasis on the study of whole numbers, decimals, and rational numbers (fractions). By the end of sixth grade, a student masters the four arithmetic perations with whole numbers, positive fractions, and positive decimal integers: a grade six student accurately computes and solves problems. Students understand the concepts of mean median and the mode of data sets and how to calculate the range. Students will also use ratios ow compare data sets: make conversions within a diven measurement system; classify two-dimensional figures collect, analyze, display, and interpret data using a variety of graphical and statistical methods. Sixth grade students begin sing integers and percentages and investigate numericaland geometric patterns.

## SCIENCE - GRADE 6

Students will be able to connect the study of Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space. Students emphasize historical contributions in the development of scientific thought about the earth and space. Students are able to interpret maps, charts, tables, and profiles; they use technology to collect, analyze and report data; and they utilize science skills in systematic investigation.
Problem solving and decision-making are an integral part of Earth Science, especially as they relate to the costs and
benefits of utilizing the Earth's resources. Students study undamental concepts of ecology, geology, hydrology. neteorology, and astronomy. Major topics of study include atmosphere, weather and climate, and the solar system and universe.

Students are also introduced to the career opportunities that exist in the earth, environmental, and space related sciences, Field and laboratory experiences are an integral part of science investigation.

## ART - GRADE 6

Students will use the elements of art and the principles of design as a framework and explore a variety of experiences nd concepts. Using expressive and technical approaches, tudents investigate and create various two-dimensional and rtists' meaning focusin on their use of forms media and symbols Students develop anincreased awareness of the nature of art and of their relationship to it as they explore the and meaning and value of works of as as and

## BAND - GRADE 6

$n$ this course an emphasis will be put on music theory to aid students in their instrumental development. Performances will occur periodically throughout the school year. Students are expected to practice regularly outside of class. After the

completion of this course, students will be able to further their musical understanding in grade seven band and the after-school Jazz Band program.

## CHOIR - GRADE 6

This course explores choral music from a wide variety of cultures and time periods through study and performance. The course emphasizes the basics of vocal technique, performances skills, sight-reading, and music theory Students in choir participate in concerts each semester as well as assembly performances throughout the school year

## PHYSICAL EDUCATION - GRADE 6

Students in this class demonstrate competence in skillful movement in dynamic game situations and in a variety of recreational activities. They transition from modified versions f movement to more complex applications across all types ff physical activities. Students demonstrate the ability to assume responsibility for guiding their own learning as they apply their knowledge and abilities to create a practice plan to improve performance in a selected game, sport, or recreational pursuit. They will also demonstrate mature esponsibility as they show respect for others and their safety make reasoned and appropriate choices, resist negative pee pressure and exhibit fair play. Students are able to set goals, rack progress and participate in physical activities to improve itness. They will develop a repertoire of physical abilities and begin to develop competence in specialized versions of ifetime activities.

Students will explore several health topics relevant to their age and social maturity. As the student reaches Middle School age, personal care and hygiene needs to be discussed Students will gain an appreciation for the care of their bodies as it affects their physical, social and emotional health. Each student will also develop their knowledge in the principles of nutrition and the role of each nutrient on their personal health. They will develop skills in how to read a nutrition label on containers to make informed decisions on their diet.

## ARABIC - GRADE 6

Grade six Arabic represents a progression from Elementary Arabic to Middle School Arabic. Students read and write ositions in Modern Standard Arabic, with a focus on the preliminary study of syntax.

ARABIC AS A FOREIGN LANGUAGE (AFL) - GRADE 6

Beginning: The main emphasis is on Modern Standard Arabic A student who successfully completes the first year of MSA can expect to possess a working competence in reading and in writing Modern Standard Arabic.

Advanced. This course includes advanced reading and writing as well as lessons in special topics. At the end of the advance course, students should be able to communicate with ease
and clarity with native speakers.

## FRENCH - GRADE 6

Don't be intimidated by learning another language; we are oing to have a lot of fun learning the beautiful language o French. By the end of the class, you will have a good, basic foundation of the language.

## SPANISH - GRADE 6

This class is an introduction to the Spanish language and the cultures that speak this wonderful language. By the end of this class you will have a basic understanding of Spanish words and phrases.

## ENGLISH - GRADE 7

n this course, students continue to develop oral communication skills, become avid readers and independent writers. Students will continue to read a wide variety of fiction nonfiction, and poetry while becoming more analytical. The students read independently for at least thirty minutes a night or appreciation and comprehension. Students write persona narratives, realistic fiction, poetry, persuasive essays, and literary essays. The students increase proficiency in the use of print and electronic information resources and learn ways to give credit to reference sources, distinguishing between nes own ideas and the ideas of others. The student also demonstrates correct use of language, spelling, and and speaking. Students will continue to maintain and add to their writing portfolio.

## SOCIAL STUDIES - GRADE 7

In grade seven, students will study world regions by focusing and exploring Africa, Asia, Australia and Oceania. This larger egion will be then further broken down into smaller sections and students will look in depth at the physical geography, cultures, climate, and the economic and political situation of these locations. Interactions between people and an
"The greatest gifts you can give your children are the roots of responsibility and the wings of independence."

- Denis Waitley

exploration of how geography has affected humanity will facilitate students' understanding as they begin to question history and view it as a living, ever-changing content area. history to prepare students for future Social Studies courses, Stud different topics in history to learn how to publically speak. In addition, various research projects will be implemented to teach critical-thinking and writing skills that will be instrumental as students move through school.


## MATHEMATICS - GRADE 7

This course reviews and extends mathematical concepts and skills learned in previous grades and introduces new content that prepare students for more abstract concepts in algebra and geometry. Students continue to gain proficiency in computations with rational numbers (positive and negative fractions, decimals, and integers). Students will be introduced to the laws of algebra and begin learning how to solve equations with a repeated unknown variable as well as simultaneous equations. Radicals and Pythagorean Theorem will also be discussed. Students will also investigate the geometry of polygons and further study probability and statistics.

## SCIENCE - GRADE 7

Science is a subject based on investigation, research and discovery. These life skills form the foundation of every
specific topic, with a major emphasis on students learning how to think independently, critically analyze information and express their subsequent opinions. The specific topics iclude change, cycles, patterns and relationships in the lving world. Students build on basic principles related to these concepts by exploring the cellular organization and classification of organisms. This leads into an understanding of change and the transmission of genetics through generations. Group-work, directed discussion and a clear understanding of purpose will ensure that students finish this course with well-developed social and emotional intelligence, as well as specific and general knowledge

## ART - GRADE 7

Students will use the elements of art and the principles of design as a framework and explore a variety of experiences and concepts. Using expressive and technical approaches, students investigate and create various two-aimensional and three-dimensional works of art. Students learn to critique artists' meaning, focusing on their use of forms, media, and yymbols. Students develop an increased awareness of the nature of art and of their relationship to it as they explore the meaning and value of works of art as a means of personal and cultural expression

## BAND - GRADE 7

The Music Department provides a performing outlet for motivated and dedicated students interested in becoming
more involved with instrumental music. Class activities will include performing, listening to music from many different styles and time periods, music theory, and sight-reading. Performances will occur periodically throughout the schod year. Students are expected to practice outside of class. Students must have previous experience playing a band instrument, either from grade six band or from playing at a previous school.

## CHOIR - GRADE 7

This is a yearlong course that explores choral music from a wide variety of cultures and time periods through study and performance. The course emphasizes the basics of vocal technique, performance skills, sight-reading, and music theory Students in choir participate in concerts each semester as well as assembly performances throughout the school year.

