



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019





# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## Academic Program / Graduation Requirements

ICS offers four high school programs, designed to meet the needs of a variety of students

1. Study within the college-preparatory high school program at ICS is focused on the objective of earning an ICS high school diploma.
2. Students may also attempt to earn an additional, concurrent qualification, the International Baccalaureate (IB) Diploma. Students who do not wish to attempt the full IB Diploma can still earn advanced credit from many colleges by taking IB Higher Level courses and scoring well on the Internal Assessments and IB exams.
3. Students with special learning needs may take the ICS Modified Diploma, which may allow them to enter Community Colleges after graduation but not usually university.
4. Students with a high need of learning support may pursue the Transitions Program, which focuses on building skills to prepare students for independent living.

Subject Area	ICS Diploma	Modified Diploma	Transitions Diploma
English	4 credits	4	4
Social Studies	3	3	1
Science	3	3	3/4
Mathematics	3	3	3/4
PE / Health	2	2	n/a
Arts	1	1	n/a
World Languages	2	n/a	n/a
Electives	8	4-8	n/a
Functional Living Skills	n/a	n/a	4
<b>TOTAL</b>	<b>26 credits</b>	<b>20-26</b>	<b>19-24</b>

\* .5 credits are awarded for successful completion of each semester of courses

IBDP graduation requirements are outlined below.

The four programs are described below.



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## ICS High School Diploma Program

The ICS High School Diploma is a fully recognized and U.S. Accredited High School Diploma program that prepares students for admission to U.S. universities. It is a four-year program and the curriculum is designed to be consistent with most international schools, facilitating transfer of expatriate students among these schools.

Students who take the full IBDP will normally also qualify for ICS High School Diploma requirements. ICS High School students must meet the ICS High School graduation requirements as outlined in the High School Handbook and ICS High School Course Guide. Full course descriptions are included in the ICS High School Course Guide.

### Requirements for the ICS Diploma

- Credit requirements for the ICS Diploma are outlined in the table above.
- The following courses are mandatory: English 9, English 10, Biology 1, Biology 2, Social Studies 9, Social Studies 10, PE 9/10.
- Students are required to complete two credits of physical education. The PE requirement for graduation should be met in grades 9 and 10. Students who transfer to ICS in grade 10 with no physical education credit in grade 9 will be required to complete one credit in physical education at the grade 10 level.
- Incoming grade 11-12 students may be excused an Art or PE credit if they are IB Diploma candidates.
- Students must take three credits of World Languages. It is recommended that students take three years of the same language.
- Elective credits are additional courses in any discipline.
- All students are required to complete the Creativity, Activity and Service (CAS) program as outlined below.

### Creativity, Activity and Service (CAS) Requirement

In accordance with our mission and philosophy, all ICS graduates must fulfill Creativity, Activity and Service (CAS) requirements. CAS is one of the core components of the IB Diploma, and completing the CAS requirements and reflection pieces complements our school community's belief that formal classroom education is only one part of life-long learning.

CAS requires students to complete, document and reflect upon weekly out-of-class activities in their final two years of high school. Such activities include individual CAS projects, the ICS Internship, sports, drama, arts, service projects, peer tutoring, student council, etc. CAS may be school-based or outside-of-school activities. The three areas (creativity, activity and service) should be equally represented in the student's individual two-year program.

- Grade 11 students should complete at least half of their CAS activities prior to beginning their senior year and complete the entire program by 1 April of Grade 12.
- ICS Diploma students who join ICS in Grade 12 will be required to fulfill approximately hours of CAS activities, plus reflections, to graduate with an ICS high school diploma.
- International Baccalaureate Diploma Students who join ICS in Grade 12 will continue with their existing CAS programs.



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## International Baccalaureate Diploma Program

The IB Diploma Program is an internationally recognized university preparatory two-year academic program. Students in grades 11 and 12 are encouraged to participate in the IB Diploma Program, which challenges students to master content knowledge and to acquire advanced critical thinking skills. Students are expected to use their creativity, to be actively involved in community service, to demonstrate proficiency in conducting independent research, and to be reflective through a balanced interdisciplinary approach to learning.

### The IB Diploma Requirements

Over the course of two years, Diploma candidates must complete the following:

- A course in Theory of Knowledge (TOK)
- The Extended Essay (a four thousand-word independent research project with an ICS supervisor).
- An individualized program of extra-curricular learning achieved through Creativity, Action and Service (CAS) activities in grades 11-12
- One course in each of the following six groups:

Group 1: First Language

Group 2: Language Acquisition

Group 3: Social Studies

Group 4: Sciences

Group 5: Mathematics

Group 6: The Arts and Electives

Three subjects must be taken at a Higher Level (HL) and three should be taken at Standard Level (SL).

Students should choose their HL courses based on their strengths and interests. Humanities- oriented students may want to take English and History Higher Level classes, whereas a future engineer might want to take Math and Science Higher Level classes.

One course, Environmental Systems and Societies SL, is designated as both Group 3 and Group 4; it meets the requirement for both Groups.

For their Group 6 course, IB Diploma Candidates can choose IB Visual Arts or IB Theatre or a second course from Groups 1–4. Some students have opted for a third language, or Geography SL. Students interested in engineering typically take Chemistry with Physics as their Group 6 elective, and students interested in medicine as a career are advised to take Chemistry with Biology as their elective, with one of them at the Higher Level.

For details on the recognition status of the IB Diploma and Certificates in the United States, Canada and/or other countries, please contact our IB Diploma Program Coordinator, Ms. Heidi Zickefoose, at [heidi.zickefoose@icsaddis.edu.et](mailto:heidi.zickefoose@icsaddis.edu.et). General information about the IB program is also available from [www.ibo.org](http://www.ibo.org).

## ICS Modified Diploma Program

The ICS Modified Diploma Program is designed to meet the needs of students who do not intend to enter university directly after a four-year high school diploma program. In order to support such students, modifications may be made to our graduation requirements, assessments, and to actual course content. Note that the ICS Modified Diploma does not prepare students for admission to universities. Students in the ICS Modified Diploma Program will work with the Student Support Team and HS Counselor to create an Individual Learning Program (ILP) and to determine appropriate modifications in light of future academic aspirations and career goals. The HS Counselor will work with the families of such students to plan for appropriate post-secondary work or academic programs.

## ICS Transitions Diploma Program

The ICS Transitions Diploma Program is designed to meet the needs of Special Education Needs students to prepare them for independent life, potential career plans, and community living. The requirements of the program are individually created to meet the needs of each student. Students in this program will be required to complete courses in the Assessment of Functional Living Skills (AFLS) Curriculum Guide under the three following domains: Basic Living Skills, Home Skills, and Community Participation Skills. The students' Individual Learning Program (ILP) determines the exact number and which module a student follows in these particular course areas. Students in the ICS Transitions Diploma Program will work with the Student Support Team and HS Counselor to create an Individual Learning Program (ILP) and to determine appropriate modifications in light of future academic aspirations and career goals. The HS Counselor will also work with the families of such students to plan for appropriate post-secondary work or academic programs.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## Course Guide

Below is the course guide for 2018-19.

