

**CARROLLWOOD DAY SCHOOL  
UPPER SCHOOL**

# Curriculum and Registration Guide



**CARROLLWOOD  
DAY SCHOOL**  
*Education with Character*



## Curriculum and Registration Guide

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### Enrollment Management Philosophy

Carrollwood Day School welcomes all prospective applicants and families. The school seeks to admit those students who show the potential to grow significantly while at CDS. Students must be academically on or above grade level. Students who require specialized instruction or are unable to function adequately in the classroom are not considered for admission.

The core characteristics that follow are those that the admissions process seeks to identify and select in its students and families:

- Students who demonstrate the academic ability and/or developmental readiness to succeed in a leading college preparatory program
- Students whose talents match and enrich the school program
- Students whose personal qualities suggest they will contribute in meaningful ways to school and community life
- Students who further the school's commitment to reflecting the diversity of the community in all of its forms
- Parents who demonstrate an awareness of and commitment to meet the school's expectation of parental cooperation and support
- Families who are able to support the school through contributions of their time, talent, and resources

Students are admitted for one year at a time and invited to re-enroll if the student is having a successful experience. The faculty and staff will make available all campus resources necessary and useful for a student's continued enrollment. In the event that the student's academic performance, behavior, and/or attitude fails to meet the expected and stated standards found in division handbooks, that student, following a set of established guidelines, may be asked to withdraw from the school.

CDS admits qualified students of any race, color, and national or ethnic origin and is non-discriminatory in all policies and school administered programs.



## OUR MOTTO

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**Education with Character**

## OUR VISION

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Build a community prepared and inspired to better the world.

## OUR MISSION

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As an IB World School, we cultivate principled entrepreneurial thinkers for a global society by enriching the mind, strengthening the character, and inspiring the passions of our community.

## DIVERSITY AND INCLUSION STATEMENT

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Carrollwood Day School embraces and celebrates the rich diversity of our students, employees, and families from all backgrounds. As an International Baccalaureate continuum school, CDS strives to create a supportive and inclusive learning environment where each person is valued. We work to intentionally develop cross-cultural

competency and appreciation of differences within all constituents. We value the influence of a wide range of experiences and perspectives in our classrooms, relationships, and interactions as we prepare our students to contribute to a diverse and interconnected world.

# Academic Guidelines and Policies

## Student Course Load

Students are generally expected to take five courses in the areas of English, Mathematics, Science, Humanities, and World Languages per year and at least one other elective course per semester. Students who wish to take less than the minimum course load need prior permission from an upper school administrator. The normal load would include six to eight courses each semester, depending on the student's academic trajectory.

## Academic Credit, GPA and Transcripts

The final grade determines the unit of credit to be given for a full-year course. A repeated course is shown on the transcript and is calculated in the GPA but does not receive additional credit. Only summer courses taught at CDS or other approved courses may be taken for credit and advancement. Courses from outside institutions are not calculated into the GPA or listed on the CDS transcript, but they will be included with college applications. Students may take Advanced Music and certain other courses for credit as many times as they wish. No fractional credit will be awarded for partial completion of a yearlong course or partial completion of a semester course.

The cumulative GPA is calculated on semester grades earned at CDS beginning freshman year.

For seniors applying to college, mid-semester grades will be sent to all colleges that require them until such time as first semester grades are available. Mid-year and final reports (semester grades) will be sent to colleges for all seniors. For colleges that do not require mid-semester grades, students have the choice to send those grades to schools directly at their discretion and in coordination with their college counselor.

## Graduation Pathways through CDS

Students should select a graduation pathway that fits their personal interests, academic aptitude & college ambitions. It is in the best interest of students to follow a pathway that is challenging enough without jeopardizing a student's cumulative grade point average (GPA) as colleges weigh GPA and Rigor of Schedule similarly in the admissions process. Carrollwood Day School has various resources available during the selection process to assist families in choosing the right pathway for their student, including the IB Diploma Programme Coordinator, the College Counseling staff, Department Chairs and teachers.

**Students who are not recommended for 3 HL courses are not eligible for the full DP Programme but can graduate as course candidates, or CDS graduates.**

	<b>CDS GRADUATE</b>	<b>CDS GRADUATE + IB COURSE CANDIDATE</b>	<b>CDS GRADUATE + FULL IB DIPLOMA</b>
<b>Rigorous College Prep</b>	Rigorous	More Rigorous	Most Rigorous
<b>Possibility of Internships During the Normal School Day</b>	Allows for more opportunities outside of school such as internships and jobs	Full school days - limited availability for outside internships	Full school days - limited availability for outside internships
<b>Minimum Credits</b>	Minimum 24 credits	Minimum 24 credits	Minimum 24 credits
<b>English</b>	4 years	4 years	4 years
<b>World Language</b>	3 years	3-4 years	4 years
<b>Humanities</b>	3 years	3-4 years	4 years
<b>Science</b>	3 years	3-4 years	4 years
<b>Mathematics</b>	4 years	4 years	4 years
<b>Fine Arts</b>	1 year	1 year	1 year
<b>Physical Education &amp; Health</b>	1 year	1 year	1 year
<b>Electives</b>	5 credits	5 credits	5 credits
<b>Community Service</b>	100 hours	100 hours	100 hours
<b>Creativity, Activity, &amp; Service (CAS)</b>	No	No	11th-12th grades
<b>Theory of Knowledge Course (TOK)</b>	No	No	11th-12th grades
<b>Extended Essay (EE)</b>	No	No	11th-12th grades
<b>Eligibility for Top Tier of Florida Bright Futures Scholarship</b>	GPA, SAT/ACT Test Scores & Service Hours	GPA, SAT/ACT Test Scores & Service Hours	GPA, SAT/ACT Test Scores & Service Hours -OR- Award of IB Diploma & Service Hours
<b>SL/HL</b>	All or mostly SL - OR - mix of IB SL and college preparatory	All SL 150 hours each - OR - mix of SL (150 hour) & HL (240 hour) classes	3 HL - 240 hours each - 3 SL -150 hours each
<b>IB Testing Senior Year</b>	No	1 or more subjects	All 6 subjects
<b>CDS Final Exams Senior Year</b>	Yes	1 or more subjects	No
<b>IB Graduation Regalia (in addition to any honor society cords)</b>	No	Blue & white cord	White IB stole

## **International Baccalaureate (IB) Middle Years Programme (MYP)**

### **Grades 6 - 10**

At CDS the Middle Years Programme spans the three years of Middle School and the first two years of high school. The MYP provides a framework for teaching and learning to help students develop the knowledge, understanding, attitudes and skills necessary to participate actively and responsibly in a changing world. The MYP curriculum at CDS emphasizes a broad and balanced education in each of eight subject areas: Language and Literature (English), Humanities, Sciences, Mathematics, Language Acquisition (Spanish or French), Physical Education, (Technology,) and the Arts. All courses are offered at the Honors level. Advanced options are available in some subjects as outlined in the course selection guide below. The program culminates in a capstone independent research project and exhibition, the Personal Project, required of all CDS 10th graders.

## **International Baccalaureate (IB) Full Diploma Programme (DP)**

### **Grades 11-12**

All students enrolled at CDS engage to some level with the International Baccalaureate Programme, first in the Middle Years Programme (MYP) in grades 6-10 and then in IB Diploma Programme (DP) classes in grades 11-12.

Designed for highly motivated students, the IB Diploma Programme is a rigorous two-year course of study leading to externally assessed examinations. The DP offers both breadth, in terms of the range of courses offered, and depth, in that students must take each course for two years. It is a deliberate compromise between the specialization required by some colleges and universities and the breadth preferred by others. Students who do not wish to become full IB Diploma candidates may elect to take IB courses in their areas of academic strength. These students will receive an IB certificate for each course successfully completed.

The IBO's reputation for rigorous assessment gives IB diploma holders access to the world's leading universities and solid preparation for high achievement once enrolled. Successful completion of IB Exams often results in college credit.

Students recommended for the IB Full Diploma Programme will engage with course material and work expectations that will challenge them at the highest level. Students take six subjects for the IB Diploma Programme; three at Higher Level (HL) and three at Standard Level (SL). By arranging work in this fashion, students are able to achieve depth of study in the context of a broad and coherent curriculum over the

two-year period. Each student must take one course in Language and Literature, Language Acquisition, Individuals & Societies (Humanities), Science, and Mathematics and may choose an elective in the Arts or an additional course in one of the other five subjects.

In addition to the six subject areas, the Programme has three core requirements that are central to the philosophy of the Diploma Programme and challenge students to apply their knowledge and understanding. These are the three core requirements of the Diploma Programme:

- **Extended Essay:** an individual research project of about 4,000 words which allows students to investigate in detail a topic of special interest to them. This project acquaints students with the independent research and writing skills that are necessary and expected at the university level.
- **Theory of Knowledge class:** an interdisciplinary course that challenges students to become critical, reflective, and independent thinkers
- **Creativity, Activity, Service requirement:** this requirement encourages students to be involved in artistic pursuits, sports and community service work, thus fostering students' awareness and appreciation of life outside the academic arena.

All Full Diploma Programme students must engage in these three activities.

While the IBO does allow for a student to take 4 HL courses, a student must obtain permission to do so from the Head of the Upper School and the IB DP Coordinator due to the demands of heavy homework assignments, library research, laboratories, and special testing sessions.

Full IB Diploma students and IB course candidates are required to take pertinent IB examinations administered in May. Students enrolled in the IB Full Diploma Programme are viewed by colleges as having chosen to challenge themselves at the highest level. Many major universities and colleges accept demonstrated competency on these examinations as evidence for granting advanced placement and/or credit in college. In Florida, being awarded an IB Diploma automatically makes a student eligible for the top-tier academic Bright Futures scholarship.