## PHYSICAL EDUCATION - GRADE 7

Students in this class demonstrate competence in skillful movement in dynamic game situations and in a variety of recreational activities. They transition from modified version of movement to more complex applications across all types of physical activities. Students demonstrate the ability to assume responsibility for guiding their own learning as they apply their knowledge and abilities to create a practice plan to improve performance in a selected game, sport, eational pursuit. They will also demonstrate mature esponsibility as they show respect for others and their safety make reasoned and appropriate choices, resist negative peer pressure and exhibit fair play. Students are able to set goals, track progress and participate in physical activities to improve fitness. They will develop a repertoire of physical abilities and begin to develop competence in specialized versions of ifetime activities.
Students will explore several health topics relevant to their age and social maturity. They will develop an awareness of weight management in their personal lives. Students will dentify the factors related to their weight and body type Dietary habics are uiscussedto

## ARABIC - GRADE 7

Students read and write compositions in Modern Standard Arabic, with a focus on the preliminary study of syntax. Students become more familiar with the more advanced genres of literature as they advance from grade six to grade seven Arabic.

## ARABIC AS A FOREIGN LANGUAGE

 (AFL) - GRADE 7Beginning: The main emphasis is on Modern Standard Arabic A student who successfully completes the first year of MSA can expect to possess aworking competence in reading and in writing Modern Standard Arabic.
as well as lessons in special topics. At the end of the advance and clarity with native speakers.

## FRENCHI - GRADE 7

this course, students begin to develop communicative competence in the language and expand their understanding of the culture(s) of the people who speak the language. Communicative competence is divided into three strands:

Speaking and writing as an interactive process in which students learn to communicate with another speaker of the language.
Listening and reading as a receptive process in which students develop comprehension of the target language Speaking and writing in a presentational context in which students focus on organization of thoughts and awareness of their audience in delivering information.

Students learn to communicate in real-life contexts about topics that are meaningful to them. To develop students' communicative competence, emphasis is placed on use of the target language in the classroom and on use of authentic materials to learn about the culture. Rather than isolating grammar in a separate strand, it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function. Through the language learning process, students develop a greater understanding of the structure of their own language and the unique aspects of their own culture. An important component of learning a modern world language is using the anguage in the real world beyond the classroom setting.

This can be accomplished in a number of ways through integration of technology into the classroom, as technology is an important means of accessing information in the target language and in providing students the opportunity to interact with native speakers of the language

## SPANISHI-GRADE 7

n this course, students begin to develop communicative competence in the target language and expand their understanding of the culture(s) of the people who speak the anguage. Communicative competence is divided into three strands

Speaking and writing as an interactive process in which students learn to communicate with another speaker of the language.
Listening and reading as a receptive process in which students develop comprehension of the target language Speaking and writing in a presentational context in which students focus on organization of thoughts and awareness of their audience in delivering information.

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This can be accomplished in a number of ways through integration of technology into the classroom, as technology s an important means of accessing information in the target language and in providing students the opportunity to interact with native speakers of the language.

## ENGLISH - GRADE 8

The focus of this course is to prepare students for the rigors of all courses in High School in that reading and writing skills are critical elements of all subjects. Key components of the curriculum include writing narrative, persuasive and expository essays, critical thinking, literature and poetry analysis, vocabulary, and grammatical and editing skills. In addition, the course focuses on public speaking to both enhance student confidence and oral English skills. Writing texts are expected to be between 600 to 900 words or more.


Students will earn and practice research skills throughout the year and will be expected to work cooperatively with other students to both research and present a debate topic in an organized and competitive forum. In addition to the genera academic requirements, students are expected to read ndependently each day and to focus on speaking English both in the classroom and in their lives at large to increase skills and more effectively achieve the aims and abilities that will lead them eventually toward their American or IB diploma.

## SOCIAL STUDIES - GRADE 8

This course will explore the historical development of people, places and patterns of life from ancient times until the Roman Republic. Students survey early human history and civilizations, the impact of farming, the development f cities, city-states and kingdoms. Students expand their understanding of history by studying the people and events that ushered in the dawn of the major Western and non Western ancient civilizations. Specific areas of focus include ancient Egypt, ancient China, Ancient India, a cross section of the ancient African kingdoms, Empires of Mesopotamia and the Fertile Crescent, Classical Greece, Hellenistic culture and Rome. Through lectures, readings, discussions, hand on class activities, map projects, and timelines; students will examine the rise and decline of these civilizations throughout antiquity. In addition, various research projects will be mplemented to further comprehend the beliefs, ideas, and technological advancements of the time period so scholars
will have the ability to gain critical-thinking and writing skills that are instrumental in articulating the origins of the modern world.

## MATHEMATICS - GRADE 8

Students focus on symbolic reasoning and calculations with symbols, which are central in algebra. Through the study fleb hare centralin algebra. Trough he stud symbolic language of mathematics. In addition, a student algebra develops algebraic skills and concepts and uses them in solving problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequalities do anaye funcions. Cos pus erning Graphing tilities enhance the understandin ffunctions; they provide a powerfultool for solving and verifying solutions to equations and inequalities as well as rovidin a focus on probability Throughout this course, tudents will be encouraed to talk about mathematics, he lanoue of symbols of mathematics in representations nd communication discuss problems and problem solving nd develop their confidence in mathematics.

## SCIENCE - GRADE 8

h this course students develop an understanding of the scientific process as they survey both physics and chemistry. Students continue to emphasize data analysis and experimentation through hands-on inquiry. The concept f change is explored through the study of transformations of energy and matter. Students focus on integrated topics, which include physical science formulas and basic chemistry concepts. Students will begin to explore the natural scientific laws that guide everyday motion of matter. Science process skills such as observation, classification, inferring hypothesizing, comparing, contrasting, measurement, interpreting data, use of numbers and communication are a key focus throughout the year.

## ART - GRADE 8

Students will explore basic 3D processes and materials in a variety of 3D media. Both traditional (plaster, ceramics) as well as non-traditional (fabric, found objects, etc.) will be emphasized. Students develop technical skills that empower them to communicate ideas visually, with the focus on developing the ability to analyze form and space relationships. Students will be encouraged to develop concepts, work through ideas, to experiment, embrace risks, and to lean from failures in the design process. Students will emphasize art making as an ongoing process that involves the student in informal and critical decision-making. Originality, effort, and creativity will be emphasized.

## BAND - GRADE 8

In this course, students who have previously participated in music may choose to continue in band. This class is designed for students to continue their musical growth. Instruction builds upon and reinforces fundamental skills learned previously. This course is also considered a pre-requisite for
students wishing to be in the band at the High School level. Students perform periodically throughout the school year Students instrument, either from grade seven band or from playing at a previous school.

## CHOIR - GRADE 8

This is a yearlong course that explores choral music from wide variety of cultures and time periods through study and performance. The course emphasizes the basics of ocal technique, performances skills, sight-reading, and music theory. Students in choir participate in concerts each semester as well as assembly performances throughout the school year.

## PHYSICAL EDUCATION - GRADE 8

Students in this course demonstrate competence in skillfu movement in dynamic game situations and in a variety of recreational activities. They transition from modified versions f movement to more complex applications across all types of physical activities. Students demonstrate the ability to assume responsibility for guiding their own learning as they apply their knowledge and abilities to create a practice plan to improve performance in a selected game, sport, or recreational pursuit. They wili also demonstrate mature esponsibility as they show respect for others and their safety, make reasoned and appropriate choices, resist negative peer pressure and exhibit fair play. Students are able to set goals, track progress and participate in physical activities to improve fitness. They will develop a repertoire of physical abilities and begin to develop competence in specialized versions of ifetime activities.
Students will explore several health topics relevant to their ge and social maturity. They will develop an awareness of stress on their personal lives. They will know the difference between positive and negative stressors, either using it to work for positive change or to take steps to reduce stress in heir lives and lessening the effects onone's health. Student will gain an understanding of how diseases are transmitted and how to take precautions to avoid illness.