- For an overview of all the HS courses offered in 2017-18 click [HERE](#).
- For a general mathematics structure grade 8-12, click [HERE](#).

Grade 10 students, considering if IB is right for you? Check out this overview [HERE](#).

If you have any questions, please contact the HS Office.

## Required Credits for an ICS Diploma

Subject Area	Credits Required
English	4
Mathematics	3
Social Studies	3
Sciences	3
Languages (other than English)	2
Physical Education	2
Arts	1
Other/Electives	8
<b>Total Credits required for ICS Diploma</b>	<b>26</b>

## Group 1: First Language

### English 9 (Grade 9; Full Year; 1.0 credit)

This focus of English 9 is to develop a strong foundation in students by studying a variety of text types and genres. Throughout the year, students will be exposed to at least one novel or collection of short stories, one play, and one unit of poetry in the course of the following units: Perception of Self, Power and Race, and Family Values and Identity. Other text types, including non-fiction, will be used to supplement their learning in each unit. Furthermore, the course seeks to prepare students for the IB by introducing two units dedicated to the study of language: Language in Essay Writing and News Reporting in the Media. Throughout the course students will work both cooperatively and independently, develop and use subject-specific vocabulary, write for different audiences and purposes, learn peer and self-editing to improve their writing process, and demonstrate their knowledge and understanding through a variety of assessment types.

### English 10 (Grade 10; Full Year; 1.0 credit)

In this course students will read, analyze, and respond to a variety of literary and nonfiction genres, taking into consideration their respective thematic, structural, and stylistic features. The course syllabus is organized by themes in literature as follows: Personal Growth, Representations of Gender, Power through Class. The nonfiction units focus on Travel Writing and Mass Communication. The texts studied may include works such as *Things Fall Apart*, *Oedipus Rex*, *Twelfth Night*, *The Great Gatsby*, *The Canterbury Tales*, and a variety of poems. Students will be expected to identify and interpret such elements of a work as character and character development, theme, conflict, symbolism and imagery. They will analyze texts in terms of stylistic features and literary devices. Students will develop their skills through such activities as cooperative projects, dramatic presentations, inter-disciplinary study, and investigations. Developing skills in reading comprehension, vocabulary development, oral communication, and writing will be emphasized. Writing of all types will be encouraged, including narrative, research, exposition and literary analysis.

### IB English Language and Literature Standard Level (grades 11/12; two years; 2.0 credits)

- **Prerequisite:** Successful completion of English 10 and Bilingual/native speaker proficiency

This is a two-year college preparatory English program. The course focuses on how language works to create meaning in cultural and historical contexts. It also teaches skills of close textual analysis of literature. All the texts are understood according to their form, content, purpose and readership/audience. The course is designed to support future academic study by developing a high social, aesthetic and cultural literacy, as well as communication skills. There are four main topics. Language and Identity concerns the racial, cultural and gender contexts of language. Media and Mass Communication concerns textual bias and the use of media formatting. Literary Studies considers how literary meanings are constructed by language. Literature in context is the study of how literary meanings are constructed by social, cultural and historical context.



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## **IB English Language and Literature Higher Level** (grades 11/12; two years; 2.0 credits)

- **Prerequisite:** Successful completion of English 10 and Bilingual/native speaker proficiency

This is a two-year college preparatory English program with more rigorous assessment standards than the Standard Level course. It also consists of two more literature units and additional written tasks. The course focuses on how language works to create meaning in cultural and historical contexts. It also teaches skills of close textual analysis of literature and comparison/contrast of texts. All the texts are understood according to their form, content, purpose and readership/audience. The course is designed to support future academic study by developing a high social, aesthetic and cultural literacy, as well as communication skills. There are four main topics. Language and Identity concerns the racial, cultural and gender contexts of language. Media and Mass Communication concerns textual bias and the use of media formatting. Literary Studies considers how literary meanings are constructed by language. Literature in context is the study of how literary meanings are constructed by social, cultural and historical context.

## **Amharic Literature Grades 9–10** (Grades 9-12; Full Year; 1.0 credit)

**Prerequisite:** Teacher approval

This course, for native Amharic speakers only, covers different literary genres, including the novel, the short story, poetry and drama. Students will write for different audiences and produce varied texts, including literary essays and research-based essays. Vocabulary and grammar work is essential, and students will be expected to read for pleasure beyond the requirements of the course. This course will prepare students to enter the IB Amharic A Literature course in grades 11 and 12.

## **IB Amharic A Literature SL** (grades 11/12; two years; 2.0 credits)

**Prerequisite:** Successful completion of Amharic Literature 9-10 or equivalent

This is a two-year college preparatory Amharic literature program. The course focuses on how language works to create meaning in cultural and historical contexts. It also teaches skills of close textual analysis of literature. All the texts are understood according to their form, content, purpose and readership/audience. The course is designed to support future academic study by developing a high social, aesthetic and cultural literacy, as well as communication skills. Students will develop critical reading skills through the in-depth study of literary texts in Amharic, including four translated “World Literature” texts. The four main topics are as follows: the novel, works in translation, poetry, and drama.

## **IB Amharic A Literature HL** (grades 11/12; two years; 2.0 credits)

**Prerequisite:** Successful completion of Amharic Literature 9-10 or equivalent

This is a challenging two-year college preparatory program intended for those with very good literary analysis ability. The course focuses on how language works to create meaning in cultural and historical contexts. It also teaches skills of close textual analysis of literature. All the texts are understood according to their form, content, purpose and readership/audience. The course is designed to support future academic study by developing a very high social, aesthetic and cultural literacy, as well as communication skills. Students will develop critical reading skills through the in-depth study of literary texts, including translated “World Literature” texts. The four main topics are as follows: the novel, works in translation, poetry, and drama. The assessment criteria for students in this course is more rigorous than for students in Standard Level.

## **English 11/12** (grades 11/12; full year; 1.0 credit)

In this course students will work to improve critical literacy skills through an engagement with and analysis of both fiction and nonfiction texts. Students will engage in a wide variety of assessment practices including timed writing of essays, take home essays, research work, creative writing, and formal presentations. Through an analysis of both fiction and nonfiction texts, students will foster their analytical reading and writing skills. Throughout the course, students will work both cooperatively as well as independently to engage diverse course content. Students will explore key literary elements such as theme, characterization, setting, and context. This course will prepare students for further study or the workforce upon completion.



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## Group 2: World and Other Languages

### **French 1 or Spanish 1** (Grades 9/10; 1 year; 1.0 credit)

**Prerequisite:** little to no previous exposure to French or Spanish or teacher approval.

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written, visual and spoken material. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. By the end of the course, students will be able to communicate and exchange information about familiar topics using phrases and simple sentences, sometimes supported by memorized language, usually handle short social interactions in everyday situations by asking and answering simple questions, present basic information on familiar topics using language they have practiced using phrases and simple sentences, write short messages and notes on familiar topics related to everyday life, often understand words, phrases, and simple sentences related to everyday life, recognize pieces of information and sometimes understand the main topic of what is being said, understand familiar words, phrases, and sentences within short and simple texts related to everyday life, and sometimes understand the main idea of what they have read.