# Guidelines for Course Selection

Prerequisites established for various courses in the Upper School as printed in the Curriculum and Registration Guide must be observed.

## Course Recommendation Policy

All student recommendations are reviewed individually each spring by the student's current teachers and the department chair. Continuation at a level is based on the student's performance and the teacher's professional judgment and should reflect the best prospects for each student's academic success. Such recommendations are based on the qualities listed below. These student characteristics are considered relative to the grade level in question. No student exhibits all of these qualities all the time, but their conspicuous and persistent absence will affect course placement decisions. We expect positive academic behavior from all students, and look for an even higher degree of self-motivation and commitment from students in advanced and higher level courses.

If a student disagrees with a course-level recommendation, they may request a change. The student and family must first meet with the classroom teacher and Department Chair to hear why the course-level recommendation was made. If a student would like to override the decision, taking full responsibility for the possible negative consequences to grade and GPA, the change will be made. The student will be placed in the requested course on a probationary basis with a review of student performance taking place at the mid-quarter mark of the next semester or before, if significant concerns arise over student outcomes.

Student requests to move to a less challenging level in Language Acquisition, in particular, will be denied if prior achievement indicates an ability to progress to the next level. Failure to follow an increasingly challenging course sequence is a negative indicator for college admissions and doesn't reflect the academic commitment expected of CDS students.

At the 11th and 12th grade levels, there is a significant difference between the time commitments for a standard level (SL) and higher level (HL) course, reflected in hours. Standard Level courses meet for 150 hours of instruction over two years whereas Higher Level courses meet for 240 hours. IB Full Diploma students must take 3 SL and 3 HL courses as part of their course of study. Students who are not recommended for 3 HL courses are not eligible for the full DP Programme but can graduate as course candidates, or CDS graduates as outlined in the graph on page 5.

These factors are taken into account when considering course placement:

### CURRENT COURSE GRADES

A student with a grade of a B in an advanced course will be recommended for the next-level advanced course unless there is a compelling reason to not recommend. A grade of A- at the standard course level is the minimum requirement for an advanced recommendation at the next grade level. A grade of B- is the minimum requirement for a student to remain in the advanced course for the next grade level. Advanced/higher level course recommendations are primarily a recognition of student achievement — not just aptitude — in a given subject area; in other words, course levels are performance-based rather than ability-based groupings.

When deciding placement and course recommendations, especially at the DP level, Department Chairs work with classroom teachers to not only investigate final grades but achievement on standardized tests and the IB grade descriptor scale. Students with an A or A- in some MYP level courses, particularly in science, might still not be recommended for the DP level of that course. Students regularly earning 6-8 on the MYP (A - A+ on report cards) scale have shown the ability to handle the specific type of advanced content offered in DP classes.

As with all classes, families can request to override the recommendation, following the procedure outlined above.

### SERIOUSNESS OF PURPOSE

An advanced student must show, beyond mere grades, a seriousness of purpose about the subject matter and about course assignments. Disruptive classroom behavior, lack of engagement, poor study habits and class preparation, and excessive absences or tardiness do not reflect seriousness of purpose.

### CLASS CONTRIBUTIONS

Students should demonstrate exceptional class engagement, especially when considering placement in an advanced class. Students should willingly and reliably contribute to the learning process in the form of class discussion and participation, completion of assignments, group work, and attention.

### INTELLECTUAL ENGAGEMENT IN THE SUBJECT

Students who want to take a course at the advanced or higher level should display a strong motivation for the subject matter of a course beyond merely meeting grade requirements. Intellectual curiosity and intellectual engagement beyond the norm is essential in an advanced class.



## **EFFECTIVE MANAGEMENT OF COURSE REQUIREMENTS**

Students who succeed at an advanced or higher level demonstrate the capacity to complete larger volumes of reading and writing and to handle more in-depth work than students who take a class at the standard level. This includes keeping track of and meeting deadlines. Students should be strongly committed to turning thoughtfully completed work in on time.

## **STRONG READING, WRITING, VOCABULARY, AND COMPUTATION SKILLS**

A student in an advanced or higher level course should not require basic-level work or remediation in reading, writing, vocabulary, and computation. In advanced courses, greater emphasis will be placed on analysis, synthesis, and evaluation and less emphasis on teaching the basics of knowledge, comprehension, and application.

## **DEVELOPED CAPACITY FOR ABSTRACT THINKING**

Students in an advanced course should be able to move beyond the literal or concrete level of thinking and reading to cope with abstraction, implication, discovery, metaphor, irony, and similar, more complex levels of meaning. This includes the ability to analyze coherently, problem solve and conceptualize new ideas, and draw supportable conclusions from facts and data.

## **SOCIAL AND EMOTIONAL MATURITY FOR MORE SOPHISTICATED DISCUSSION**

Students in advanced sections of a class should show the maturity needed to discuss more controversial and challenging works and topics without lapsing into inappropriate humor, anger, or other highly subjective reactions. This includes understanding why certain works and topics are included in the curriculum even when they may not suit the taste of an individual student.

### **Drop/Add**

There is a drop/add period of 2 weeks for all Upper School courses. Some advanced and higher level courses may extend the drop/add window to four weeks, based on assessment schedule. To change a course, a student initiated schedule change request should be submitted to the MYP or DP Coordinator. All schedule changes must be done by the end of the fourth week of school. Any request received after the deadline will need the approval of the Head of the Upper School.

A withdrawal from any course after the first interim period will result in having a "W" (withdrew) noted on the student's official transcript, unless an exception is made by the Head of the Upper School; upon inquiry by colleges, the school will indicate withdrawal status (passing, failing).



# Grades and Grade Reports

Students receive a grade for each subject. Grades are reported at the semester, with each semester grade appearing on the official transcript and used in the GPA calculation. Mid-semester comments and parent-teacher conferences inform families and students about student progress and alert them to any potential problems. Notification will be sent at the mid-semester point for Academic Watch, Warning, or Probation for students earning two D or F grades or for students who have formerly been on warning or probation and who have not demonstrated substantial improvement. Honor Roll and Principals Honor Roll are determined at the semester.

Within classes, teachers use criteria based grading to assess student progress and report on learning outcomes, with emphasis placed on best sustained student performance over time. The criteria for assessing skills and content are often presented to students on rubrics with a grade scale of 1-8 for the MYP Programme and 1-7 for the DP Programme. Below is the conversion teachers use to translate the criteria based grade to the A-F scale reported on Schoology, report cards, and the numerical conversion used to generate GPAs and transcripts.

For IB DP courses, CDS adds 1.00 quality point to the point scale.  
Failing grades do not receive the additional 1.00 point.

For IB MYP and Honors classes, CDS adds 0.50 quality point to the point scale.  
Failing grades do not receive the additional 0.50 point.

To allocate, record, and report grades on Schoology, report cards, and transcripts the following scale is used (includes - and +):

## MYP Grade Conversion

LETTER	MYP SCORE	GPA	NUMBER	MYP DESCRIPTOR
A+	7/8	4.3	97-100	Produces high-quality, frequently innovative work. Communicates comprehensive, nuanced understanding of concepts and contexts. Consistently demonstrates sophisticated critical and creative thinking. Frequently transfers knowledge and skills with independence and expertise in a variety of complex classroom and real-world situations.
A	6	4.0	93-96	Produces high-quality, occasionally innovative work. Communicates extensive understanding of concepts and contexts. Demonstrates critical and creative thinking, frequently with sophistication. Uses knowledge and skills in familiar and unfamiliar classroom and real-world situations, often with independence.
A-	5	3.7	90-92	Produces generally high-quality work. Communicates secure understanding of concepts and contexts. Demonstrates critical and creative thinking, sometimes with sophistication.
B+	5	3.3	87-89	Uses knowledge and skills in familiar classroom and real-world situations and, with support, some unfamiliar real-world situations
B	4	3.0	83-86	Produces good-quality work. Communicates basic understanding of most concepts and contexts with few misunderstandings and minor gaps. Often demonstrates basic critical and creative thinking.
B-	4	2.7	80-82	Uses knowledge and skills with some flexibility in familiar classroom situations, but requires support in unfamiliar situations
C+	3	2.3	77-79	Produces work of an acceptable quality. Communicates basic understanding of many concepts and contexts, with occasionally significant misunderstandings or gaps.
C	3	2.0	73-76	Begins to demonstrate some basic critical and creative thinking. Is often inflexible in the use of knowledge and skills, requiring support even in familiar classroom situations.
C-	3	1.7	70-72	
D+	2	1.3	67-69	Produces work of limited quality. Expresses misunderstandings or significant gaps in understanding for many concepts and contexts.
D	2	1.0	63-66	Infrequently demonstrates critical or creative thinking. Generally inflexible in the use of knowledge and skills, infrequently applying knowledge and skills.
D-	2	.7	60-62	
F	1	0.0	Under 60	Produces work of very limited quality. Conveys many significant misunderstandings or lacks understanding of most concepts and contexts. Very rarely demonstrates critical or creative thinking. Very inflexible, rarely using knowledge or skills.