## ARABIC - GRADE 8

his class represents a progression from grade seven Arabic. Students read and write compositions in modern Standard Arabic, with a focus on the preliminary study of syntax. heir verbu with the more advanced genres of literature as they advance.

## ARABIC AS A FOREIGN LANGUAGE (AFL) - GRADE 8

Beginning: The main emphasis is on Modern Standard Arabic A student who successfully completes the first year of MSA can expect to possess a working competence in reading and in writing Modern Standard Arabic.


Advanced: This course includes advanced reading and writing as well as lectures in special topics. At the end of he advanced course students should also be able to communicate with ease and clarity with native speakers.

## FRENCHI- GRADE 8

In this course, students begin to develop communicative competence in the target language and expand their understanding of the culture(s) of the people who speak the anguage. Communicative competence is divided into three strands:
speaking and writing as an interactive process in which students learn to communicate with another speaker of the language
Listening and reading as a receptive process in which students develop comprehension of the target language Speaking and writing in a presentational context
which students focus on organization of thoughts and wareness of their audience in delivering information. Students learn to communicate in real-life contexts about topics that are meaningful to them. To develop students' communicative competence, emphasis is placed on use of he target language in the classroom and on use of authentic materials to learn about the culture. Rather than isolating
rammar in a separate strand it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function.

Through the language learning process, students develop a greater understanding of the structure of their own language and the unique aspects of their own culture. An important component of learning a modern world language is using the anguage in the real world beyond the classroom setting.

This can be accomplished in a number of ways through integration of technology into the classroom, as technology s an important means of accessing information in the arget language and in providing students the opportunity to interact with native speakers of the language.

## FRENCH II - GRADE 8

n this course, students continue to develop their communicative competence by interacting orally and understanding oral and written messages in the language, and making oral and written presentations in the language Students begin to show a greater level of accuracy when using basic language structures, and they are exposed to more complex features of the language. Students continue to focus on communicating about their immediate world and daily activities. Students read material on familiar topics and write short, directed compositions. Emphasis continues to
be placed on use of the target language in the classroom as well as on use of authentic materials to learn about the target culture(s).

## SPANISHI-GRADE 8

this course, students begin to develop communicative competence in the target language and expand thei understanding of the culture(s) of the people who speak the anguage Communicative competence is divided into three strands:

Speaking and writing as an interactive process in which students learn to communicate with another speaker of the language
Listening and reading as a receptive process in which students develop comprehension of the target language Speaking and writing in a presentational context
in which students focus on organization of thoughts and awareness of their audience in delivering information Students learn to communicate in real-life contexts about topics that are meaningful to them. To develop students communicative competence, emphasis is placed on use of the target language in the classroom and on use of authentic materials to learn about the culture. Rather than isolating grammar in a separate strand, it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function.

Through the language learning process, students develop a greater understanding of the structure of their own language and the unique aspects of their own culture. An important component of learning a modern world language is using the language in the real world beyond the classroom setting.
This can be accomplished in a number of ways through integration of technology into the classroom, as technology s an important means of accessing information in the target language and in providing students the opportunity to interact with native speakers of the language.

## SPANISH II - GRADE 8

n this course, students continue to develop their ommunicative competence by interacting orally and in writing with other speakers of the target language, understanding oral and written messages in the language, and making oral and written presentations in the language. Students begin to show a greater level of accuracy when using basic language structures, and they are exposed to more complex features of the language.

Students continue to focus on communicating about their mmediate world and dally activities. Students read materia on familiar topics and write short, directed compositions. mphasis continues to be placed on use of the target language in the classroom as well as on use of authentic materials to learn about the target culture(s).

## HIGH <br> SCHOOL

## Program Overview

Students in the High School celebrate the responsibility of keen inquiry. The atmosphere is wonderfully academic, vibrant with insight. We do not ask students to simply take a formula or a procedure and regurgitate it in different contexts. We encourage them to wrestle with underlying concepts and see how complex ideas function. This curiosity spans classrooms, stages, laboratories, and playing fields. Through small close relationships among teachers, students, and their families, we forge genuine collaboration. We emphasize partnership, to nurture the capacity to respect ourselves and each other as independent, engaged, and virtuous citizens who recognize the essential interdependence of all members of the community, from neighborhood and city to nation hemisphere, and world.

Performing arts during the day, rich and varied extracurricular offerings, and community programs also contribute to Dunecrest American School's unique tapestry. Opportunitie bound to explore, strengthen, a de cuivate Yuerous interests and peer relationships. We encourage students to aketo Excelle ince in Eduction, woventhr You who and months as hardwork and moraldistinction comeal through critical thinking and compassion for one another.

The entire High School comes together regularly for community time. These gatherings offer performances insights, and ideas, presented as often by students as ousts and faculty. In these gatherings, we grasp and discuss topics we face within our school walls, in our city, our nation, and the world. They are times to fuse individual and communal strength and understanding.
Our graduating Seniors will possess the qualities of:
Openness to new ideas
The ability to think well and act wisely
Faith in the human condition
A sense of purpose

## ACADEMIC PROGRAM

The High School runs on a semester system. Courses meet for a full year and are worth one credit.

## GRADUATION REQUIREMENTS FOR AMERICAN DIPLOMA PROGRAM

4 credits of English: English 9, English 10, English 11, English 12
4 credits of history: World History I, World History II, U.S. History, Business Studies
4 credits of mathematics: Integrated Math I, Integrated Math II, Math Studies, Calculus
4 credits of science: Biology, Physical Science, Chemistry Physics
2 credits of an Additional Language: Arabic, Arabic as a Foreign Language, French, Spanish


4 credits of Arabic for Arab Nationals
1 credit of Visual or Performing arts
2 credits of Physical Education

## IB DIPLOMA PROGRAM

International Baccalaureate (IB) is a challenging program and universities around the world recognize the value of the $B$ diploma and the academic depth, breadth, and rigor it represents. IB works to develop the whole student along with academic excellence. Hence, IB has become recognized as one of the strongest educational experiences available in secondary education today.

The Diploma Program prepares students for effective participation in a rapidly evolving and increasingly global society as they:

Develop physically, intellectually, emotionally and ethically Acquire breadth and depth of knowledge and understanding, studying courses from six subject groups. Develop the skills and a positive attitude toward learning that will prepare them for higher education. Study at least two languages and increase understanding of cultures, including their own.
Make connections across traditional academic disciplines
and explore the nature of knowledge through the program's unique theory of knowledge course. Undertake in-depth research into an area of interest through the lens of one or more academic disciplines in the extended essay.
Enhance their personal and interpersonal development through creativity, action and service.

## AUTHORIZATION AND RECOGNITION

Only schools officially authorized by the IB may offer the Diploma Programme and register candidates for an IB examination session. There are over 2,450 IB World Schools offering the Diploma Programme in more than 140 countries. The IB has shown that students are well prepared for university work and the Diploma Programme has earned a eputation for rigorous assessment, giving IB diploma holders access to the world's leading universities. These include istitutions such as Cambridge, Harvard, Heidelberg, McGill, MIT, Oxford, Princeton, Rotterdam Erasmus, Sorbonne, UBC and Yale.

## IB MISSION STATEMENT

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural
understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.


## EXTENDED ESSAY

The extended essay of some 4,000 words offers the opportunity for IB students to investigate a topic of special interest related to one of the student's six Diploma Programme (DP) subjects/disciplines. The world studies extended essay provides students with the opportunity to carry out an in-depth interdisciplinary study of an issue of contemporary global significance, utilizing two IB diploma disciplines. Both types of extended essay (single-disciplinary and interdisciplinary essays) are intended to promote high-level research and writing skills, intellectual discovery and creativity expected at university studies. They provide students with an opportunity to engage in personal research na topic of their own choice, under the guidance of a supervisor (a teacher in the school). This leads to a major piece of formaly presented, structured wing, in whichiceas mane ge it is manner, appropiace the subject rissue choser. It is written essay with a short concluding interview with the upervisor countries where interviews are requred prior superisor In coun he extended essay has proved to be a valuble stimulus for discussion.