**The topics covered are:** Presentation, Family, Hobbies, Leisure and Free Time, Daily routine, Music and Culture, Shopping.

### **French 2 or Spanish 2** (Grades 9/10; 1 year; 1.0 credit)

**Prerequisite:** Completion of French or Spanish 1 or teacher approval.

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written, visual and spoken material. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. By the end of the course, students will be able to participate in conversations on a number of familiar topics using simple sentences, handle short social interactions in everyday situations by asking and answering simple questions, present information on most familiar topics using a series of simple sentences, write briefly about most familiar topics and present information using a series of simple sentences, understand the main idea in short, simple messages, texts and presentations on familiar topics, and understand the main idea of simple conversations that they overhear.

**The topics covered are:** Fair trade, Health and Well-being, Technology, Climate, Biographies, Travel, Culinary Arts.

### **French 3 or Spanish 3** (Grades 9/10; 1 year; 1.0 credit)

**Prerequisite:** Successful completion of French or Spanish 2 or teacher approval

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written, visual and spoken material. Such material will extend from everyday oral exchanges to literary texts, and will be related to the cultures concerned. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. By the end of the course, students will be able to participate in conversations on familiar topics using sentences and series of sentences, make presentations on a variety of familiar topics using connected sentences, write on a variety of familiar topics using connected sentences, understand the main idea in messages and presentation related to everyday life and personal interests and studies, understand the main ideas of texts related to everyday life and personal interests.

**The topics covered are:** Health, Art and Cinema, Ecology, Celebrations, Family Relations, Travel.

### **French 4 or Spanish 4** (Grades 9/10; 1 year; 1.0 credit)

**Prerequisite:** Successful completion of French or Spanish 3 or teacher approval

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written, visual and spoken material. Such material will extend from everyday oral exchanges to literary texts, and will be related to the cultures concerned. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. By the end of the course, students will be able to participate in conversations on familiar topics using sentences and series of sentences, usually say what they want to say about themselves and their everyday life, make presentations on a wide variety of familiar topics using connected sentences, can write on a wide variety of familiar topics using connected sentences, understand the main idea in messages and presentation related to everyday life and personal interests and studies, understand the main ideas of texts related to everyday life and personal interests.

**The topics covered are:** Family and Friendship Relations, Environment, Personal Expression, Gastronomy, Immigration, and Social Media.



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## **Advanced French Literature** (Grades 9/10; 1 year; 1.0 credit)

**Prerequisite:** Successful completion of French 4 or teacher approval

This course is for students who are at the advanced level in French. HS French Literature courses include the study of the instrumental function of a language where listening, viewing, speaking, reading and writing skills are emphasized through the study of a variety of literary texts and at least one literary book. Literature and thematic topics are based on works from the francophone world.

By the end of the course, students will be able to participate with ease and confidence in conversations on familiar topics, usually talk about events and experiences in various time frames, usually describe people, places, and things, handle social interactions in everyday situations, sometimes even when there is an unexpected complication, make presentations in a generally organized way on school, work, and community topics, and on topics they have researched, make presentations on some events and experiences in various time frames, write on topics related to school, work, and community in a generally organized way, write some simple paragraphs about events and experiences in various time frames, easily understand the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies, usually understand a few details of what they overhear in conversations, even when something unexpected is expressed, sometimes follow what they hear about events and experiences in various time frames, easily understand the main idea of texts related to everyday life, personal interests, and studies sometimes follow stories and descriptions about events and experiences in various time frames.

**The topics covered are:** Politics, Literary Movements, Cuisine, Discrimination, Environment, Travel and Adventure.

## **IB Language B SL French & Spanish** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** 3 – 5 years of language learning and teacher recommendation.

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material. Such material will extend from everyday oral exchanges to literary texts, and should be related to the culture(s) concerned. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. It is not intended solely for the study of specific subject matter or content. By the end of the course, students will be able to exchange information related to areas of mutual interest. Use language to do a task that requires multiple steps. Use language to handle a situation that may have a complication. Present information on academic and work topics. Make a presentation on events, activities, and topics of particular interest. Present their point of view and provide reasons to support it. Write about school and academic topics. Write about community topics and events. Write about work and career topics. Write about an entertainment or social event. Throughout the 2-year course, all three core topics will be covered.

**These topics are:** Social Relationships, Communication and Media and Global Issues. In addition to the core topics, teachers will select at least 2 of 5 options: Health, Customs and Traditions, Leisure, Cultural Diversity, Science and Technology.

## **IB Language B HL French & Spanish** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** 3 - 5 years of language learning and teacher recommendation.

The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material. Such material will extend from everyday oral exchanges to literary texts, and should be related to the culture(s) concerned. The material is chosen to enable students to develop mastery of language skills and intercultural understanding. It is not intended solely for the study of specific subject matter or content.

By the end of the course, students will be able to participate in conversations about familiar topics that go beyond my everyday life, talk in an organized way and with some detail about events and experiences in various time frames, describe people, places, and things in an organized way and with some detail, handle a familiar situation with an unexpected complication. Deliver organized presentations appropriate to my audience on a variety of topics. Present information about events and experiences in various time frames write on general interest, academic, and professional topics. Write organized paragraphs about events and experiences in various time frames. Understand the main idea and some supporting details in organized speech on a variety of topics of personal and general interest. Follow stories and descriptions of some length and in various time frames. Understand information presented in a variety of genres on familiar topics, even when something unexpected is expressed. Understand the main idea and some supporting details on a variety of topics of personal and general interest. Follow stories and descriptions of some length and in various time frames and genres. Throughout the 2-year course, all three core topics will be covered.

**These topics are:** Social Relationships, Communication and Media and Global Issues. In addition to the core topics, teachers will select at least 2 of 5 options: Health, Customs and Traditions, Leisure, Cultural Diversity, Science and technology. At Higher level, 2 works of literature are read.





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## **IB French or Spanish ab initio** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** 0-2 years of French or Spanish

The main focus of the courses is on the acquisition of language required for purposes and situations that are usual in everyday social interaction. Spanish and French Language ab initio courses are only available at Standard Level (SL).

These courses aim to develop in students a variety of linguistic skills and a basic awareness of the culture(s) using the language. By the end of the course, students will be able to participate in conversations on a number of familiar topics using simple sentences, handle short social interactions in everyday situations by asking and answering simple questions, present information on most familiar topics using a series of simple sentences, write briefly about most familiar topics and present information using a series of simple sentences, understand the main idea in short, simple messages, texts and presentations on familiar topics, and understand the main idea of simple conversations that they overhear.

**Three themes are covered:** Individual and Society, Leisure and Work, Urban and Rural Environment. IB internal assessments will form a major portion of the grade. Students will be prepared for the ab initio Standard Level (SL) examination at the end of Year Two.