# DP Grade Conversion

LETTER	DP SCORE	GPA	NUMBER	DP DESCRIPTOR
A+	7	4.3	97-100	<ul style="list-style-type: none"> <li>Demonstrates excellent content knowledge and understanding, conceptual and contextual awareness and critical, reflective thinking.</li> <li>Highly effective research, investigation and technical skills are evident, as is the ability to analyze, evaluate and synthesize qualitative and quantitative evidence, knowledge and concepts to reach valid conclusions or solve problems.</li> <li>Responses are highly insightful, accurate, clear, concise, convincing, logically structured, with sufficient detail, precise use of appropriate terminology and with appropriate attention to purpose and audience.</li> <li>Responses are creative, make very effective use of well-selected examples, demonstrate awareness of alternative points of view.</li> </ul>
A	6	4.0	93-96	<ul style="list-style-type: none"> <li>Demonstrates very good content knowledge and understanding, conceptual and contextual awareness and critical, reflective thinking.</li> <li>Competent research, investigation and technical skills are evident, as is the ability to analyze, evaluate and synthesize evidence, knowledge and concepts.</li> <li>Responses are mainly accurate, clear, concise, convincing, logically structured, with sufficient detail, using consistent terminology and with appropriate attention to purpose and audience.</li> <li>Responses show creativity, make effective use of examples, demonstrate awareness of alternative points of view and provide evidence of intercultural understanding.</li> </ul>
A-	5	3.7	90-92	<ul style="list-style-type: none"> <li>Demonstrates sound content knowledge and understanding, good conceptual and contextual awareness and evidence of critical, reflective thinking.</li> <li>Research, investigation and technical skills are evident and sometimes well developed. Analytical ability is evident, although responses may at times be more descriptive than evaluative.</li> <li>Responses are generally accurate, clear, logically structured and coherent, with mainly relevant material, using suitable terminology, and are sometimes well developed.</li> <li>Responses show reasonable creativity, use of examples, awareness of audience and evidence of intercultural understanding.</li> </ul>
B+	5	3.3	87-89	
B	4	3.0	83-86	<ul style="list-style-type: none"> <li>Demonstrates, with some gaps, secure content knowledge and understanding, some conceptual and contextual awareness and some evidence of critical thinking.</li> <li>Research, investigation and technical skills are evident, but not thoroughly developed. Analysis is generally valid, but more descriptive than evaluative.</li> <li>The student solves basic or routine problems, but with limited ability to deal with new or difficult situations.</li> <li>Responses are mostly accurate and clear with little irrelevant material. There is some ability to logically structure responses with adequate coherence and use of appropriate terminology.</li> <li>Responses sometimes show creativity, and include some awareness of audience and evidence of intercultural understanding.</li> </ul>
B-	4	2.7	80-82	
C+	4	2.3	77-79	
C	3	2.0	73-76	<ul style="list-style-type: none"> <li>Demonstrates basic knowledge and understanding of the content, with limited evidence of conceptual and contextual awareness.</li> <li>Research and/or investigation is evident, but remains undeveloped. There is some ability to comprehend and solve problems.</li> <li>Responses are only sometimes valid and appropriately detailed. There is some expression of ideas and organization of work and basic use of appropriate terminology, but arguments are rarely convincing.</li> <li>Responses lack clarity and some material is repeated or irrelevant.</li> <li>There is limited creativity, awareness of context or audience and limited evidence of intercultural understanding.</li> </ul>
C-	3	1.7	70-72	
D+	3	1.3	67-69	
D	2	1.0	63-66	<ul style="list-style-type: none"> <li>Demonstrates little knowledge or understanding of the content, with weak comprehension of concepts and context and little evidence of application.</li> <li>Evidence of research and/or investigation is only superficial.</li> <li>There is little ability to comprehend and solve problems. Responses are rarely accurate or valid. There is some attempt to express ideas, use terminology appropriate to the subject and organize work, but the response is rarely convincing.</li> <li>There is very little creativity, awareness of context or audience and little evidence of intercultural understanding.</li> </ul>
D-	2	.7	60-62	
F	1	0.0	Under 60	<ul style="list-style-type: none"> <li>Demonstrates very rudimentary knowledge or understanding of the content, with very weak comprehension of concepts and context.</li> <li>Ability to comprehend and solve problems or to express ideas is not evident.</li> <li>Responses are rarely accurate or valid. Organization is lacking to the point that responses are confusing.</li> <li>Responses demonstrate very little to no appreciation of context or audience, inappropriate or inadequate use of terminology, and little to no intercultural understanding.</li> </ul>

# Graduation Requirements

## Credits and Courses

To graduate from CDS Upper School, a student must earn at least 24 credits and successfully complete all required courses during grades 9 through 12 while earning a grade below C- in no more than five credits or the equivalent (i.e., multiple half-credit courses). All students are encouraged to accumulate more than the minimum 24 credits prior to graduation through individualized programs designed to meet specific college admission requirements. In addition, a student must complete his or her senior year as a full-time student at CDS enrolled in at least 5 courses. Any exception to this policy requires approval from the Head of the Upper School.

DEPARTMENT	COURSE REQUIREMENTS	CREDITS
<b>Language and Literature</b>	<ul style="list-style-type: none"> <li>• IB MYP English Honors I</li> <li>• IB MYP English Honors II</li> <li>• IB DP Language &amp; Literature SL &amp; HL I &amp; II</li> </ul> <i>Students must take 4 years of Language and Literature.</i>	4
<b>Language Acquisition</b>	<ul style="list-style-type: none"> <li>• IB MYP Spanish I, II, III, IV</li> <li>• IB MYP French I, II, III, IV</li> <li>• IB DP Spanish SL &amp; HL, I &amp; II</li> <li>• IB DP French SL &amp; HL, I &amp; II</li> <li>• IB DP Spanish Ab Initio SL, I &amp; II</li> <li>• IB DP French Ab Initio SL, I &amp; II</li> </ul> <i>At least a two year sequence in any language with 3-4 years in the same language recommended.</i>	3
<b>Humanities</b>	<ul style="list-style-type: none"> <li>• IB MYP World History Honors I</li> <li>• IB MYP US History &amp; Government Honors or Extended Honors (AP Test Optional)</li> </ul> One of the following: <ul style="list-style-type: none"> <li>• IB DP History of the Americas SL &amp; HL I &amp; II</li> <li>• IB DP Global Politics SL &amp; HL I &amp; II</li> <li>• IB DP Psychology SL &amp; HL I &amp; II</li> <li>• IB DP Business Management SL &amp; HL I &amp; II</li> </ul> Non-IB Honors Course <ul style="list-style-type: none"> <li>• Economics &amp; Personal Financial Literacy Honors</li> </ul>	3
<b>Mathematics</b>	<ul style="list-style-type: none"> <li>• IB MYP Algebra I Standard</li> <li>• IB MYP Quadratics &amp; Geometry Standard</li> <li>• IB MYP Geometry Extended or Extended Advanced</li> <li>• IB MYP Algebra II Standard, Extended, or Extended Advanced</li> <li>• IB DP Mathematical Applications &amp; Interpretation SL I and II</li> <li>• IB DP Mathematical Analysis &amp; Approaches SL &amp; HL I and II</li> </ul> Non-IB Honors Course <ul style="list-style-type: none"> <li>• Precalculus Honors</li> <li>• Statistics &amp; Probability Honors</li> </ul> <i>Students must take 4 years of Mathematics</i>	4
<b>Science</b>	<ul style="list-style-type: none"> <li>• IB MYP Biology Honors I</li> <li>• IB MYP Chemistry Honors or Extended Honors</li> </ul> One of the following: <ul style="list-style-type: none"> <li>• IB MYP Physics Honors</li> <li>• IB DP Biology SL &amp; HL I &amp; II</li> <li>• IB DP Chemistry SL &amp; HL I &amp; II</li> <li>• IB DP Physics SL &amp; HL I &amp; II</li> <li>• IB DP Environmental Systems &amp; Societies SL I &amp; II</li> <li>• IB DP Sports, Exercise &amp; Health Science SL &amp; HL I &amp; II <i>*not a lab science</i></li> <li>• IB DP Computer Science SL &amp; HL I &amp; II <i>*not a lab science</i></li> <li>• IB DP Design Technology SL &amp; HL I &amp; II <i>*not a lab science</i></li> </ul> Non-IB Honors Course <ul style="list-style-type: none"> <li>• Anatomy &amp; Physiology Honors</li> </ul> <i>Most selective universities require 4 years enrollment in Science, three must be lab sciences</i>	3

<sup>1</sup>Courses in the IB Diploma Programme, which runs in 11th and 12 grade, are offered at the Standard and Higher Level. Students who are in the full IB Diploma Programme will choose 3 Standard and 3 Higher level courses. Other students can take a customized mix of SL and HL options.

<b>Visual &amp; Performing Arts</b>	At least one of the following: <ul style="list-style-type: none"> <li>• IB MYP Visual Arts: 2D Art</li> <li>• IB MYP Visual Arts: 3D Art</li> <li>• IB MYP Visual Arts Photography</li> <li>• IB MYP Drama</li> <li>• IB MYP Comprehensive Theater</li> <li>• IB MYP Music (guitar, strings, or piano)</li> <li>• IB MYP Concert Band</li> <li>• IB DP Visual Arts SL or HL I &amp; II</li> <li>• IB DP Theater Arts SL or HL I &amp; II</li> <li>• IB DP Music SL or HL I &amp; II</li> <li>• IB DP Film SL or HL I &amp; II</li> </ul>	1
<b>Physical Education</b>	• IB MYP Physical Education and Health I & II	1
<b>Stem &amp; Electives</b>	At least 5 elective credits. Courses from another group can also serve as elective credit, i.e., two science courses, two arts, four years of music, etc.: <ul style="list-style-type: none"> <li>• IB MYP Entrepreneurship I &amp; II</li> <li>• IB MYP Principles of Computer Science &amp; Game Development/Cyber Security</li> <li>• IB MYP Introduction to Engineering &amp; Principles of Engineering</li> <li>• IB MYP Digital Media Creation</li> <li>• Strength &amp; Conditioning</li> <li>• Journalism Honors</li> <li>• Creative Writing Honors</li> </ul>	5
<b>Community Service</b>		100 Hours by Graduation
<b>Total Credits</b>		<b>24</b>

### College Counseling

Carrollwood Day School is cognizant of what students need in order to complete the college admission process in a timely and successful manner. One goal of the College Counseling Office at CDS is for all CDS students to be accepted to and attend the college of their choice which is their individual best fit – academically, socially, and financially.