## THEORY OF KNOWLEDGE (TOK)

TOK plays a special role in the Diploma Programme by providing an opportunity for students to reflect on the nature of knowledge, and on how we know what we claim to know.

The fundamental question of TOK is "how do we know that?" Students are encouraged to think about how knowledge is common and the differences between the disciplinary.

OK therefore both supports and is supported by the study of other DP subjects, as students are required to explore knowledge questions against the backdrop of their experiences in their other DP subjects. Discussion and critica
around discussions of questions such as:

What counts as evidence for $X$ ?
What makes a good explanation in subject $Y$ ?

- How do we judge which is the best model of Z?

How can we be sure of W?
What does theory T mean in the real world?
How do we know whether it is right to do S?
Through discussions of these types of questions, students gain greater awareness of their personal and ideologica assumptions, as well as developing an appreciation of the diversity and richness of cultural perspectives. The TOK course is assessed through an oral presentation and a 1600 word essay.

The TOK presentation assesses the ability of the student to apply TOK thinking to a real - life situation, while the TOK essay takes a more conceptual starting point; for example, asking students to discuss the claim that the methodologies used to produce knowledge depend on the use to which that knowledge will be used.

OK is a demanding and challenging course, but one which plays a crucial role in effectively preparing students for the complex and rapidly changing world they will encounter both during their DP experience and beyond.

## CREATIVITY, ACTIVITY, SERVICE (CAS)

CAS enables students to live the IB learner profile in real and practical ways, to grow as unique individuals and to recognize strandation to others. CAS is organized around

Creativity-arts and other experiences that involve creative thinking
Activity-physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the IB Diploma Programme.
Service-an unpaid and voluntary exchange that has a learning benefit for the student.

Students develop skills and attitudes through a variety of ndividual and group activities that provide students with opportunities to express their passions, personalities and perspectives. CAS complements a challenging academic programme in a holistic way, providing opportunities for
self-determination, collaboration accomplishment and self-determination, collaboration, accomplishment and enjoyment.

Students are also required to undertake a CAS Project that challenges students to show initiative, demonstrate perseverance, and develop skills such as those of collaboration, problem solving, and decision making.

## INTERNATIONALLY RECOGNIZED STANDARDS

The IB diploma Program is widely recognized for its high academic standards. Assessment is varied and takes place over two years, with final examinations in each subject. Student work is assessed by an international board of examiners who are themselves rigorously trained and monitored by the International Baccalaureate Organization (IBO).

## IBO LEARNER PROFILE

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.

## NQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.


## KNOWLEDGEABLE

ake resritical and creative thinking skills to analyze and nitiative in making reasoned, ethical decisions.

## HINKERS

We use critical and creative thinking skills to analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

## COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, istening carefuly to the perspectives of other individuals and groups.

## PRINCIPLED

e act with integrity and honesty, with a strong sense of airness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

## OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience

## CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

## RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change

## BALANCED

We understand the importance of balancing different aspects of our lives intellectual, physical, and emotional to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

## REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses.

## HIGH SCHOOL COURSE OFFERINGS

 ENGLISHIthe English program, we strive to make our students effective and empathetic communicators through reading, discussion and analysis of literature, and cultivation of strong writing skills. Students have practice in the major forms of writing; these forms and structures are revisited each year, but with the expectation that students will show greater and greater mastery. By exposing students to a wide array of authors from different backgrounds and eras, we encourage them to address and react to new ideas and build on existing knowledge. Likewise, in developing students' analytical, creative and personal writing skills, we help them to express heir thoughts and feelings about the topics they address in class, and more broadly, about the world they encounter.

The heart of the English program, like the heart of Dunecrest American School itself, is the conversation between students American School itself, is the conversation between students and facuty, in which we support, push

## ENGLISH - GRADE 9

Students in grade nine identify and explain literary terms in their own writing and in their analysis of significant literary works. Students meet increased requirements for research and use print, electronic databases, online resources, and MLA style to cite reference sources. Students also distinguish between reliable and questionable Internet sources. Students read and analyze a wide variety of literary genres such as short stories, novels, plays and epics.

In addition, students demonstrate correct use of language, spelling, and mechanics by applying grammatical convention in both writing and speaking. By the end of grade nine English students should be confident in writing 800-1,000 word essays.

## ENGLISH - GRADE 10

Tenth grade English focuses on non-European world literature. Tenth-grade students read and analyze literary exts from a variety of cultures such as the Middle East. Asia, Africa and Latin America. Students also study the important work of authors, poets, and playwrights of various historical periods and critique their works, using analysis to improve writing skills. Students continue to build research skills by crediting sources and presenting information in correct manuscript (MLA) format appropriate for content. Grade ten English students write or deliver increasingly sophisticated esearch reports. Knowledge of Standard English convention icluding grammar and mechanics of writing is expanded as he student presents, writes, and edits materials, applying the conventions of language. By the end of grade ten, students should be able to write essays of 1,000-1,500 words in length

## ENGLISH - GRADE 11

grade eleven students focus on analyzing the historical genres and literary traditions of American literature. The survey of both classic and contemporary American literature enhances the student's appreciation for the major themes and characterizations, which are reflective of the history and cuture in American literature. Students are able to make and nalyze informative and persuasive oral pre the effectiveness of delivery. Grammar development continues throughout the course with the application of rules for sentence formation, usage, spelling, and mechanics. The student develops native and persuasive compositions by locating, valuating, synthesizing, and citing applicable information ith careful attention to organization and accuracy. By the , grade eleven English, students should be co udience and purpose for the specific piece of writing

## IBH/SL ENGLISH A LANGUAGE AND LITERATURE

his course focuses on the study of a variety of texts produced in English. These texts are central to an active engagement with English and English-speaking cultures and to how we see and understand the world in which we ive. IBH/S English A Language and Literature course aims o develop skills of textual analysis and the understanding that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturallydetermined reading practices. IBH/S English A Language and Literature recognizes that Diploma Program students may have complex language profiles and may need opportunities o study English without solely focusing on English iterature.

## IBH/SL ENGLISH A LITERATURE

This course is built on the assumption that literature is concerned with our conceptions, interpretations and experiences of the world. Literature enables an exploration of one of the more enduring fields of human creativity and provides opportunities for encouraging independent, original critical and clear thinking.


## ENGLISH - GRADE 12

Grade twelve English focuses on British and European literature. Twelfth-grade students also use organizational skills, audience awareness, appropriate vocabulary and grammar, and both verbal and nonverbal presentation skills to plan and deliver effective oral presentations. Writing includes the production of expository papers, which are organized ogically and contain clear and accurate ideas supported by evidence. Students demonstrate advanced knowledge of grammatical conventions through writing, editing, and speaking. By the end of grade twelve English, students should e comforable writing a 2,000-wordresearch paper using MLA format.

## SOCIAL STUDIES

Social Studies is a way of seeking the truth, based on charting the distance between past and present. Social Studies courses introduce students to this way of thinking and nowing and try to make the process of discovery central. tudies courses encourage students to enerate their sown res courses his skill is best witino All courses require a sigificant number of student essays based on the use of primary sources.

## WORLD HISTORY - GRADE 9

This course is uniquely designed to cover the history of the world from the fall of the Roman Empire to the beginning of the 19th century CE. Students will investigate the foci of power throughout the globe and examine how and why powe has shifted. The main subject area is history, but geographic, economic, religious, technological advancements, and cultural themes will also be thoroughly examined.