### Group 3: Social Studies Social

#### **Social Studies 9** (Grade 9; Full Year; 1.0 credit)

This course is designed as a multi-disciplinary Social Studies course, meaning that the course will draw on concepts and skills from several Social Studies disciplines, most notably history, economics and geography. These concepts and skills are based on standards drawn from the National Council for Social Studies. The focus of the year is the essential question: What are the causes and outcomes of conflict? Each quarter we will explore a different kind of conflict through a series of case studies such as Human Migration, the Israeli-Palestinian Conflict, and the Syrian Civil War. The grade 9 Social Studies course is also intended to help students establish and develop some vital high school skills, such as public speaking and presenting, debate, close reading of nonfiction texts, note-taking, and persuasive writing. Many of those skills come together as students learn to conduct independent research. For these literacy skills, the course follows the Common Core State Standards for History/Social Studies, Science and Technical Subjects. Students are expected to be active participants in their own learning through asking questions, coming prepared to class and participating in class discussion and related activities.

#### **Social Studies 10** (Grade 10; Full Year; 1.0 credit)

Building upon the foundations established in the Social Studies 9 course, the grade 10 course also takes a multidisciplinary approach, drawing on concepts and skills from a variety of Social Studies disciplines, guided by standards from the National Council for Social Studies. Learning will begin with specific real-world problems, which students will explore using concepts and tools from geography, history, economics and other Social Studies disciplines. These problem based explorations will be an avenue for further development of reading, writing, speaking and research skills, as guided by the Common Core State Standards for History/Social Studies, Science and Technical Subjects. The course will culminate in 2nd semester with an independent extended research paper, and a project that contributes to a solution on one of the real-world problems studied in the course. Students are expected to be active participants in their own learning through asking questions, coming prepared to class and participating in class discussion and related activities.

#### **IB Contemporary World History SL** (Grades 11/12; 2 years; 2.0 credits)

IB Contemporary World History is a topical introduction in depth to some of the major events and political institutions that have shaped the twentieth century world. The course will be focused around six historical concepts of causation, consequence, change, continuity, significance and perspectives. Based on continual reading, students apply these historical concepts to the content through frequent in-class essays and historical research. The content topics have been selected to intentionally create overlap and coherence across the two Standard Level papers. Over the two years, main topics of study will be: Independence Movements (Vietnam, Tanzania and Kenya); Authoritarian States (Vietnam, Derg Ethiopia, Rwanda); and case studies on conflict and intervention (Rwanda, Kosovo).

#### **IB Contemporary World/African History HL** (Grades 11/12; 2 years; 2.0 credits)

The primary difference between higher level and standard level history is the quantity of content, with higher level students required to learn significantly more content. However, the application of skills through written essays and historical research is the same in both classes. Contemporary World History is a topical introduction in depth to some of the major events and political institutions that have shaped the twentieth century world. The course will be focused around six historical concepts of causation, consequence, change, continuity, significance and perspectives. Based on continual reading, students apply these historical concepts to the content through frequent in-class essays and historical research. The content topics have been selected to intentionally create overlap and coherence across the three higher level papers. Over the two years, main topics of study will be: Independence Movements (Vietnam, Tanzania and Kenya); Authoritarian States (Vietnam, Derg Ethiopia, Rwanda); case studies on Conflict and Intervention (Rwanda, Kosovo). The specific higher level content will be: Post-independence Politics in Africa to 2005 (Ethiopia and Rwanda) and 20th-century Nationalist and Independence Movements in Africa (Angola, Namibia, Kenya, Ghana, Tanzania and Senegal).

#### **IB Geography SL** (Grades 11-12; 2 years; 2.0 credits)

Contemporary geography explains trends and developments in societies that are caused by the interactions between individuals, societies, and the physical environment. Geography also investigates the way people adapt to change and helps to evaluate management strategies associated with such change. The course integrates both physical and human geography, thus allowing the student to understand methodologies used both in the scientific and socio-economic spheres. Part of the coursework and IB assessment will be practical field experiences in the Addis Ababa area. Over the two years, students will be prepared for the four core and three extended topics.

#### **IB Geography HL** (Grades 11-12; 2 years; 2.0 credits)

Contemporary geography explains trends and developments in societies that are caused by the interactions between individuals, societies, and the physical environment. Geography also investigates the way people adapt to change and helps to evaluate management strategies associated with such change. The course integrates both physical and human geography, thus allowing the student to understand methodologies used both in the scientific and socio-economic spheres. Part of the coursework and IB assessment will be practical field experiences in the Addis Ababa area. Over the two years, students will be prepared for the four core, three extended and seven Globalization themes.



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## **IB Business and Management SL/HL** (Grades 11-12; 2 years; 2.0 credits)

The business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. The course covers the key characteristics of business organization and environment and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real world examples and case studies.

The course encourages the appreciation of ethical concerns at both a local and global level. It aims to develop relevant and transferable skills, including the ability to: think critically; make ethically sound and well-informed decisions; appreciate the pace, nature and significance of change; think strategically; and undertake long term planning, analysis and evaluation. The course also develops subject-specific skills, such as financial analysis.

External assessment for HL and SL students consists of two written examination papers. Paper one is based on a pre-seen case study issued in advance, and paper two consists of structured questions based on stimulus material and an extended response question that assesses students' understanding of the key concepts of the course. Internal assessment for HL students is a research project and for SL students a written commentary. In both tasks, students study real world business organizations. These are internally marked by subject teachers and then externally moderated by IB examiners.



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## Group 4: Sciences

### **Biology** (Grade 9; 1 year; 1.0 credit)

The nature of this introductory biology course begins with an examination of the organic molecules that make up life. One important organic life molecule is DNA. Students will apply their understanding of how DNA works to other ideas in biology such as why are cells and individuals in a population are different, and how DNA is passed down from parent to offspring. The course finishes with a detailed analysis of statistics and probability to support explanations for why some organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. The follows a systems approach in understanding how energy flows through and how matter cycles in ecosystems. Problem based learning is a key feature in this course as students will be presented with a series of challenges to seek and understand how humans are impacting natural systems and will be challenged to evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

### **Chemistry** (Grade 10 only; 1 year; 1.0 credit)

This course prepares students for IB diploma chemistry course by providing a bridge between middle school science and the more advanced concepts covered in grades 11 and 12. The structure of the atom is reviewed with a focus on valence electrons that help us understand chemical reactions. The structure and patterns in the periodic table are then explored. Covalent, ionic and metallic bonding is introduced to allow students to correctly name and write correct formulae. In stoichiometry the students learn to balance equations and use these fixed ratios to calculate a wide variety of quantitative values. REDOX, acid-base and electrolysis reactions are introduced followed by investigations into the rate of reactions and the energy needed by or provided from chemical reactions. There is a final basic introduction to organic chemistry. There will also be opportunities to plan, conduct and report practical laboratory work in preparation for the IB's internal assessment (grade 12).