In order to help students achieve this goal, the college counselors will provide students and parents key information and guidance to prepare for college. The College Counseling Office will host a series of college counseling coffees for all interested upper school families as well as mandatory class-level meetings. Students and families will also receive one-on-one advice every year from their designated college counselor to ready themselves for the college admissions process.

### Statement Disclosure

While CDS counselors work closely to assist all students with college admissions, college applications require that all serious infractions, such as suspension or expulsion occurring from 9th through 12th grade as well as any misdemeanors or felonies during that time, be reported on all college applications by the student and confidentially on Secondary School Report forms by the college counselor.

# Advice from College Counselors

## What does college admissions desire from a curriculum standpoint for best admission?

It is highly recommended (for best admission results) to take the five core academic disciplines (math, science, humanities, language acquisition, and language and literature) all four years. It is imperative to remain sequential and progressive in each core academic discipline without “gapping” oneself. Gapping refers to not being enrolled in a specific core academic discipline after the minimum requirement to graduate is met. College admissions offices are ascertaining through one’s curriculum how seamless their transition will be from secondary to college level work, thus gapping would inhibit the perception of college “readiness”. Selective colleges have minimum requirements to apply, but this is not what is recommended to be a competitive applicant.

It is paramount to enroll in one specific foreign language and maintain a four- year sequence (9-12). It is generally not advisable to change one’s foreign language selection (French to Spanish and vice versa) once secondary school commences. As the world becomes more global, colleges are emphasizing second language proficiency.

Degree of course rigor is of the highest importance in undergraduate college admissions review. The IB Diploma Programme curriculum is unilaterally considered the most challenging standard curriculum to complete in the United States. Though not all students will complete the IB Diploma Programme curriculum, those that do are generally rated by admissions offices as taking “the most rigorous curriculum available.” This rating is considered one of the primary variables in a positive review for admission.

College admissions offices will also review each student’s grade stratification each year and

accumulatively (9th- through 1st semester 12th). They will review how many A vs. B. vs. C , etc. grades a student earns and if there are any discernible patterns. A discernible pattern might include the following: A student’s math grade might decline from an A in 9th to a C in 12th grade. Essentially, as the math class increased in degree of rigor and intellectual expectation, the student’s achievement decreased. Grade stratification in each class/ year is very important to one’s admissibility to college.

College admissions offices will look closely at each individual’s Grade Point Average (GPA) trend line over 7 semesters (9th through 1st semester 12th). As the intellectual and homework expectations increase from year to year, colleges are interested in how students respond to the increasing demands of their courseload. Do they maintain their achievement level from year to year or do they continue to increase? Does one’s achievement go up and down from year to year or does it decline? Having a high GPA and maintaining or having an increasing GPA from year to year is most favorable.

A student’s 3-year cumulative GPA is what is reported on one’s college applications. Thus each year (9-11) is equivalent to 1/3 of one’s final cumulative GPA. Because of this, one year is not considered more important than another year with respect to GPA calculation. A “fast start” (9th grade) is emphasized and important to each student’s success in the college application process.

Senior grades are important for the undergraduate admissions review process. In many cases where a student is determined to be a borderline applicant, college will request first quarter/ first semester grades from one’s senior year. The expectation is that each student is enrolled in their most rigorous

curriculum and is achieving at their highest level to date.

### Bright Futures Scholarship Qualification

The Florida Bright Futures scholarship remits 100% tuition to any Florida public university or the dollar equivalent to any Florida private college or university. If a Carrollwood Day School student fulfills all IB Diploma Programme requirements for graduation and successfully completes the IB diploma, they automatically qualify for the Florida Bright Futures scholarship (full tuition at public universities and the dollar equivalent to private colleges and universities). If a student is not awarded the IB Diploma or falls short of the IB Diploma requirements, there is an alternate qualification process. Each student failing to qualify through the IB Diploma Programme can still achieve the Bright Futures Scholarship (named the Florida Academic Scholars award) with numerical qualification. A student will have to earn a 3.5 GPA (weighted) through 8 semesters and achieve at least a 1330 on the SAT exam.

# Sample Schedule

## Standard Schedule

<p><b>9th Grade:</b></p> <p>MYP English I Honors  MYP World History Honors  MYP Spanish II Honors  MYP Biology Honors  MYP Geometry Extended  MYP Intro to Engineering  MYP Visual Arts  MYP PE</p>	<p><b>11th Grade:</b></p> <p>IB DP HL Language &amp; Literature I  IB DP SL Spanish I  IB DP HL History of the Americas I  IB DP SL Biology I  IB DP SL Mathematics Analysis &amp; Approaches I  IB DP HL Psychology I  IB DP Theory of Knowledge (Full DP students)</p>
<p><b>10th Grade*:</b></p> <p>MYP English II Honors  MYP US History &amp; Government Honors  MYP Spanish III Honors  MYP Chemistry Honors  MYP Algebra II  MYP Principles of Engineering  MYP Visual Arts 3D  MYP PE</p>	<p><b>12th Grade**:</b></p> <p>IB DP HL Language &amp; Literature II  IB DP SL Spanish II  IB DP HL History of the Americas II  IB DP SL Biology II  IB DP SL Mathematics Analysis &amp; Approaches II  IB DP HL Psychology II  IB DP Theory of Knowledge (Full DP students &amp; 1st semester only)</p>

\*All CDS 10th grade students complete the Personal Project, a year-long exploration of a topic of interest culminating in a public exhibition.

\*\*All IB Full Diploma Students complete the Extended Essay, a 4000 word academic exploration on a topic of their choice completed with the support of a faculty mentor.

\*\*All CDS students must complete 100 hours of service before graduation, with hours adjusted for students transferring in later in the program.

# Course Registration Guidelines

**1. Review graduation requirements** for Carrollwood Day School

**2. With your Faculty Advisor or College Counselor** complete and/or revise your four-year plan to reflect courses you have completed, refresh your memory regarding courses you intend to take, and monitor your progress toward graduation and scholarship requirements.

### **3. Selecting Courses**

Indicate your course selections for the coming year on the forms provided (be sure your choices are marked clearly). The school reserves the right to place a student in a course when the student's choices cannot be honored. Students are recommended for courses on the basis of their previous academic achievement, standardized test scores, and learning characteristics. *(See the beginning of this Guide for the Course Recommendation Policy.)*

**4. Parent Involvement:** Ask your parents to review your choices, and submit your registration form.

**5. Drop/Add:** The first two weeks of any elective or DP course 9th - 11th grade is the drop/add period. Students should contact their advisor or College Counselor with their drop/add request. Students will not be permitted to drop full-year courses at the end of the first semester, unless approved by the Assistant Head of the Upper School for Academics.

**6. Rising Seniors** will be asked to review their course selections and progress toward satisfying graduation requirements with a college counselor and their faculty advisors. Underclassmen also review their programs with and receive assistance from college counseling and faculty advisors.



# Upper School Departments & Course Offerings

## Language & Literature

The English Department at Carrollwood Day School views the study of Languages and Literature as fundamental to the curriculum, for it crosses the boundaries of all disciplines, develops skills in reading, writing, and critical thinking, and promotes intercultural competence. The department endeavors to inspire students to appreciate the power of literature and culture and to apply this insight to domestic and international communities. In support of these essential skills, we apply the values of both the International Baccalaureate Organization and our own school's Character Education.

Students will attain a thorough appreciation of the English language and multicultural literature. They will learn how to contribute to the intellectual growth of the academic and global communities through insightful participation and consistent effort. Ultimately, they will garner a perceptive understanding of how language is used in a variety of media and how to use clear, fluent expression in written and oral discourse. They will be able to apply these strong communication skills effectively and appropriately across cultures and continents in ways that, today, one can only imagine.

### Studies in Language and Literature

International Baccalaureate defines Language A1 as the student's best language. It is obviously fundamental to the curriculum as it crosses the boundaries of the traditional disciplines. It is the basic tool of communication in the sense of enabling one to understand and to be understood, and to establish one's own identity. Language is also the avenue by which one gains access to literature and thereby to the cultural treasury of civilization. Each course will focus on the instrumental function of language: listening, viewing, speaking, reading and writing skills, as well as the study of literature, which encompasses a variety of periods and genres.

### Middle Years Programme Courses

#### IB MYP English Honors I

MYP English Honors I is a course of study for students to continue to develop their abilities in reading, writing, listening, speaking, and critical analysis. During the year, students will read and analyze poems, short stories, and novels. In addition, they will practice and sharpen their public speaking skills by making oral presentations that will reflect group and/or individual research. Students will also study grammar, vocabulary, and the writing process, as well as methods of analyzing literature. As writers, students will produce extended essays in which they will apply appropriate methods of critical analysis and demonstrate effective thesis development, which

includes their supporting, exemplifying, and confirming the theses in correct MLA Documentation Style.

#### IB MYP English Honors II

MYP English Honors II is designed to prepare students for the IB/Diploma Program in 11th and 12th grade English. Students in this class will meet all objectives for English II through an accelerated program for learners with challenging, in-depth readings with an emphasis on abstract concepts and critical thinking skills. Students will be expected to produce frequent formal writings that will be evaluated for evidence of close analysis, elaboration of detail, and fluid articulation of ideas. Students will also do a number of oral reports.

### Diploma Programme Courses

#### IB DP English A Language and Literature SL/HL I & II

The English A Language and Literature two-year course introduces students to the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. Students develop the techniques needed for the critical analysis of communication, becoming alert to interactions among text, audience, and purpose. Students develop an understanding of how language, culture, and context determine the construction of meaning through the exploration of texts, some of which are studied in translation, from a variety of cultures, periods, media, and genres. Students develop skills of literary and textual analysis, and the ability to present ideas effectively. A key aim is the development of critical literacy.