The primary content of the course will deal with the expansion of Eastern and Western civilizations, and the connections between them. Topics will range from the yzantine and Islamic Empires, Mongols, indigenous cultures and Europe. The European theme of the course will explore the Middle Ages, the Renaissance, Protestant Reformation, nd the Ages oxploration, Enlightenment, Absolutism and subsequent Revolutions.

Through lectures, readings, discussions, hands-on class activities, map projects, and timelines; students will study the influence that these eras have on our modern world. In ddition, various research projects will be implemented to eridso scholas will have the tity to analytical, critical-thinking and writing skills.
"Study the past if you would define the future." - Confucius

## MODERN WORLD HISTORY -

 GRADE 10This course is uniquely designed to study the major themes that occurred in history throughout the 19th and 20th centuries, including the impact of nationalism and imperialism. In addition, students investigate the causes and effects of twentieth century conflicts, including the First and Second World Wars, the Cold War, and the changing hature of warfare. Special emphasis is also placed on the emergence and ideologies of single party states in Germany,
Italy, the Soviet Union, and China Students also examine the Italy, the Soviet Union, and China. Students also examine the phenomena of economic interdependence, human impact on the environment, terrorism, and globalization in the postWWII period. Through lectures, readings, discussions, hands on class activities, map projects, and timelines; students will understand the historical interconnectedness of our moder worl. Senolars of Modern wistory walyze primary documens, and int writing skills that will assist in preparation for the Internationa Baccalaureate programme

## IB GLOBAL POLITICS

This course is a dynamic and stimulating subject that draws on a variety of disciplines in the social sciences and humanities. The global politics course helps students to understand abstract political concepts by grounding them in real world examples and case studies. The course also invites comparison between such examples and case studies to ensure a transnational perspective.

Developing international mindedness and an awareness of multiple perspectives is at the heart of this course. It encourages dialogue and debate, nurturing the capacity to iterpret competing and contestable claims. All students will tudy the core topics: Power, sovereignty and international lations, Human rights, Development and Peace and conflict Higher level students also examine two contemporary global political challenges, through a case studies approach

## UNITED STATES HISTORY

Students survey American history from the colonial period to the present with nation building as a guiding theme. Students will examine long-term changes in the American political and economic systems as well as cultural themes. Special emphasis is placed on the evolving role of the United States in world affairs, particularly during the 20th century.

## IBHL/SL BUSINESS MANAGEMENT

Business management is a rigorous, challenging and dynamic discipline in the individuals and societies subject group. Although business management shares many skills and areas of knowledge with other humanities and social sciences, tt is distinct in a number of ways. For example, business management is the study of decision-making within an organization, whereas economics is the study of scarcity and resource allocation, both on micro and macro levels. Business management examines the use of information technology in business contexts, whereas information technology in a global society (ITGS) critically examines its impact on other fields, such as health and government.

Business management studies business functions. management processes and decision-making in contemporary contexts of strategic uncertainty. It examines now business decisions are influenced by factors internal and upon its stakeholders, both internally and externally. Business management also explores how individuals and groups interact within an organization, how they may be successfully managed and how they can ethically optimize the use of esources in a world with increasing scarcity and concern for sustainability.

Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course, as this integration promotes a holistic
overview of business management. Through the exploration six concepts underpinning the subject (change, culture, ethics, globalization, innovation and strategy), the business management course allows students to develop their understanding of interdisciplinary concepts from a business

MATHEMATICS
The goal of the High School Mathematics curriculum is to help students gain knowledge of mathematical principles, develop critical and logical as well as creative and flexible reasoning skills; learn to work well with others and by themselves; and come to appreciate the beauty and power of mathematics, both in the abstract and in its applications to real-world situations. Through our program, we hope to develop habits of mind for life-long learning. Our pedagogy incorporates a problem-based approach that allows students to explore mathematics in a dynamic way by creating a classroom environment in which students are expected to participate actively, think creatively, communicate effectively, earn from mistakes, and take risks. Students become not only better mathematicians, but also more creative and confident learners, communicators, collaborators, and problem-solvers. During a typical class, after student's present solutions to the assigned problems, their classmates contribute to the ensuing discussion with ideas, corrections, and alternative solutions. The teacher guides, shifts, directs, summarizes, and synthesizes. The teacher's skillful facilitation
discussion, strategic questioning, and modeling of pproaches to problem-solving help to clarify concepts and nd structures that students should master by year's end. Students organize content in notebooks that becom When students are experiencing difficulties, teachers actively encourage them to seek their guidance outside of class.

## INTEGRATED MATH I

This course focuses on increasing students' complete mathematical understanding as they work with:

Algebra: Algebraic operations, Indices, Sets and Venn Diagrams, Algebraic Expansion, Factorization, Laws of Algebra, Radical, Equations and problem solving. Geometry: Coordinate Geometry, Congruence and Similarity and Pythagoras.
Statistics: Probability, types of data, Standard deviation and the normal Distribution

## INTEGRATED MATH II

This is the final course in the High School Integrated Math series. With this course, students further explore quadratic functions and extend learning to polynomial functions. Students will work with a graphing calculator.


The course will include the following topics: Algebra: Indices, Sets and Venn Diagrams, Algebraic Expansion and Factorization, Radicals and surds, System of Equations, Exponential functions and Logarithms, vectors and problem solving.
Geometry: Congruence and Similarity and Pythagoras' theorem.
Trigonometry: Trigonometric ratios, the area of triangle, the sine rule and the cosine rule
Statistics: Probability, types of data, box-and-whisker plots.

## IB SL MATHEMATICAL STUDIES

This course is designed to provide a realistic mathematics course for students with varied backgrounds and abilities. The skills needed to cope with the mathematical demands of a technological society are developed and emphasis is placed on the application of mathematics to real-life situations. A substantial piece of personal research, in the form of a project, is required. Students likely to pursue advanced study in mathematics or the sciences are advised to consider IBH Mathematics or IB Mathematics Standard Level.

## CALCULUS

Students enrolled in Calculus are presented with the same evel of depth and rigor as entry-level college and university calculus courses. This course is intended for students who have a thorough knowledge of analytic geometry and elementary functions in addition to algebra, geometry, and trigonometry. The Calculus course outlines a complete curriculum in one-variable calculus. Calculus is a widely applied area of mathematics and involves an intrinsic theory Students mastering this content will be exposed to both aspects of the subject.

## IB HL MATHEMATICS

his course is designed for students with competence and a good background in mathematics and who can cope successfully with a heavy workload. Some students choose to study the subject because they have a genuine interest in mathematics and enjoy meeting its challenges and problems, and others because they need mathematics fo further studies in this subject or related subjects such as hysics, engineering, and technology at university. The first ear focuses on fundamental mathematics, e.g. algebra, sequences and series, trigonometry, complex numbers, functions, vectors, matrices, statistics, and calculus.

## IB SL MATHEMATICS

This course is designed to provide a background of mathematical thought and reasonable level of technical ability for those students not wishing to take IB Higher Level Math. It is intended to provide a sound mathematical basis or students planning to pursue further studies in such fields as chemistry, economics, geography and business administration. It is a demanding program requiring some background knowledge asit contains a variety of topics including functions, vectors, calculus and statistics.

## SCIENCE

The Science Department works to ensure that all students understand how science influences their lives and to enable hem to use their knowledge of science and its methods in uture problem-solving and decision-making. Through forma instruction, class discussion, and laboratory investigation we seek to cultivate a lifelong curiosity about the world. Throughout the courses, we stress observation critical nalysis, and experimental design We employ and advance our student's skills extensively in mathematics, writing and computer use. For students with special interest and ability science the department offers a challenging and diverse selection of advanced courses.