### **Physics** (Grade 10 only; 1 year; 1.0 credit)

**Prerequisite:** Successful completion of Integrated Mathematics 2

This course prepares students for IB diploma physics course by providing a bridge between middle school science and the more advanced concepts covered in grades 11 and 12. The syllabus mirrors some of the DP course at a simplified level but still requires strong mathematical skills. Mathematics is the language of physics so students need to be comfortable and skilled with algebra prior to the course and trigonometry during the course. The course opens with a study of the classical mechanics of motion including energy, momentum and impulse. Thermal physics is then covered to introduce specific and latent heat. In electricity and magnetism, the rules governing parallel and series circuits are practiced. Waves and oscillations offer opportunities to study sound, water and electromagnetic waves. Finally, atomic and nuclear physics is introduced. There will also be opportunities to plan, conduct and report practical laboratory work in preparation for the IB's internal assessment (grade 12).

### **Astronomy** (Grades 9-12; 1 semester; .5 credit)

How is it that amongst all the discovered planets in our Universe, ours is the only one known to have life? This course focuses on our solar system, with emphasis given to our place in the universe, how our solar system came to be, and why our neighboring planets are so different from Earth. Students will also learn about and use telescopes as part of a night viewing for which they will plan and conduct. A final assessment piece has students exploring in depth an astronomy topic of personal interest, such as the Big Bang, search for extraterrestrial life or black holes, and teaching the class about this topic.

### **Environmental Science** (Grades 9-12; 1 semester; .5 credit)

Our topics will include understanding ecosystems as the basic units of the natural world, human population, renewable resources and energy, pollution and its prevention, and working toward a sustainable future. The course will provide students with opportunities to explore environmental science concepts in the classroom, laboratory and in the field. The class will review case studies from all over the world, designing experiments and models to solve water problems, and field studies in local environments.



# ICS HIGH SCHOOL COURSE GUIDE

## 2018–2019

### **IB Environmental Systems and Societies (ESS) Standard Level** (Grade 11/12; 2 years; 2.0 credits)

**Prerequisite:** Successful completion of HS Biology

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). By choosing to study a transdisciplinary course such as ESS as part of their IB Diploma, students are able to satisfy the requirements for both Groups 3 and 4 of the hexagon, thus allowing them to choose another subject from any hexagon group (including another Group 3 or 4 subjects). The Environmental Systems and Societies course is offered at the Standard Level only.

**The eight topics covered:** Foundations of ESS, Ecosystems and Ecology, Biodiversity and Conservation, Water and Aquatic Food Production Systems and Societies, Soil Systems and Terrestrial Food Production Systems and Societies, Atmospheric Systems and Societies, Climate Change and Energy Production, and Human Systems and Resource use. The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies. This perspective will enable them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face, rather than a purely journalistic appreciation of environmental issues.

### **IB Biology SL** (Grade 11-12; 2 years; 2.0 credit)

**Prerequisite:** HS Biology

In Biology, students investigate the living world at all levels using many different approaches and techniques. At one end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologists investigate the interactions that make whole ecosystems function. Many discoveries remain to be made and great progress is expected in the 21st century. In this course students will become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, the emphasis on a practical approach in this course will provide opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings. The investigations may be laboratory based or they may make use of simulations and data bases. This course is designed for students who may have an interest in a scientific, or a medical field but may not necessarily have the language skills required for success in the HL course.

**The 7 topics for this course includes:** Cells, Molecular Chemistry, Genetics, Ecology, Evolution and Biodiversity, Human Physiology, and an extended study of Ecology and Conservation.

### **IB Biology HL** (Grade 11-12; 2 years; 2.0 credit)

**Prerequisite:** Successful completion of HS Biology

In Biology, students investigate the living world at all levels using many different approaches and techniques. At one end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologists investigate the interactions that make whole ecosystems function. Many discoveries remain to be made and great progress is expected in the 21st century. In this course students will become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, the emphasis on a practical approach in this course will provide opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings. The investigations may be laboratory based or they may make use of simulations and data bases. This course is designed for students who may have an interest in the medical field, biotechnology, or field ecology.

**The 12 topics for this course includes:** Cells, Molecular Chemistry, Genetics, Ecology, Evolution and Biodiversity, Human Physiology, Nucleic Acids, Metabolism, Further Genetics, Plant Biology, Animal Physiology, and an extended study of Ecology and Conservation.

### **IB Chemistry SL** (Grade 11-12; 2 years; 2.0 credit)

**Prerequisite:** Successful completion of HS Chemistry and IB Chemistry teacher's recommendation.

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as useful preparation for employment. This chemistry course provides students with a detailed comprehension of the world in which they live, of the cosmic evolution of elements into inorganic molecules and compounds, to their formation into proteins (enzymes), DNA, and ultimately into living organisms. This two-year course imparts chemical theories, rules and many other tools to allow students to synthetically manipulate matter and understand chemical reactions.

**The 11 core topics include:** Stoichiometric Relationships, Atomic Structure, Periodicity, Chemical Bonding and Structure, Energetics/ Thermochemistry, Chemical Kinetics, Equilibrium, Acids and Bases, Redox Processes, Organic Chemistry, as well as Measurement and Data Processing.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## **IB Chemistry HL** (Grades 11-12; 2 years; 2.0 credits)

**Prerequisites:** Successful completion of HS Chemistry, IB Chemistry teacher's recommendation and Strong SL Math course recommendation or HL Math.

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as useful preparation for employment. This chemistry course provides students with a detailed comprehension of the world in which they live, of the cosmic evolution of elements into inorganic molecules and compounds, to their formation into proteins (enzymes), DNA, and ultimately into living organisms.

This two-year course imparts chemical theories, rules and many other tools to allow students to synthetically manipulate matter and understand chemical reactions. This course is designed for students who may wish to major in chemistry, engineering or any health-related field in college and/or pursue its application to any other anticipated occupation that may require a strong science background. The 11 core topics (as per the SL course) include: stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, as well as measurement and data processing.

**The 10 additional higher level topics build on the core and include:** Atomic Structure, the Periodic Table—the Transition Metals, Chemical Bonding and Structure, Energetics/Thermochemistry, Chemical Kinetics, Equilibrium, Acids and Bases, Redox Processes, Organic Chemistry, and Measurement and Analysis.

**The course concludes with the student's choice of studying 1 of 4 option topics:** Materials, Biochemistry, Energy, or Medicinal Chemistry.

## **IB Physics SL** (Grade 11-12; 2 years; 2.0 credit)

**Prerequisites:** Successful completion of HS Physics, IB Physics teacher's recommendation and Strong Standard or Higher Level Mathematics course recommendation.