### Electives

#### Journalism (1 credit, Honors, grades 9-12)

In this year-long course, students will explore the field of journalism by publishing the school newspaper, *Patriot Press*. Journalism is offered to all grade levels and can be repeated at higher levels. Students will gain knowledge in writing for mass communication; legal, ethical, and copyright issues; photography; and principles of graphic/visual design. Students will develop skills in communication, collaboration, creativity, critical thinking, time management, and ethical decision-making.

**Creative Writing** (1 elective credit, Honors, grades 9-12) Creative Writing is a year-long course designed for students who enjoy writing as a form of art and personal expression. In this course, students will explore the elements of numerous literary genres (short fiction, poetry, drama, playwright, lyrics) and the power of both print and multimedia formats. To develop original writing pieces, students will engage in writing workshops, literary element development lessons, writing/author studies, and peer reviews/conferences. To show evidence of writing development throughout the course, students will be required to maintain a Writer's Notebook/Journal that may be developed digitally or in print. Finally, students will design, edit, and contribute writing pieces for school publication.

All students are required to study an additional modern language. Second language courses develop students' powers of expression, provide them with a resource for the study of other subjects, and bring them into contact with ways of thought which may differ from their own. The principal aim for the courses in group 2 is to enable students to use the language in a range of contexts and for many purposes.

## Language Acquisition

### Middle Years Programme Courses

The MYP language acquisition courses are designed to provide students with the necessary language skills and intercultural understanding to prepare students to enter the Diploma Programme at the Standard or Higher level. Students are encouraged to continue their learning of their language of choice for their middle school years. Any student who is thinking to switch languages upon entering high school should consult with the college counselor and chair of the Department for approval.

CDS offers a variety of courses at this level:

- **MYP Spanish I, II, III, IV**
- **MYP French II, III, IV**

### Diploma Programme Courses

*The DP Coordinator, in conjunction with teachers, is responsible for the placement of students. The most important consideration is that the course should be a challenging educational experience for the student. Courses for the Diploma Programme are taken during the junior and senior years and are offered at standard level (SL) and higher level (HL). CDS currently offers DP Language B courses in Spanish, French.*

*Prerequisites:*

- **IB DP Spanish or French HL:** MYP Spanish/French II and III (A, A+ average)
- **IB DP Spanish or French SL:** MYP Spanish/French II and III (grade A- or B+)
- **IB DP Spanish or French Ab-Initio SL:** no prerequisites.

## Humanities

The Mission of the Carrollwood Day School Upper School Division's Humanities Department is to promote students' understanding of the humanities disciplines, including the nature and diversity of sources, methods, and human interactions between and among societies and with the natural environment elevate and promote the humanities disciplines' skills of research, analysis, synthesis, and evaluation for practical and professional applications beyond academics develop students' viability as active, successful contributors to the modern, complex global economy provide students with the necessary skills to analyze documents, events, media, and personages in both academic and real-world contexts.

Courses offered in the freshman and sophomore years consist of World History (Grade 9) and United States History and Government (Grade 10). They are intended to lead students from an understanding of their own time and region to an appreciation at regional, national and global levels and across time periods. Students acquire the ability to analyze, classify, explain and record spatial phenomena with increasing sophistication at each level. The study of history demands a truly international approach. It addresses a variety of cultures and times, and stresses their increasing interaction in our modern world. History within an international curriculum stresses the ability to analyze evidence, to use historical sources in a critical way, to detect bias, and to argue empathetically. Beyond factual knowledge, students are encouraged to develop the capacity to think and write historically and to enjoy and value the past for its own sake as well as a means by which to understand and appreciate the present.

Courses offered for the junior and senior years span the humanities and social sciences. An essential characteristic of these courses is that their subject matter is contestable and that their study requires students to tolerate some uncertainty. Studies of local situations and of global perspectives foster an appreciation of change and continuity as well as of similarity and difference. Students evaluate the major theories, concepts and research findings of the respective disciplines and learn each discipline's methodology.

## **Middle Years Programme Courses**

### **IB MYP World History Honors**

World History introduces students to the theories, themes, events, and characters that have shaped the history of humankind, particularly from prehistory until today. We will examine social, economic, cultural, and political histories from diverse global perspectives. Through our intensive exploration of multiple historical perspectives, students will complete this course with the depth and breadth of historical understanding required to make sense of our modern, complex world.

### **IB MYP US History & Government Honors**

United States History is a year long course that strives to develop in each student an understanding of the outstanding individuals, evolutionary trends, and critical events which have shaped the destiny of our republic. This course will survey the progress of American civilization from 1492 to the present. Students will be taught to appreciate uncertainty in the quest for historical knowledge. In addition, students will be exposed to American history from a critical perspective, but also with an appreciation for the contributions and sacrifices of those who came before. *This course is offered as an Extended Honors course with an AP test option to recommended students.*

## **Diploma Programme Courses**

### **IB DP History SL/HL I & II**

This course takes place over both the junior and the senior year. The requirements for Standard Level and Higher Level overlap to a large degree, though the HL places added emphasis on the regional option History of the Americas, along with a degree of enhanced rigor. Both incorporate a World History prescribed subject and two world history topics. The IB emphasis on developing a tolerant, reflective, risk-taking, and culturally aware student exist strongly on both levels. Students are evaluated through external essay testing that takes place at the end of their senior year, along with an historical investigation that is graded internally. CDS assigns a course grade based on performance in the class.

### **IB DP Psychology SL/HL I & II**

This course takes place over both the junior and the senior year. Students will develop a fundamental knowledge of Psychological Science as foundational to the application of critical thinking skills. Through the study of psychology, students acquire an understanding of and an appreciation for human behavior, behavior interaction and the progressive development of individuals on cognitive, biological, socio-cultural levels. This will better prepare them to understand their own behavior and the behavior of others. This course is offered with an AP test option to recommended students.

### **IB DP Global Politics SL/HL I & II**

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 interpret competing and contestable claims.

### **IB DP Business Management SL/HL I & II**

The course considers the diverse range of business organizations and activities and the cultural and economic context in which business operates. Emphasis is placed on strategic decision-making and the day-to-day business functions of marketing, production, human resource management and finance. Links between the topics are central to the course, and this integration promotes a holistic overview of business activity. The course encourages the appreciation of ethical concerns and issues of social responsibility in the global business environment. The Business Management course will contribute to students' development as critical and effective participants in local and world affairs.

## **Non-IB Humanities Honors Courses**

### **Economics and Personal Financial Literacy Honors**

(1 credit, Honors, 10-12 grade)

Economics and Personal Financial Literacy Honors will examine the fundamental economic questions of the behavior of consumers, firms, and markets. Topics covered include supply and demand analysis, banking, economic performance indicators, and the global economy. The course will also focus on personal financial literacy focusing on budgeting and money management, credit, wise consumer choices, taxes, and employment.

## **Mathematics**

Our goal at Carrollwood Day School is to provide mathematics instruction that will encourage students to become accurate, efficient, and adaptive problem solvers. It is our belief that the changes in technology will create an ever-changing world for the current and future generation of students. We can no longer predict and plan for the problems that these students will need to solve when they enter the workforce. Therefore, we must make sure that our students have the requisite knowledge, as well as the skills to apply this knowledge to a variety of circumstances that are known and unknown at the current time.

At the center of our mathematics instruction are authentic problem-solving opportunities that present a significant challenge. A mathematical problem may be a hands-on exploration of a mathematical concept, a multi-step objective, shorter problem with a singular answer, or looking for patterns or reasoning in arithmetic strategies. Students must have the chance to struggle with meaningful problems, discuss possible methods for solutions with their peers, conceive legitimate mathematical arguments, and place these hypotheses before a group of their peers who can provide constructive feedback.

The study of mathematics aims to deepen a student's understanding of mathematics as a discipline and to promote confidence and facility in the use of mathematical language. Aims and objectives include understanding mathematical reasoning and processes, the ability to apply mathematics and to evaluate the significance of the results, the ability to develop flexible strategies for problems in which solutions are not obvious, and the acquisition of mathematical intuition. Students gain an appreciation that mathematics is a universal language with diverse applications and an understanding of how cultural, societal and historical influences from a variety of cultures have shaped mathematical thought.

### **Middle Years Programme Courses**

#### **IB MYP Algebra I**

*Prerequisite: Successful completion of Pre-Algebra*

Algebra I is a course in which students learn the fundamentals of writing and solving algebraic equations and inequalities. Students are introduced to functions and learn foundational skills and vocabulary that will lead to success in future mathematics courses. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns. The topics of this course include writing, solving, and graphing linear equations and inequalities, linear systems, absolute value equations, exponent laws and equations, radical operations and equations, and quadratic equations using factoring, completing the square, and the quadratic formula.

#### **IB MYP Quadratics and Geometry Standard**

*Prerequisite: Successful completion of Algebra I*

Standard Math I is a course in which students focus on Geometry, Trigonometry, Statistics, and Probability. In Geometry and Trigonometry, students will extend what they have learned in Algebra I and apply those skills to 2D and 3D figures. They will also gain experience with deductive reasoning skills. In Statistics and Probability, students will learn the basics of analyzing data in addition to organizing data in a way to find simple probabilities. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate

effectively using mathematics, and investigate patterns. The topics of this course include surface area and volume, coordinate geometry, similarity and congruence of triangles, circle theorems, pythagorean theorem, trigonometric ratios, measures of center, statistical graphs, linear regression, venn diagrams, tree diagrams, and sample space diagrams.