## BIOLOGY

Students enrolled in Biology focus on the study of living organisms and their environments. As well, students study opics that include cellular functions and structure at the espiration, photosynthesis and genetics. Students also explore topics such as viral replication, biotechnology, genetic engineering, ethics and stem cell research and the human body.

Emphasis continues to be placed on the skills necessary to examine alternative scientific explanations, conduct controlled experiments, analyze and communicate information, and gather and use information in scientific iterature. The history of biological thought and the evidence hat supports it are explored, providing the foundation for ivestigating biochemical life processes, cellular organization mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. The mportance of scientific research that validates or challenges deas is emphasized at this leve

## B SL BIOLOGY

This course gives students a well-rounded, in-depth biological education, which challenges their scientific nowledge, skills, and thinking. The curriculum concentrates on the following areas. cell biology, molecular biology genetics, ecology, evolution and biodiversity, and human physiology. The goals of this program are achieved through aboratory investigations, lectures and research. Students who plan to enter college or university find this program beneficial.

## B HL BIOLOGY

This course expands and builds upon the biological foundation. It should be viewed as a course that increases the scope of biological knowledge illustrating the interdependence of all living organisms on Earth. This course allows the students more freedom for investigations based on personal interests. The curriculum concentrates on the following areas: nucleic acids, metabolism, cell respiration and photosynthesis, plant biology, genetics, evolution and animal physiology. Students planning to enter the fields of medicine, agriculture, environmental sciences, blochemistry or biology find this course to be valuable.


## PHYSICAL SCIENCE

Physical Science is an introduction to the conceptua foundations of both Physics and Chemistry. This course is lesioned to You will be studying motion, work, force, matter and energy in Physics. In Chemistry, you will be studying how atoms interact to form various substances, as well as the periodic able physical and chemical changes, temperature and heat This course will involve problem solving as well as design, data ollection and analysis during experimentation Students will earn to write formal lab reports.

## CHEMISTRY

This is a college preparatory course in which students study all major topics in chemistry, including the study of matter, energy, the structure of the atom, stoichiometry, gas behavior, thermodynamics, and acid/base theory. Students will utilize their algebraic skills while examining mathematical properties of chemical reactions while gaining conceptual understandings of chemical systems. Students participate a variety of labs and demonstrations to gain a thorough nowledge of chemistry. Chemistry emphasizes qualitative and quantitative study of substances and the changes hat occur in them, use of safety procedures and sound lab technique, and technology where feasible. Students
re encouraged to use the language of chemistry, discuss problem-solving techniques, and communicate effectively in the lab and classroom.

## B HL/SL CHEMISTRY

his course is a rigorous two-year program to prepare students to pursue scientific studies at the university level. Students are exposed to a wide variety of factual knowledge, nd at the same time the application of this knowledge to eal world problems and situations are stressed. Students develop their ability to think in an abstract manner in order to articet new problems. In addition to theory, students also the first yate in extensive laboratory work. Topics studied in nendst year lay groundwork for the course. atomic theory, Additionally, students will spend time on laboratory practical work, including a significant personal research project and the cross-disciplinary Group 4 project.

Ine second year of B Chemistry, students extend and expand their understanding of the nature of molecular chemistry. Students deal with topics of a more theoretical nature than in first year such as: chemical kinetics, chemica equilibrium, thermodynamics and thermo chemistry as well as acid/base theory and electrochemistry. While finishing heir laboratory practical requirements, students also have the opportunity to study several optional units.

## "The good thing <br> about science is that it's true whether or not you believe in it." - Neil deGrasse Tyson

## PHYSICS

Physics is a class intended for students who have a curiosity about the physical world in which you live. Emphasis is placed on the concepts of energy, energy transfer, and energy conservation. Topics will include astrophysics, motion, mechanics, heat, fluids, sound, light, electricity and magnetism, and nuclear physics. Physics students will develop their problem-solving skills, though the emphasis will be on qualitative rather than fully quantitative solutions. Even so, a sound understanding of algebra and trigonometry is necessary to being successful in this class.

## IB HL/SL PHYSICS

Physics is the most fundamental of the experimental sciences, encompassing everything from the smallest particles known to man to the vastness of the known universe. IB H/S Physics is a comprehensive 2-year program overing various forms of physical energies and their pplication in everyday life. Topics mechanics, heat oscillations and was, ectricty and magnetism, nuclear physics, quantum physics, and energy production.

Optional fields of study will include relativity, astrophysics, engineering physics, and digital imaging.
Physics is a strong mathematical science in which problem solving is critically important. Accordingly, students will spend a significant amount of classroom time doing in-class problem solving, complemented by outside homework assignments. Additionally, students will spend approximately ne-fifth of their time on laboratory practical work, including a significant personal research project and the crossdisciplinary Group 4 project.

Students will work together to develop a strong sense of eamwork over the two years of the program. They will also develop a solid skill for independent study and a logical, confident approach to problem solving.

## LANGUAGES

## WORLD LANGUAGE

The World Languages Department considers the study and acquisition of language to be a gateway to understanding ther cultures. At all levels, teachers aim to instill enthusiasm or the target language, inspiring learners to advance their ability to communicate effectively in the target language. This goal is achieved through diverse activities and tasks designed to develop students' interpersonal communication interpretative expertise, and presentation skills. The World Language program is grounded in communicative activities, exposure to authentic texts, use of a wide range the grammar of the target language. Students learn about the history, customs, and values of the people and countries f the target language. and thus make comparisons to their wn culture and language. As students' progress through the program, they engage in even more complex analysis of increasingly sophisticated literary texts. The ultimate goal of the department is to provide students with both a command f the language and an understanding of other cultures hat will enable them to become more knowledgeable and engaged global citizens.

## ARABIC AS A FOREIGN LANGUAGE

There are three levels of Arabic as a Foreign Language (AFL) Students in these courses are non-native speakers and may be admitted to the appropriate level based on a placement test as well as previous knowledge of Arabic
Beginning Level: Students engage in conversational Arabic and begin to write in Arabic.
termediate Level: Students must have either AFL Beginning or the equivalent. Students continue to build their proficiency ,
Advanced Level. This course includes advanced reading and writing as well as lectures in special topics. At the end of the dvanced course, students should be able to communicate with ease and clarity with native speakers.

IB HL/SL ARABIC A LANGUAGE AND LITERATURE

This course stems from the study of texts produced in Arabic. These texts are central to an active engagement with Arabic and Arabic-speaking cultures and to how we see and understand the world in which we live. IBH/S Arabic A Language and Literature course aims to develop skills of textual analysis and the understanding that texts, both iterary and non-literary, can be seen as autonomous ye simultaneously related to culturally determined reading practices. IBH/S Arabic A Language and Literature recognizes that Diploma Program students may have complex language profiles and may need opportunities to study Arabic without solely focusing on Arabic literature

## IB HL ARABIC B

This is a course that strives to improve both oral and written communication skills. The aim is to prepare the student to use a high standard of Arabic in many situations and contexts. Students demonstrate variety in their use of spoken and
written language. They also demonstrate an appreciation written language. They also demonstrate an appreciation of
the different perspectives of people from other cultures. The program meets the needs of IB students who have already studied Arabic for between two and five years.

## B ARABIC AB INITIO

This is an Arabic language learning program designed to be studied over two years at the standard level by students who have had no or very little previous experience of learning the language. This program fulfills the foreign language equirement for the IB Diploma.

## FRENCH I

This course focuses on students beginning to develop their ability to communicate in French and their understanding of the culture of francophone countries through speaking, istening, reading and writing. Students will earn to communicate in real-life contexts about topics that are meaningful to them. Rather than isolating grammar in a separate strand, it is integrated into instruction according o the vocabulary and structures needed in the various situations in which students are required to function

## FRENCH II

n this course students continue to develop their proficiency in reading, listening, speaking and writing. They are able to understand oral and written short messages in French and are able to make simple oral and written presentation on topics studied in class. They continue to focus on communicating about their immediate daily life activities.