SL physics includes 8 core topics and 1 extended option topic. It is a very demanding yet exciting course that requires confident mathematical fluency in algebra and trigonometry as mathematics is the language of physics. The core topics are: Measurements and uncertainties; Mechanics; Thermal physics; Waves; Electricity and magnetism; Circular motion and gravitation; Atomic, nuclear and particle physics; Energy production. The option topic choices include: Relativity; Engineering physics; Imaging; Astrophysics. During the course we will finesse data handling using excel or similar software along with a range of ICT data logging tools. We also use a wide range of simulations and models to help visualize some of the many challenging topics across the range of scales that we cannot directly observe - from quantum dimensions and interactions up to the motion of galaxies in the universe. SL students will have time for consolidation and review while the higher level students are covering the extra material required by that course. The course also includes the practical internal assessment requirement which is worth 20% of the final grade. This course is well suited for those studying physics or engineering at university.

## **IB Physics HL** (Grades 11 and 12; 2 years; 2.0 credits)

**Prerequisites:** Successful completion of HS Physics, IB Physics teacher's recommendation and Strong Standard or Higher Level Mathematics course recommendation.

HL physics includes 12 core topics and 1 extended option topic. It is a very demanding yet exciting course that requires confident mathematical fluency in algebra and trigonometry as mathematics is the language of physics. The core topics are the same as SL physics with the addition of the additional higher level (AHL) material: Wave Phenomena; Fields; Electromagnetic Induction; Quantum and Nuclear Physics. The same option topic choices are available but each is extended for the HL students. During the course we will finesse data handling using excel or similar software along with a range of ICT data logging tools. We also use a wide range of simulations and models to help visualize some of the many challenging topics across the range of scales that we cannot directly observe - from quantum dimensions and interactions up to the motion of galaxies in the universe. Given the increased content the HL course also requires students who can quickly assimilate new ideas and abstract concepts and readily apply that knowledge in novel and complex problem solving. For HL students there is little to no time for consolidation and review prior to final exams so students must have the capacity to review earlier material while learning new skills in the last few months before final exams. The course also includes the practical internal assessment requirement which is worth 20% of the final grade. Students have until 1 October of grade 12 to revert to SL physics. This course is well suited for those studying physics or engineering at university.



# ICS HIGH SCHOOL COURSE GUIDE

## 2018–2019

### **IB Computer Science SL** (Grades 11/12; 2 years; 2.0 credits)

This is a two year course intended for students who want a greater knowledge of how computers and computer networks operate, as well as practical experience building computer programs. The core topics are System Fundamentals (including system design, implementation, and human interface), Computer Organization (including architecture, memory, operating systems, and logic gates), Networks (including data transmission and wireless networking), and Computational Thinking, Problem-Solving and Programming (including object-oriented programming using the Java language). Student achievement will be assessed through examinations covering content knowledge (70%), as well as a program developing a computational solution to a defined practical problem (30%). Computer Science is a subject that is relevant and useful in many areas - science, engineering, business, etc - as well as in specific computer-related fields, and students who learn a broad understanding of computer science will find it applicable in many careers and areas of life.

### **IB Computer Science HL** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** Introduction to computer programming or teacher recommendation

IB Computer Science at the Higher Level is a challenging course going deeply into the operations of computers and computer networks as well as practical work in computer program and algorithmic analysis. The core topics are System Fundamentals (including system design, implementation, and human interface), Computer Organization (including architecture, memory, operating systems, and logic gates), Networks (including data transmission and wireless networking), and Computational Thinking, Problem-Solving and Programming (including object-oriented programming using the Java language). In addition, the Higher Level course includes Abstract Data Structures (including recursion, binary trees, and linked lists), Resource Management (system resources and the role of the operating system), and Control (both centralized and distributed control systems). Student achievement will be assessed through examinations covering content knowledge and a researched case study (80%), as well as a program developing a computational solution to a defined practical problem (20%). Higher Level Computer Science would be appropriate for students interested in pursuing degrees and careers in Engineering, Scientific research or any technical computer-related field.



### Group 5: Mathematics

#### **Integrated Mathematics I**

(Grades 9; 1 year; 1.0 credit) A graphic display calculator is required for this course.

**Prerequisite:** Grade 8 Mathematics (or equivalent)

The fundamental purpose of Integrated Mathematics I is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, organized into units, deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Students will interpret arithmetic sequences as linear functions and geometric sequences as exponential functions. They will master the concepts of domain and range. They will explore systems of equations and inequalities, and use regression techniques to describe linear relationships. They will establish triangle congruence criteria, based on analyses of rigid motions and formal constructions. Finally, students will use a rectangular coordinate system to verify geometric relationships, including properties of special triangles and quadrilaterals, and slopes of parallel and perpendicular lines. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Integrated Mathematics II** (Grades 9-10; 1 year; 1.0 credit) A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics I (or equivalent)

The focus of Integrated Mathematics II is on quadratic expressions, equations, and functions. Students will learn to compare their characteristics and behavior to those of linear and exponential relationships from Integrated Mathematics I as organized into 6 critical areas, or units. Students will learn to extend the laws of exponents to rational exponents and explore distinctions between rational and irrational numbers by considering their decimal representations. They will create and solve equations, inequalities, and systems of equations involving exponential and quadratic expressions. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, round out the course. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Integrated Mathematics III** (Grades 9-10; 1 year; 1.0 credit) A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics II (or equivalent)

It is in Integrated Mathematics III that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into four critical areas, organized into units. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to include general triangles and open up the idea of trigonometry applied beyond the right triangle as well as the study of the unit circle. And, finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Note that this course is the prerequisite for students intending to study IB SL Mathematics in the final two years of high school.

**Integrated Mathematics III Extended** (Grades 9-10; 1 year; 1.0 credit) A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics II (or equivalent) and teacher recommendation

This course embodies all the standards of the Integrated Mathematics III course above, but the expectation will be that students study the topics at a deeper and broader level. The course is designed for students who have a high level of ability and who are motivated to excel in the subject. While the philosophy and teaching methods are similar to Integrated Mathematics III, students will be exposed to more sophisticated mathematical arguments. Emphasis will be placed on higher level thinking skills and on connections between topics, especially focusing on applying the mathematics learned in various situations. The appropriate use of technology is integral to almost all topics in the course. Note that this course is the prerequisite for students intending to study IB HL Mathematics in the final two years of high school.

**Advanced Mathematics** (Grade 10; 1 year; 1.0 credit) A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics III Extended (or equivalent)

This course is primarily designed for those students who have finished the prerequisite course one year earlier than their peers. Students completing this course will typically go on to study IB HL Mathematics in the final two years of high school. Students enrolled in Advanced Mathematics should have solid algebraic skills, a working knowledge of linear, quadratic, exponential, logarithmic and trigonometric functions, and a willingness to work hard. Throughout the course, the graphic display calculator and software packages are used to present alternate ways to solve problems and to visualize mathematical concepts. Problem solving, preparation for various mathematics contests held throughout the year, and presentation skills are major focuses of the course. Students intending to study IB HL in their final two years of high school will enjoy the challenge and high expectations of this course.