#### **IB MYP Geometry Extended**

*Prerequisite: Successful completion of Algebra I or Algebra I Honors*

Extended Math I is a course in which students focus on Geometry, Trigonometry, Statistics, and Probability. This course is designed for students who wish to pursue further studies in math and this course will go deeper into each of the topics than the IB MYP Standard Math I course. In Geometry and Trigonometry, students will extend what they have learned in Algebra I and apply those skills to 2D and 3D figures. They will also gain experience with deductive reasoning skills. In Statistics and Probability, students will learn the basics of analyzing data in addition to organizing data in a way to find simple probabilities. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns. The topics of this course include surface area and volume, 2D and 3D coordinate geometry, congruent and similar figures, circle theorems, pythagorean theorem, trigonometric ratios, law of sines and cosines, the unit circle, measures of center, statistical graphs, linear regression, venn diagrams, tree diagrams, sample space diagrams, and probability of multiple events.

#### **IB MYP Geometry Advanced Extended**

*Prerequisite: Successful completion of Algebra I or Algebra I Honors*

Extended Advanced Math I is a course in which students focus on Geometry, Trigonometry, Statistics, and Probability. This course is designed for the top students that plan on taking the HL (higher level) math course in their junior and senior year. While the content covered is the same as the IB MYP Extended Math I course, the depth and level of problem solving is more challenging. In Geometry and Trigonometry, students will extend what they have learned in Algebra I and apply those skills to 2D and 3D figures. They will also gain experience with deductive reasoning skills. In Statistics and Probability, students will learn the basics of analyzing data in addition to organizing data in a way to find simple probabilities. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns. The topics of this course include surface area and volume, 2D and 3D coordinate geometry, congruent and similar figures, circle theorems, pythagorean theorem, trigonometric ratios, trigonometric identities, law of sines and cosines,



the unit circle, measures of center, statistical graphs, linear regression, probability of multiple events, venn diagrams, tree diagrams, sample space diagrams, and conditional probability.

### **IB MYP Algebra II Standard**

*Prerequisite: Successful completion of IB MYP Standard Math I or Algebra I and Geometry*

Standard Math II is a course in which students focus on Algebra II. In this course, students will build upon the skills learned in Algebra I and Geometry. Students will gain a strong understanding of functions in multiple forms in addition to learning the complex number system. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns. The topics of this course include graphing, transforming, and solving quadratics, exponential functions, logarithmic functions, radical functions, rational functions, polynomials, and trigonometric functions.

### **IB MYP Algebra II Extended**

*Prerequisite: Successful completion of IB MYP Extended Math I or Algebra I and Geometry Honors*

Extended Math II is a course in which students focus on Algebra II. This course is designed for students who wish to pursue further studies in math and this course will go deeper into each of the topics than the IB MYP Standard Math II course. In this course, students will build upon the skills learned in Algebra I and Geometry. Students will gain a strong understanding of functions in multiple forms in addition to learning the complex number system. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns. The topics of this course include graphing, transforming, modeling with, and solving quadratics, exponential functions, logarithmic functions, radical functions, rational functions, polynomials, and trigonometric functions.

### **IB MYP Algebra II Advanced Extended**

*Prerequisite: Successful completion of IB MYP Advanced Extended Math I or Algebra I and Geometry Honors*

Extended Math II is a course in which students focus on Algebra II. This course is designed for the top students that plan on taking the HL (higher level) math course in their junior and senior year. While the content covered is the same as the IB MYP Extended Math II course, the depth and level of problem solving is more challenging. In this course, students will build upon the skills learned in Algebra I and Geometry. Students will gain a strong understanding of functions in multiple forms in addition to learning the complex number system. In this course, students will be required to show knowledge and understanding of the skills, apply their knowledge to real-world contexts, communicate effectively using mathematics, and investigate patterns.

The topics of this course include graphing, transforming, modeling with, and solving quadratics, exponential functions, logarithmic functions, radical functions, rational functions, polynomials, and trigonometric functions.

### **Diploma Programme Courses**

#### **IB DP Mathematical Analysis and Approaches SL/HL I & II**

The course Mathematics: Analysis and Approaches is offered at both the SL and HL level. The SL course is a subset of the HL course. It is appropriate for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will also be fascinated by exploring real and abstract applications of these ideas, with and without the use of technology. This course covers 5 topics (number & algebra, functions, geometry & trigonometry, statistics & probability, calculus) with an emphasis on calculus. Students who take this course will be those who enjoy the thrill of mathematical problem-solving and generalization. This subject is aimed at students who will go on to study subjects with substantial mathematics content. There is a mathematical exploration that is an individual piece of written work that involves investigating an area of mathematics.

#### **IB DP Mathematics Applications & Interpretations SL I & II**

The course Mathematics: Applications and Interpretations is offered only at the SL level at CDS. It is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. This course covers 5 topics (number & algebra, functions, geometry & trigonometry, statistics & probability, calculus) with an emphasis on statistics and modeling. Students who take this course will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such as social sciences, natural sciences, some economics, psychology, and design, for example. There is a mathematical exploration that is an individual piece of written work that involves investigating an area of mathematics.

### **Non-IB Math Honors Courses**

The order that the students takes these two one-year courses will vary since they will be offered in the CDS course selection every other year. School year 2020-21 will be offering the Statistics & Probability Honors course.

### **Precalculus Honors**

This one-year course caters to students with varied backgrounds and abilities that are IB Course Candidates or CDS graduates. It is designed to build confidence and encourage an appreciation of mathematics in students.

Topics covered include building linear and quadratic functions with mathematical modeling, polynomial & rational functions, financial compounding interest rates that use exponential & logarithmic functions, applications of trigonometry, and linear programming with systems of linear equations.

### **Statistics & Probability Honors**

This one-year course caters to students with varied backgrounds and abilities that are IB Course Candidates or CDS graduates. It is designed to build confidence and encourage an appreciation of mathematics in students. **Statistics** topics include concepts of sampling techniques and bias, different visual display of data, measures of center and spread, correlation of a linear regression equation, normal distribution, and the Chi Squared test of independence. There will be a project that statistically analyses real-world data to summarize their learning in a concrete way. **Probability** topics include both hands-on experimental probability as well as theoretical probability. The students will use sample space and Venn diagrams to visually see all the possible outcomes as they learn to work with combined, conditional, & independent events. Concepts of discrete random variables and their probability distributions will be used to find an expected value of a situation.

## **Science**

The mission of the science department at Carrollwood Day School is to provide the students with a body of knowledge and an understanding of the scientific approach to problem solving. This is achieved by nurturing intellectual growth and developing the ability to apply knowledge, and excel in practical and analytical skills which prepare students to tackle challenging and fundamental real-world problems. Our dedication to our students combines rigorous academic study and the excitement of discovery through the collaboration among the various disciplines. We strive to create among our students a passion to work creatively in order to develop a generation of scientists capable of making significant contributions to their society and the world.

The study of science aims to provide the student with both a body of knowledge and an understanding of the scientific approach to problem solving. This dual role makes science an important means to investigate and understand the natural world. The ability to formulate hypotheses, design and carry out strategies to test them, and evaluate results, constitutes the framework within which specific content is presented. Among other skills, the student is expected to use basic laboratory equipment safely and efficiently, to measure and make sensible estimates, and to use classification as a system for grouping and organizing. As with other areas of the curriculum, students are encouraged to relate the content of the classroom and laboratory to the realities

of life as they develop critical thinking and problem-solving skills. As well as providing a sustained, valuable academic experience, the science courses promote an awareness of the increasingly international context of scientific activity, its impact and limitations, as well as the constant evolution of scientific knowledge and understanding. Students are encouraged to consider science as a constantly evolving cooperative venture between individuals and among members of the international community, influenced by its social, economical, technological, political, ethical and cultural surroundings.

### **Middle Years Programme Courses**

#### **IB MYP Biology Honors**

Biology is the study of life and consists of a range of concepts from intracellular structures and functions to ecological relationships and species impact on the environment. Throughout the course students will focus on the relationships between organisms, and academic disciplines. Classroom assignments and assessments will include cooperative group activities, research from a variety of sources including the Internet, web quests, laboratory experiments (both student and instructor designed), and traditional assessments (tests, quizzes).

#### **IB MYP Chemistry Honors**

*Prerequisite: Algebra I*

Basic principles and calculations of chemistry will be covered with emphasis in the areas of atomic structure, chemical bonding, molecular structure and properties; descriptive chemistry of the periodic table; acids, bases and salts; equilibrium; thermodynamics; oxidation-reduction and kinetics. The laboratory is an introduction to quantitative analysis and the study of atomic and molecular structures. Resources used will include Internet, power points presentations, and various projects to accent the covered topics. *This course is offered as an Extended Honor course.*

#### **IB MYP Physics 10 Honors**

*Prerequisite: Geometry Extended or Extended Advanced*

This course will cover the basic theories and research methods necessary for a strong foundation in physics. We will cover process of scientific inquiry and understanding the nature of science will be explored. Students will study motion and its causes, energy, fluids, thermodynamics, vibrations and waves, sound and light, electricity and magnetism, and modern physics. Clear emphasis will be made on graphing and mathematical reasoning skills. Students will be expected to apply their critical thinking skills and learn to develop scientific models based on their understanding of the natural world. *This course can be taken as Physics Honors by non-DP students in Grade 11.*

### **Diploma Programme Courses**

*Courses for the Diploma Programme are taken over two years and are offered at standard level (SL) and higher level (HL). HL courses represent 240 teaching hours; SL*

*courses cover 150 hours. By arranging work in this fashion, students are able to explore some subjects in depth and some more broadly over the two-year period.*

### **IB DP Biology SL/HL I & II**

*Prerequisites: General biology and understanding of chemistry*

Biology is the study of life and consists of a range of concepts from intracellular structures and functions to ecological relationships and species impact on the environment. Throughout the course students will focus on the relationships between organisms and academic disciplines. During the Diploma Programme Biology course the students will gain an understanding of 1) the world they live in and their role/impact on the biosphere, 2) evolution and its impact on the past, present and future of the world biosphere, 3) the scientific method and how to utilize it in solving a variety of problems, 4) how questioning and curiosity leads to discovery and exploration, and 5) how to communicate and work in groups.