## FRENCH III

n this course students continue to develop their proficiency in reading, listening, speaking and writing. They are able to interact with other speakers of French. They also can use more complex structures in French on a variety of topics moving gradually from concrete to more abstract concepts.

## FRENCHIV

n this course students are able to exchange and support opinions on more complex topics in French. They comprehend spoken and written texts from a variety f authentic sources as well as produce compositions containing well-developed ideas on various topics. They also are able to compare and contrast cultural elements of francophone countries with their own.

## B SL/HL FRENCH

The IB French program is designed to teach French as a second language over a two-year period. This two-year course fulfills the second language requirement for the speakers and writers and prepares the student to use French appropriately in a range of situations and contexts and for a variety of purposes. The program meets the needs of IB tudents who have already studied French for between four and six years.

## IB FRENCH AB INITIO

This is a French language learning program designed to be studied over two years at the standard level by students who have had no or very little previous experience of learning he language. This program fulfills the foreign language equirement for the IB Diploma. Students who take IB French ab initio must be enrolled as full IB diploma students.

## SPANISHI

This is a rigorous beginning course in which students study basic grammatical concepts and learn to comprehend and express themselves in the present, past, and near future enses. Emphasis is placed on communication for everyday situations and on correct pronunciation/phonetics. Students work on writing through the composition of short personal essays and stories and are introduced to Hispanic cultures through films, stories, poems, and songs.

## SPANISH II

Students will learn how to speak, write, listen and read about the two main themes of this course: their daily routines and their free time. This will introduce them to new grammar opics like the past tense. Students will be able to do small presentations about the topics treated in class. They will also continue to develop their abilities to communicate in Spanish using a diverse vocabulary for topics that they learned before.

## SPANISH III

In this class students will continue to improve in the areas of listening, speaking, reading and writing. This course introduces more complex grammatical structures and more dvanced vocabulary in topics previously studied as well as new topics. They will be able to produce more complex writing and presentations. Upon completion students should be able to comprehend and respond with increasing proficiency to written and spoken Spanish and should be able to demonstrate further cultural awareness.

## SPANISHIV

This course offers an introduction to Spanish Civilization and an introduction to the social, political and cultural history of Spain and Latin American countries,

## IB SPANISH AB INITIO

This course is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respec for cultural diversity. The Spanish ab Initio course develops students' linguistic abilities through the development of receptive, productive and interactive skills by providing them opportunities to respond and interact appropriately in a defined range of everyday situations. The course's focus is on subjects like daily routine, food, transportation, health, vacations, traveling and many aspects of the Spanish and
Latin American culture. Latin American culture.

## TECHNOLOGY SPORTS <br> ARTS

## COMPUTER SCIENCE

Computer Science courses aim to engage students in the creative use of computing technology. Technology has given artists of all disciplines new tools for creative expression.

Digital Storytelling will introduce you to a collection of popular di, ital storytelling tools used by photographers interactive esigers, writers, and videographers You will investigate how digital technologies have all owed artists to easily integrate graltivity non-linear narrative structures, repetition automation, and randomness into their creative output project-based course will guide you to create of a collection of digital art projects and teach you how to create an online portfolio to showcase the artwork you've created.

At the same time, you'll develop a strong foundation in key Computer Science concepts. Digital Storytelling provides students a fun, arts-focused introduction to the Storytelling, maging, Animation, Video, and Media Computation skills that are important for creating and manipulating a wide-range of digital media. Students also learn how to translate their ideas into a language that a machine can understand. Designed as an accessible and engaging introduction uses the graphics-oriented Processing programming language to teach students how to think programmatically.

Students explore important topics in computational thinking as they create colorful and interactive portfolio-style programming projects. Each project connects Computer Science to another subject so that students not only learn now to program, but also how they might apply those skills in other disciplines. This is a project-based academic course time for projects and labs. However, occasionally projects will require time spent programming outside of class. Some projects are completed in pairs or in teams, and students are expected to collaborate effectively on those projects; several group projects will also involve class presentations.

COMPUTER PROGRAMMING AND ROBOTICS

This course is designed to introduce the concepts of computer programming using Java, focusing on developing the student's analytical thinking and problem-solving skills and techniques. An extensive stuay of robotics will e undertaken using Carnegie Mellon Robotics Academy software in connection with Lego Mindstorms robotic equipment. The history of programming, the study of various programming languages and the impact they have on the development of technology in business, the Internet and computer games. By the end of the course the student is expected to

Use the algorithmic approach to solve problems. Explore concepts of object-oriented programming. Use program applications and applets producing both text and graphic output, extensively.
Solve problems that involve branching, looping, file input and output, and arrays.
Understand classes and methods supporting OOP

Translate solutions into computer programs using Java through the IDE JCreator.

## WEB AUTHORING AND DESIGN

Students will gain experience in web site design and development. Students learn HTML and Adobe Dreamweaver, Photoshop and Flash. Skills include basic and intermediate HTML (Hyper Text Markup Language), graphic design, file format management, animated GIFs, Flash/HTML integration, page frames/layers, Java-script integration, project/time management, and digital image manipulation with Adobe Photoshop.

This course requires students to manage time and to use inter-personal skills. One outcome of this course is the creation of specialized web pages for projects and events. Emphasis is placed on the production of professional looking web pages, which display a proper balance of text, graphics, sound and video clips. By the end of the course, the student is expected to:
Define, discuss, and understand some of the advanced concepts of computers.
Understand the concepts of web page design using HTML and Macromedia Dreamweaver.
Demonstrate knowledge of the principles of web page design and apply that knowledge when developing or evaluating web pages
Understand the concepts of image creation and editing.
Use the appropriate procedure when planning a web site for development.

## DIGITAL MEDIA PRODUCTION

This course is an introduction to the processes and production techniques for developing digital media content. This is a team-oriented class, where students work together, to complete high quality video productions. You will be graded on individual work assignments and have the opportunity to shoot and edit video productions. Students wili be required to demonstrate competency in camera operation, script writing, storyboarding, audio recording and video editing.

Students will have the opportunity to create video projects on variety of subjects. By the end of the course, the student is expected to

Demonstrate competency in all three areas of digital media production pre-production (planning), production (shooting) and post-production (editing).
Apply problem-solving skills in planning, creating and evaluating quality video productions,
Demonstrate an understanding of basic camera functions, basic camera shots, lighting techniques, and audio recording techniques
Demonstrate knowledge of effective visual composition. Demonstrate knowledge of general video editing techniques.
Demonstrate an ability to critique the strengths and weaknesses of video productions
Know how to use non-linear video editing software


## PERFORMING ARTS

The Performing Arts Department seeks to provid opportunities for students to explore their potential for ersonal expression and growth throurh music theater and dance While these three disciplines each have their wntechniques and concepts they share a common set of educational values:

## Craft and discipline

Teamwork and mutual support
Individuality and self-discovery
In the Performing Arts we consider it our mission to help students to

Take responsibility for and become engaged with their work
Develop a sense of trust in themselves and each othe Learn from their mistakes
Learn the importance of preparation and repetition Learn to concentrate in performance

We aim to achieve these ends by creating a safe environmen for risk-taking, promoting understanding of commitment and responsibility to the group, setting high standards for performance, allowing creativity to grow both from imitatio and from within, and instilling a sense of fun and play.

## CHOIR

The Choir is the premiere ensemble of the Dunecrest American School Choral Program. Students will utilize skills acquired in previous choir courses to learn a broad range of choral repertoire and to perform on several occasion throughout the year. The students will work on basic vocal technique, warm-ups, sight reading, and ear training exercises to perform a vast array of musical styles from classical to pop, to jazz. Many songs will be sung a cappella and all of the repertoire will be in four-part harmony. The signers will have opportunities to solo in class, as well as during performances. The chorus is an integral part of the Dunecrest American School community and will perform at a variety of events throughout the year.