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### **Applied Mathematics 11/12** (Grades 11/12; 2 semesters; 1.0 credit)

This course enables students to broaden their understanding of mathematics as it is applied in practical areas as well as other scientific and technical disciplines. Students will solve problems associated with finance, investing, and borrowing. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations, use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. The use of technology will be embedded in this course. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

### **IB Mathematical Studies Standard Level** (Grades 11/12; 4 semesters; 2.0 credits)

A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics II (or equivalent) and teacher recommendation

IB Mathematical Studies is available only at standard level, and is equivalent in status to mathematics SL, but addresses different needs. It has an emphasis on applications of mathematics, and the largest section is on statistical techniques. It is designed for students with varied mathematical backgrounds and abilities. It offers students opportunities to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics. It prepares students to be able to solve problems in a variety of settings, to develop more sophisticated mathematical reasoning and to enhance critical thinking. The individual project is an extended piece of work based on personal research involving the collection, analysis and evaluation of data. Students taking this course are well prepared for a career in social sciences, humanities, languages or arts. These students may need to utilize the statistics and logical reasoning that they have learned as part of the mathematical studies SL course in their future studies.

### **IB Mathematics Standard Level** (Grades 11/12; 4 semesters; 2.0 credits)

A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics III (or equivalent) and teacher recommendation

IB Mathematics Standard Level caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration. The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigor required for mathematics HL. Students will be expected to apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed component, the exploration, offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

### **IB Mathematics Higher Level** (Grades 11/12; 4 semesters; 2.0 credits)

A graphic display calculator is required for this course.

**Prerequisite:** Integrated Mathematics III Extended (or equivalent) and teacher recommendation

IB Higher Level Mathematics caters for students with a good background in mathematics who are competent in a range of analytical and technical skills. This course is a demanding one, requiring students study a broad range of mathematical topics through a number of different approaches and to varying degrees of depth. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems. The course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. Development of each topic often features the justification and proof of results. Students embarking on this course should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. They should also be encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

The internally assessed component, the exploration, offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## Group 6: The Arts

### Visual Arts 1 & 2 (Grades 9-12; 1 semester; .5 credit)

This course is for students who want to improve their art skills and concentrate on the elements and principles of art. Media used are drawing, painting, collage, printmaking, sculpture, computer design and photography. Students at this level are given the freedom to concentrate on developing their skill in a chosen media. A portfolio and research workbook is required which serves to document the creative process. Art portfolios from this course may also be used to help the IB Coordinator and art teacher determine if a student is eligible for the IB Visual Arts course.

### Advanced Visual Arts 1 & 2 (Grades 9-12; 1 semester; .5 credit)

This course is a continuation of Visual Arts 1 & 2. Students in the advanced course will explore developing a body of studio work that revolves around a theme; which is linked to art research. Previous knowledge in drawing, painting, collage, printmaking, sculpture, computer design and photography will be utilized, so Visual Art 1 & 2 are a prerequisite. An art journal will be used to document the studio process, and students will participate in class critiques and school wide exhibitions. This course should be taken by students who have a serious interest in developing as artists and communicators. Advanced Visual Arts 1 & 2 can be taken as a pre-IBDP Visual Arts track or by students who are not intending to pursue the IBDP Visual Arts.

### Multi-Media (Grades 9-12; 1 semester; .5 credit)

This course will explore a variety of themes revolving around “identity” and “human connections”. This course is for the student who want to explore themes given by the teacher, but choose their own media explorations of those themes. This could include, for example, looking at cultural identity through a series of collaged photographs that are digitally altered to emphasize meaning. It could be a series of pencil and ink drawings that express connections between humans. The course opens up all media possibilities to students. An art journal will be used to document the studio process, and students will participate in class critiques and school wide exhibitions.

### Photography (Grades 9-12; 1-2 semester; .5 credit)

Students will learn to see the world through a lens and to think using the language of still images and effects. The first quarter will focus on the still image, and gathering a body of images. Conceptual development will be emphasized, including how techniques can be employed for desired effects. Content will explore, portraiture, urban culture and landscape images. The students will produce a portfolio of photographs, have them printed studio quality, mat and mount their works and participate in an exhibition.

*\*Please note: a personal camera or decent quality phone camera is encouraged.*

### IBDP Visual Arts Standard Level (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** Recommendation by IB Visual Arts teacher. This art course requires no official prerequisite courses, however it is strongly recommended that students take visual art courses in grades 9/10. Students who have not had previous visual arts courses can present a portfolio of work to show their interest and commitment to the subject.

**This 2-year course is guided by three areas of exploration:** Theoretical Practice, art Making Practice, and Curatorial Practice. Through these three areas, student will learn to research and create visual art in context, explore techniques and methods of visual art, and become articulate in making and discussing art as a tool of communication.

#### Assessment:

- **Task 1:** Comparative Study 20% - Students analyse and compare artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artifacts from differing cultural context. SL students must compare at least 3 different artworks, by at least 2 different artists with commentary of 10-15 pages.
- **Task 2:** Process Portfolio 40% - Students submit carefully selected material which evidence their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course. SL students will submit a total of 9-18 pages/slides. The submitted work should be in at least two different art-making forms.
- **Task 3:** Exhibition 40% - Students submit for assessment a selection of resolved artworks from their exhibition. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication. SL students submit 4-7 pieces with exhibition text for each. A curatorial rationale (400 words maximum).



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## **IBDP Visual Arts Higher Level** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** Recommendation by IB Visual Arts teacher. This art course requires no official prerequisite courses, however it is strongly recommended that students take visual art courses in grades 9/10. Students who have not had previous visual arts courses can present a portfolio of work to show their interest and commitment to the subject.

**This 2-year course is guided by three areas of exploration:** Theoretical Practice, Art Making Practice, and Curatorial Practice. Through these three areas, student will learn to research and create visual art in context, explore techniques and methods of visual art, and become articulate in making and discussing art as a tool of communication.

### **Assessment:**

- **Task 1:** Comparative Study 20% - Students analyse and compare artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artifacts from differing cultural context. Students must compare at least 3 different artworks, by at least 2 different artists with commentary of 10-15 pages. HL, the same as SL, plus a reflection on the extent to which their work and practices have been influenced by any of the art/artists examined (evidenced in 3-5 additional pages/slides).
- **Task 2:** Process Portfolio 40% - Students submit carefully selected material which evidence their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course. HL students will submit a total of 13-25 pages/slides. The submitted work should be in at least three different art-making forms.
- **Task 3:** Exhibition 40% - Students submit for assessment a selection of resolved artworks from their exhibition. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication. HL students submit 8-11 pieces with exhibition text for each. A curatorial rationale (700 words maximum).

## **Choir** (Grades 9-12; 1 semester; .5 credit)

**Prerequisite:** singing or piano experience preferred but not required

This vocal ensemble consists of both groups of students and performs several times a year. Attendance at all performances is required to receive full credit for the class. Through a wide range of musical styles, students will explore the concepts of vocalization, tone production, vowel and consonant sounds while developing singing, sight singing techniques and posture. Choir students are encouraged to participate in our ISSEA Arts Festival.