### **IB DP Physics SL/HL I & II**

*Prerequisite: Strong Algebra II skills*

Physics is an approach to understanding the natural world through the use of mathematics and physical relationships. During the two year IB Physics program the students will develop skills used in understanding 1) the universe, from the smallest particles to the vast distances between galaxies, 2) mathematics, which is the language of physics, 3) the scientific method and how to utilize it in approaching and solving a variety of problems, 4) how questioning and curiosity leads to discovery and exploration, and 5) how to communicate and work in groups. Assessment of theoretical concepts will culminate at the end of the course in an exam format. The use of practical work by developing an appreciation of the hands-on nature of scientific work along with the benefits and limitations of scientific methodology will be assessed throughout the course.

### **IB DP Chemistry SL/HL I & II**

*Prerequisite: Strong Algebra II skills & MYP Chemistry Extended*

During the two-year IB Chemistry programme, the students will gain an understanding of 1) the world they live in and their role/impact on the environment; 2) how scientists work and communicate with each other; 3) the scientific method which involves formation, testing and modification of hypothesis through observation and measurement under the controlled conditions of an experiment; and 4) environmental and technological contexts. The course aims to raise awareness of the social, moral and economic effects of science and a practical approach through experimental work. Chemistry is an experimental science that combines academic study with the acquisition of practical and investigation skills. It is called the central science, as chemical principles underpin both the physical environment in which we live and all biological

systems. Throughout the course students will focus on the physical, organic, environmental and modern analytical chemistry.

### **IB DP Environmental Systems and Societies SL I & II**

As a transdisciplinary subject, environmental systems and societies is designed to combine the techniques and knowledge associated with group 4 (the experimental sciences) with those associated with group 3 (individuals and societies). The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. This course is conducive to students evaluating the scientific, ethical and socio-political aspects of issues.

### **IB DP Sports, Exercise, and Health Sciences SL/HL I & II**

The newest science offered at CDS, Sports Exercise and Health Sciences incorporates the disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. A combination of syllabus content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyze human performance. The SEHS course has strong international dimensions such as international sporting competition and the international bodies that regulate them. Ethical issues that exist within sporting competitions are considered. The comprehensive curriculum provides excellent preparation for university courses including those specifically related to Sport, Sports Science or Physical Education.

### **IB DP Computer Science SL/HL I & II**

*Prerequisite: Principles of Computer Science*

The IB DP Computer Science SL/HL courses require an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.



## **IB DP Design Technology SL/HL I & II**

DP Design Technology aims to develop an enhanced understanding of design and the technological world. Inquiry and problem-solving are at the heart of the subject. This course requires the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems, the development of feasible solutions, and the testing and evaluation of the solution. A solution can be defined as a model, prototype, product or system that students have developed independently.

## **Non-IB Science Honors Courses**

### **Honors Anatomy & Physiology (11th and 12th grade)**

Explore the organization of the human body and how it works. Acquire knowledge necessary to understand what the body is doing and how you can help the body cope with many different situations. Body systems will be studied in order to understand how their structure, location, and function allow for interaction with other parts of the body. Honors anatomy and physiology is an intensive study of the structure and function of the human body. This will include a review of introductory biology, cytology, histology, integumentary, skeletal, muscular, nervous, circulatory, and digestive systems and special senses. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course.

## **Fine Arts**

The Fine Arts department's mission is to foster student development in areas such as critical and creative thinking, personal expression, cooperative learning, effective communication, cultural awareness, and community engagement. Through the study of a variety of mediums including: theater, music, visual arts, and film; we aim to educate students to understand, appreciate, and respect how artists from different cultures express themselves as well as aid in their understanding of themselves and the world in which they live.

**Vision:** Education in the fine arts is an integral part of the development of the individual student as well as our shared cultural heritage. The fine arts engage many areas of the brain and provide learners with life skills such as: creative thinking, problem solving, collaboration, communication, self-management, resiliency, and adaptability. Studies on art education have shown links to improvements in attention and literacy, motivation and academic performance, social skills and community cohesion, as well as self-esteem and overall personal satisfaction. The fine arts department aims to not only nurture the student's

appreciation for the fine arts and their development as an artist but to cultivate the entire child.

The fine arts program's goal is to ensure all students:

- Learn an appreciation of the fine arts
- Learn to communicate and express themselves through the fine arts
- Learn to critically analyze, understand, and evaluate a work of fine art
- Learn to explore a work of fine art through its various contexts and make connections to other artists, works of fine art, and fine art making techniques
- Learn the technical skills and creative process used to create a work of fine art
- Learn to work as artists both individually and collaboratively
- Learn to provide and receive constructive criticism and feedback on their own work and the work of others
- Learn to use the fine arts as a way to reflect on and impact the world around them

The arts encompasses visual arts and performing arts and is of particular interest in an international programme. From the earliest times, artistic expression has been common to all cultures as human beings make statements through a variety of non-verbal forms and create objects which are aesthetically pleasing. Beyond the barrier of languages, the discovery of the cultural values of civilizations through their artistic production is one of the best ways to promote international understanding. The coursework brings students into contact with the art forms and aesthetic values of other cultures as well as their own, and helps to develop perceptions between ideas and art. Students are encouraged to identify particular creative abilities and to master techniques appropriate to that form of expression. In addition to developing the student's own imagination and skills, the program seeks to acquaint young people with the creations of men and women whose works have proven to be of enduring worth. The various art courses are designed to help the student become a developing artist, one who is able to assess the level of skill and target the areas that need development. It organizes learning around the creative cycle, a dynamic, ongoing process of sensing, planning, creating and evaluating art, and one in which all the senses are involved. This cycle involves creative energy, communication, interaction and reflection.

## **Middle Years Programme Courses**

### **IB MYP Visual Arts: 2D**

Visual Arts two dimensional design class will provide a foundation in the fundamentals of pictorial design. The course addresses the elements and principles of design (line, color, shape, texture, space, form, value, unity, balance, variety, scale, proportion, rhythm, emphasis). Throughout the courses students are presented with

visual problems to solve through both teacher directed and student initiated exercises and projects, which include drawing, painting, and mixed media. Using a variety of traditional and non-traditional materials and methods, students are encouraged to develop their own concepts and techniques. Through their participation in these course students will acquire foundational skills; develop visual curiosity; analyze and research artists and works of art; experiment with techniques and methodologies; and communicate knowledge through written and verbal critiques. These courses are designed to equip the student to be more confident in the visual translation and personal expression of their ideas and concepts as well as develop their awareness and appreciation of art and its significance and function.

### **IB MYP Visual Arts: 3D Art**

Visual Arts 3D is a three dimensional design class that will introduce students to the fundamental sculptural processes of addition, subtraction, and substitution. The course is taught through a variety of hands-on exercises and projects in which the students are introduced to the concepts of form, positive and negative space, scale, proportion, visual weight, mass, transformation, texture, balance, movement, and color. Emphasis will be on the execution of successful idea generation, creative problem solving, and craftsmanship. In addition to introducing formal sculptural design strategies, the course will explore other issues in sculpture such as material, process, site, context, aesthetics, function, and the relationship of an object to the viewer. Students will explore various sculptural methods including paper fabrication, plaster construction, assemblage, and mold making. Through their participation in this course students will acquire foundational skills; develop visual curiosity; analyze and research artists and works of art; experiment with techniques and methodologies; and communicate knowledge through written and verbal critiques. This course is designed to equip the student to be more confident in the visual translation and personal expression of their ideas and concepts as well as develop their awareness and appreciation of sculpture and its significance and function.

### **IB MYP Visual Arts Photography**

The purpose of the Photography class is to provide the opportunity for students to develop their technical skills while fostering an artistic appreciation for the art of photography. The class projects will be tied to discussions of the history of photography as well as the use of photography in modern society. Students will learn a variety of photographic equipment, processes, and techniques including: compositional theory, how to use a DSLR camera, digital editing, and studio lighting and equipment. The emphasis of this course is for students to develop a concentration and a thematic body of work while expanding their knowledge of the materials and processes. Students will work independently, relying on critical thinking, problem solving, and exploration to create their own expressive work.

### **IB MYP Drama**

The progression of theater courses emphasizes the importance of working individually and as a member of an ensemble. Students are encouraged to develop the organizational and technical skills needed to express themselves creatively in theater. At the core of the theater program lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement, and imaginative synthesis--all of which should be achieved through practical engagement in theater.

### **IB MYP Comprehensive Theatre**

Prerequisite: Students must have taken a drama class. Comprehensive Theatre students will do advanced work in acting, directing, and set design, and will continue the study of theater with greater emphasis on the historical evolution and cultural contributions of theater, production styles, and performance. Production work will be required. Working on the production provides practical hands-on experiences in acting and stagecraft through the preparation and public performances of plays.

### **IB MYP Music (guitar, strings, piano)**

IB MYP Music both reviews and builds on concepts explored in the previous years of the MYP and provides new music students an opportunity to develop an instrumental skill. Students can continue to study on string instruments, or start from the beginning on guitar or piano. Students in MYP Music acquire knowledge and develop skills relating to the interpretation of notated sounds and isolated rhythmic patterns. This knowledge is used to create music through instrumental exploration and playing, both collaboratively and individually. MYP music is not principally a performance based course, and serves both experienced musicians and students who would like to explore music but have little or no formal music study. MYP Music I and II lay a foundation of skills which can be developed in the DP Programme.