## CONCERT BAND

High School Band is open to wind players and percussionists through audition. Classroom activities are designed to develop elements of musicianship incluaing tone production skills, analyzing music, and integration of other applicable discipines such as sight-reading and correct responses to a f developmentally appropriate concert band literature. There is periodic classroom assessment to monitor student progress. Private lessons are strongly encouraged. Practicing at home is expected. Students must have previous band experience.


THEATRE ARTS
Students will focus on mastering basic drama skills that are universally applicable. Through participation in drama exercises, improvisation and theatre games, students train in concentration, and develop the vocal, physical, and mental skills necessary to act in and to produce plays. The echnical aspects of video production, including shooting, toryboarding, and editing, will also be emphasized. Students may audition for the school play or musical as an outside extension of their studies in Theatre Arts but students focus n the developmen skills and the study of drama which ncludes a survey of theatre history.

VISUAL ARTS
Through our offerings in ceramics, photography, woodworking, drawing, painting, printmaking and art history the Visual Arts Department assignments invite individual responses and inspire students' imaginations. Immersing students in a creative process develops their confidence taking risks and challenges their problem-solving skills. Discussions and journal writing nurture critical thinking and meta-cognitive skills as students reflect on their work. From apanese wood block technique to mythological masks students experience the multiple languages of art-making from around the world. Many assignments encourage the investigation of personal narrative or the investigation of
thers, allowing students to make their own voices heard and giving them opportunities to hear and value the varied voices f their classmates. In these ways, we believe that mutual and self-respect are nurtured.

## FOUNDATIONS OF ART

This course introduces the beginning art student to the basic elements and principles of art and design. Technical skills in both 2D and 3D will be developed through a variety of art making processes that will include drawing, painting, sculpture and art historical research. Every project will be evaluated in groups where students learn how to formally and conceptually analyze works of art. Media and methods could include but are not limited to watercolor, charcoal, pastel. acrylic painting, printmaking, and sculpture. Students will learn vocabulary of common art terms and be able to use them to aid our understanding of art and its uses. A workbook of ideas, research, and the development of the student's work will be maintained throughout the year

## 2D STUDIO ART

Students develop the skills and abilities learned in Foundations of Art. The course will focus on the principles echniques of whimensional forms.A ange of
watercolor, pastel, painting, printmaking, graphic design and digital image making). Emphasis is placed on using drawing and research into artist models and movements to develop skills with a range of materials for the production of a final portfolio of 2D artworks. A workbook of ideas, research analysis and development of work will be maintained.

## 3D STUDIO ART

his course further develops the skills and abilities learned in Foundations of Art. The course will focus on the principles and elements of design in three dimensional forms and begin to contextualize their work in the history of art. The student will explore sculptural forms and concepts through a variety f methods and media that may include plaster and mold making, carving, assemblage and animation. Emphasis is placed on developing the necessary analytical, physical and conceptual skilis to produce artworks with intention, meaning and reflection. A workbook of ideas, research, analysis and development will be maintained throughout the year and will help establish a final portfolio of works,

## BHL/SL VISUAL ARTS

This is a two-year program that involves students in in-depth studies of the elements and principles of design, the socia historical, and cultural influences of art and artists, and the technical skills required to become proficient in a variety of visual media for self-expression. As students learn to expres themselves with more skilis and confidence, they use class time to explore, refine, and interpret chosen ideas, themes, and a portfolio for their end of pronal investigation workbook and a portfolio for their end of program interview and exhibit.
"Creativity takes courage."

- Henri Matisse


## PHYSICALEDUCATION

is the goal of the Physical Education Department to provid children with a good foundation of skill development and cognitive understanding of sport and fitness. Activities are designed to help students increase their self-confidence and elf-esteem through physical activity so that they will become adults who understand the benefit and value of a physically active and healthy lifestyle. Physical Education and Fitness lasses offer each student the opportunity to participate a fulfilling and enjoyable experience. Students are able to explore new activities and pursue further training in select activities.

## PHYSICAL EDUCATION - GRADES 9-10

Students complete the transition from modified versions of movement forms to more complex applications across all types of physical activities; games, sports, dance, and recreational pursuits.
hey demonstrate the ability to use basic skills, strategies, and tactics. Students demonstrate more specialized knowledge in identifying and applying key movement
concepts and principles. They assess and develop a persona physical activity program aimed at improving their skill performance. They apply their understanding of personal fitness to lifelong participation in physical activity.

Students demonstrate independence of others in making choices, respect all others, avoid conflict, but are able to resolve conflict appropriately, and use elements of fair play and ethical behavior in physical activity settings.

Students demonstrate the ability to plan for and to improve components of fitness and to achieve and maintain a healthenhancing level of personal fitness.

## SWIMMING

A coed sport elective with an emphasis on swimming that provides students the opportunity to swim, set goals and efine other life-skills such as leadership. This aquatic course is uniquely designed to deliver the basic fundamentals of the sport to the most advanced skills. Students will learn the principles of competitive swimming, which includes but is not mited to proper technique, dry land and conditioning training. and racing strategies through structured practices

## ATHLETIC STATEMENT

Sports and activities play a vital part of student life at Dunecrest American School. Some of life's most important essons, such as victory and being part of a team, are learned through participation in athletics and activities. At Dunecrest American School we strive to provide our students with the best in coaching, facilities and equipment, all of whic are based on the core values of our program: excellence in effort, sportsmanship, teamwork, self-discipline and dedication. Through our Athletic program students will have an opportunity to participate in both competitive and/or
non-competitive sport teams.
Dunecrest American School believes that athletics are a positive and powerful motivator for students to perform etter in all parts of school life. Athletics is a way for our tudents to grow and mature as healthy, well-rounded and socially well-adjusted citizens. By encouraging commitment, determination and teamwork we feel that our students will enefit greatly as they apply these skills in other areas of their e. We truly hope that our students will take advantage of the thletic opportunities offered to them in order to make their school career a richer experience
he objective of the Athletic program at Dunecrest American School is to provide our students an opportunity to be involved in athletic activities in order to develop a positive acter-buliding experience outside of regular school hours.
dunecrestAmerican School's Athletics Department goal is , most sportsmanlike and disciplined sports program in the region.

## ATHLETICS FACILITIES

Dunecrest American School's campus boasts two indoor basketball courts, an outdoor basketball court, a 25-meter pool, a soccer field, Olympic size track and tennis courts. Additional athletics training and competition occurs throughout Dubai and its many clubs.

## ATHLETICS PRACTICES

Varsity, Junior Varsity and Middle School teams practice or play every weekday, with occasional Saturday games and practices

## COACHES

Coaches of Dunecrest American School teams are made up from full time teachers at the school. In addition, local talent is used for specialized sports.

## ATHLETIC TEAMS

Basketball Boys (Middle School, Junior Varsity, Varsity) Basketball Girls (Middle School, Junior Varsity, Varsity) Cross Country Boys (Middle School, Junior Varsity, Varsity) Cross Country Girls (Middle School, Junior Varsity, Varsity) Soccer Boys (Middle School, Junior Varsity, Varsity) Soccer Girls (Middle School, Junior Varsity, Varsity) Swimming Boys (Middle School, Junior Varsity, Varsity) Swimming Girls (Middle School, Junior Varsity, Varsity) Track \& Field Boys (Middle School, Junior Varsity, Varsity) Track \& Field Girls (Middle School, Junior Varsity, Varsity) Volleyball Boys (Middle School, Junior Varsity, Varsity Volleyball Girls (Middle School, Junior Varsity, Varsity)


## DUNECREST AMERICAN SCHOOL

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