### **IB MYP Concert Band**

IB MYP Concert Band develops musicians through ensemble performance of music from diverse global contexts and individual instrumental achievement. Students build on their previous knowledge, acquiring and demonstrating more advanced knowledge and skill. Musicians reflect, commenting and making connections about the context of music, practice methods, the organization of sounds, and combined rhythmic structures. IB MYP Concert Band is a performance based course which serves to prepare musicians for the IB Music Diploma Programme.

### **Diploma Programme Courses**

#### **IB DP Visual Arts SL/HL I & II**

Visual arts is an extensive two-year visual arts course for the motivated student who has a deep interest in art. Through the duration of the course students will be

required to keep an investigation workbook in addition to creating multiple art projects that embody a cohesive body of work. Students will be encouraged to make art that is both personally and aesthetically meaningful to them, while mastering skills and techniques of many different types of art media. As the art students become submersed in the Diploma Programme, they will focus on a theme or art medium that showcases their technical art skills and visual self-expression. Students will delve into this concentration to create imaginative, purposeful, high quality pieces of artwork. Their artwork and ideas will evolve through investigation and experimentation. An art exhibition that demonstrates each student's growth and commitment will be completed at the culmination of the course.

### **IB DP Theater Arts SL/HL I & II**

The aims of the program in Theater Arts are to help students understand the nature of the theater; to understand it by making it as well as by studying it; to understand it not only with their minds but with their senses, their bodies and their emotions; to understand the forms it takes in cultures other than their own; and through this understanding better understand themselves, their society and their world. Students in this course engage in four areas of theatrical studies: 1) development of performance skills, 2) world theater studies, 3) practical play analysis, and 4) actual theater production. Higher level students will also be required to complete an individual project.

### **IB DP Music**

In this course, students and teachers engage in a journey of imagination and discovery through partnership and collaboration. Students develop and affirm their unique musical identities while expanding and refining their musicianship. Throughout the course, students are encouraged to explore music in varied and sometimes unfamiliar contexts. Additionally, by experimenting with music, students gain hands-on experience while honing musical skills. Through realizing and presenting samples of their musical work with others, students also learn to communicate critical and artistic intentions and purpose. As students develop as young musicians, the course challenges them to engage practically with music as researchers, performers and creators, and to be driven by their unique passions and interests while also broadening their musical and artistic perspectives.

### **IB DP Film SL/HL I & II**

DP Film Studies is a two-year course that involves the study of both domestic and international film texts, film theory, and practical exercises in filmmaking and analysis. The course is available to juniors, and seniors who wish to pursue a rigorous study of film production and continue the program the following year. At the core of the IB film course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis that is achieved through the practical engagement of film.

Students are required to create film projects as well as analyze film in writing and oral presentations as well as provide community service via the A/V club. This course will fulfill the graduation requirement for a credit in fine and practical arts.

### **Electives**

#### **IB MYP Digital Media Creation (1 credit, Honors, grades 9-12)**

Digital Media Creation (DMC) is a 1 credit elective that focuses on giving students the skills to analyze and create digital media in a variety of formats and contexts. The class would allow students to understand what makes good media design and develop ideas based around and using good media. Students will develop podcasts, online content channels, video blogs, promotional videos, etc. They will learn digital marketing techniques and processes to create these items, as well as understanding the ethical implications of sharing digital media content. Students will develop skills in the Adobe Creative Cloud suite, along with other industry video and audio hardware. Students will also be asked to create digital media content for school promotions and events.

## **Physical Education**

We believe that physical education is a vital component for the development of a student's physical, mental and social well-being. It is our mission to provide equal opportunity to our students, through planned activities, for physical development in the areas of strength, flexibility, coordination, endurance, balance, agility, range of motion, and power. Our diverse program will allow students the opportunity to develop individual skills and introduce new, enjoyable experiences for life long physical fitness and well-being. We will provide information for knowledge in proper exercise techniques and practices, as well as good nutritional habits.

We believe that physical education is a vital component for the development of a student's physical, mental and social well-being. It is our mission to provide equal opportunity to our students, through planned activities, for physical development in the areas of strength, flexibility, coordination, endurance, balance, agility, range of motion, and power. Our diverse program will allow students the opportunity to develop individual skills and introduce new, enjoyable experiences for life long physical fitness and well-being. We will provide information for knowledge in proper exercise techniques and practices, as well as good nutritional habits.

### **Middle Years Programme Courses**

#### **MYP Physical Education and Health I & II**

IB MYP Physical Education and Health years 4 and 5 enable students to:

- use inquiry to explore physical and health education concepts
- participate effectively in a variety of contexts



- understand the value of physical activity
- achieve and maintain a healthy lifestyle
- collaborate and communicate effectively
- build positive relationships and demonstrate social responsibility
- reflect on their learning experiences

## Electives

### **Strength and Conditioning** (1.0 credit, grades 11-12)

The objective of this Strength & Conditioning course is to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities which will further promote a healthy and active lifestyle. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Students will also be taught proper warm-up and cool-down methods, exercise testing, spotting procedures, muscle groups, and proper exercise techniques. Students will design and participate in an individualized strength and conditioning program including resistance training and aerobic exercise. It is our goal that students will take what is learned in this class and use it for lifelong fitness programming.

## Design

### **Middle Years Programme Courses**

#### **IB MYP Entrepreneurship I & II**

A practical course that fosters entrepreneurial thinking by helping students become innovators and leaders by creating business ideas using Lean Launchpad start-up techniques. Students will gain experience in ethical decision making, effective communication, working in creative teams, and perseverance as they learn what it's like to start a new business using the design cycle. Upon course completion students will understand what it takes to start a business and develop a minimum viable product quickly in order to learn valuable lessons from potential customers and ultimately work towards creating a finished prototype.

IB MYP Design Entrepreneurship Technology II will build upon Entrepreneurship I with students taking a lean model canvas from a startup idea further by creating models, prototypes, and minimum viable products. Students will get an opportunity to work with mentors to really push their ideas forward.

#### **IB MYP Principles of Computer Science**

Principles of Computer Science introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable curriculum that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

This course aligns with the AP Computer Science Principles exam and students may opt to take the AP exam.

#### **IB MYP Game Design & Cybersecurity**

Students will start the year learning about a range of cybersecurity issues, ethical and technical, and hone skills to combat cybercrime and keep themselves and their data safe. They will also practice their skills and push their understanding in 'capture the flag' and 'cyber-defense' competitions. The second semester will be dedicated to building students' programming skills, taking what they know of procedural programming to the next level, object-oriented programming. This will be done through the context of Game Development in Unity and through the programming language, C#. Students will complete a capstone project - designing and building a playable 2D or 3D game.

#### **IB MYP Introduction to Engineering Design**

Introduction to Engineering Design (IED), students begin to explore the History of Engineering, the Design Process, Simple Machines, Control Systems, Fluid Systems and many other technology systems and processes. The principles of math and technology are explored as to how they both relate to our global society. Students will explore the vital skills of teamwork, decision making, troubleshooting, problem solving, independent research, and career exploration. These skills allow learners to apply multiple intelligences in completing projects that has meaning and attain a sense of accomplishment.

#### **IB MYP Principles of Engineering**

The major focus of this course is to further develop students' skills in the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will have the opportunity to further develop skills and understanding of course concepts through activity, project, and problem based learning.

### **Diploma Programme Courses**

*Courses for the Diploma Programme are taken over two years and are offered at standard level (SL) and higher level (HL). HL courses represent 240 teaching hours; SL courses cover 150 hours. By arranging work in this fashion, students are able to explore some subjects in depth and some more broadly over the two-year period.*

#### **IB DP Computer Science SL/HL I & II**

*Prerequisite: Principles of Computer Science*

The IB DP Computer Science SL/HL courses require an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and

empowers innovation, exploration and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.

about 40 hours in total on the extended essay. Each student engaged in writing the extended essay will be supervised by a member of the faculty.

## **Diploma Programme Required Courses**

In addition to its academic requirements, the IB Diploma Programme (for students in grades 11 and 12 ) includes three fundamental features that contribute to its strength and success: Theory of Knowledge; CAS-Creativity, Activity, Service; and Extended Essay. Through their involvement in these components of the programme, students develop skills that set them apart from other students when they progress to university or college. The student who satisfies the demands of the International Baccalaureate Diploma demonstrates a strong commitment to learning, both in terms of the mastery of subject content and in the development of skills and discipline necessary for success in a competitive world.

### **IB DP Theory of Knowledge I & II**

The Theory of Knowledge course is the central interdisciplinary core around which the subject areas of the International Baccalaureate revolve. By exploring the knowledge systems of mathematics, natural sciences, human sciences, history, the arts, and ethics through the filters of emotion, reason, language, and depth, students and teachers learn to reflect critically on these essential human processes. The course challenges students to become aware of the complexity of knowledge and to acknowledge the need to act responsibly in a global society. This, in turn, reinforces the Creativity, Activity, and Service (CAS) components of the IB Diploma Programme.

### **Creativity, Activity, Service (CAS)**

The creativity, activity, service (CAS) requirement takes seriously the importance of life outside the world of scholarship, providing a counterbalance to the academic self-absorption some students feel within a demanding school curriculum. Participation in CAS encourages students to share their energies and special talents while developing awareness, concern and the ability to work cooperatively with others. The IBO's goal of educating the whole person and fostering more caring and socially responsible attitudes comes alive when students reach beyond themselves and their studies.

### **Extended Essay**

All candidates in the IB Diploma Programme are required to submit an extended essay. The extended essay is an individual research project of about 4,000 words which allows students to investigate in detail a topic of special interest to them. This project acquaints students with the independent research and writing skills that are necessary and expected at the university level. The IBO recommends that students spend



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