## **Band** (Grades 9-12; Full Year; 1.0 credits)

Band is a full year course for students who desire to become advanced players. Attendance at all performances is required in order to receive full credit for the class. Students will continue their study of music theory, history, and performance and musicianship skills. Students will continue to refine their tone production, intonation, balance and blend with other players in the ensemble. Students will have the opportunity to work on solo and ensemble music and to audition to join AMIS High School Honor Band, should their audition tapes be accepted. Members of this ensemble will also have the opportunity to attend the ISSEA band festival every year.

## **Guitar 1 & 2** (Grades 9-12; 1 semester; .5 credits)

This course for students with limited experience on the guitar. Students will focus on learning to read musical notation, TAB, chords, and strumming patterns in order to create compositions and improvisations. The course will expose students to significant guitarists through history as well as set of criteria for the definition of 'significant guitarist.' Students will also develop techniques to perceive and interpret music. Students will have class performances.

## **Guitar 3 & 4** (Grades 9-12; 1 semester; .5 credits)

Students who have completed Guitar 1 & 2 (or who have previous experience and have shown knowledge of reading musical notation, TAB, chords and strumming patterns) may take Guitar 3 & 4. In this course, students will continue to develop their skills in these areas, while developing new techniques to create accompaniments in a variety of styles. Students in this course will apply their knowledge of these skills to creating original compositions. Students will have class performances as well as at Coffee House or The Big Show.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## **Music Composition** (Grades 9-12; 1 semester; .5 credit)

This Music Composition course explores the process of creating original musical works, developing knowledge of music theory, while learning some elementary keyboard skills to supplement and explain musical concepts. The course begins with arranging popular music to manipulate musical ideas, creating new versions of known musical works. Students also create original pieces for both large and small groups, some of which will be presented at music concerts in the fall and spring. This program requires a laptop, headphones, musescore (free notation software), and GarageBand (or a similar free music production software program).

## **Drama: Acting and Devising** (Grades 9-12; 1 semester; .5 credit)

Students will develop an understanding of and appreciation for theatre as a performance art form. We will use (US) National Core Arts Standards as well as IBDP Theatre aims and objectives. This will include, from the IBDP Theatre syllabus, presenting theatre, theatre in context, and theatre processes.

**The focus of Drama: Acting and Devising:** Acting, Directing, and Devising. Students will be assessed through projects and performances. Students will develop ensemble and collaboration skills, creativity and critical thinking. Students will be expected to take part in improvisations and scenes, as well as class performances. Additionally, students will attend out-of-class performances whenever possible.

## **Drama: Design** (Grades 9-12; 1 semester; .5 credit)

Students will develop an understanding of and appreciation for theatre as a performance art form. We will use (US) National Core Arts Standards as well as IBDP Theatre aims and objectives. This will include, from the IBDP Theatre syllabus, presenting theatre, theatre in context, and theatre processes.

**The focus of Drama: Design will be stage design:** light, sound, costume, and set. Students will be assessed through projects and performances. Students will develop ensemble and collaboration skills, creativity and critical thinking. Students will be expected to take part in class performances as designers. Additionally, students will attend out-of-class performances whenever possible.

## **IBDP Theatre Standard Level** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** this theatre course requires no previous experience; however, an understanding of course expectations is necessary for a successful experience. Students interested in IBDP Theatre SL should meet with the theatre teacher prior to signing up for the course.

Theatre is a dynamic, collaborative and live art form. It encourages discovery through experimentation, the taking of risks and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. Standard level students will engage in a variety of opportunities to make theatre as creators, designers, directors and performers.

**Each of these will prepare students for three final assessment tasks:** Creating a Director's Notebook based on a Published Play Text; Completing a Research Presentation based on a Theatre Tradition; and, Collaboratively Creating and Presenting an Original Piece of Theatre.

## **IBDP Theatre Higher Level** (Grades 11/12; 2 years; 2.0 credits)

**Prerequisite:** this theatre course requires no previous experience; however, an understanding of course expectations is necessary for a successful experience. Students interested in IBDP Theatre HL should meet with the theatre teacher prior to signing up for the course.

Theatre is a dynamic, collaborative and live art form. It encourages discovery through experimentation, the taking of risks and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. Higher level students will engage in a variety of opportunities to make theatre as creators, designers, directors and performers.

**Each of these will prepare students for four final assessment tasks:** Presenting a Solo Theatre Piece based on a selected Theatre Theorist; Creating a Director's Notebook based on a Published Play Text; Completing a Research Presentation based on a Theatre Tradition; and, Collaboratively Creating and Presenting an Original Piece of Theatre.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## **Physical Education and Health**

### **Physical Education & Health 9/10** (Grades 9 and 10; 2 Years; 2.0 credits)

Movement is essential for daily functioning. Knowledge of what, where and how the body can move is critical for quality human existence. Physical Education, as an integral part of the general education process, contributes to an individual's awareness and understanding of the elements and dimensions of movement and forms the basis for the learning of sport skills. Sport, on the other hand, is viewed as a vehicle for the enhancement of fundamental motor skills and the development of complex skills learnt through a properly structured Physical Education and Sport Programme. It is governed by formal or informal rules that involve competition and may be pursued for recreation or reward while promoting healthy lifestyle practices. Sport is recognised as an instrument for the promotion of international peace and understanding and many local, regional and international sporting bodies have embraced shared values through sport.

The study of Physical Education and Sport, therefore, not only allows students to work individually and cooperatively in the theoretical and practical components of the subject but also assists them in developing critical life skills. As a curricular inclusion, it provides students of varying abilities with experiences that facilitate physical, social, intellectual, cultural, spiritual and emotional growth. Skills related to decision-making, problem solving and critical thinking and the use of sport technology are acquired by students undertaking a course of study in Physical Education and Sport.

ICS Addis PE & Health is offered to prepare students for a life of rewards and challenges through physical activity, social interaction and leadership. The improvement of students' coordination, endurance, strength and ability will be encouraged through participation and understanding in an internationally influenced curriculum preparing students for life beyond ICS and Addis Ababa. Students further their knowledge in invasion games, net/wall, striking/fielding games and body management and movement activities. Students demonstrate cooperation, sportsmanship, teamwork, and sensitivity to individual differences in abilities.

Additionally, students are required to study theory of health relating to physical, sociological and emotional well-being. The health curriculum is designed so that the students gain a better insight into the nature and function of their bodies, their environment, and the intricate relationship between the two. Through research and real-life connections, students will be able to gain a better idea of how their health affects their lives. The topics discussed will include: healthy life components, stress, principles of training, nutrition, sexuality, Freedom from Chemical Dependency (FCD), diseases including HIV/AIDS and first aid.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## Electives

### **Global Issues, Leadership and Action** (Grades 9-12; 1 semester; .5 credit)

Great leaders are not born: they have to learn and develop the skills necessary to inspire, manage, and motivate other people. They have to know how to speak confidently to large groups, communicate clearly and effectively, understand others' feelings and points of view, identify and adapt to others' strengths and weaknesses, and manage groups of people to help them be cohesive and goal-directed. "GILA" will give students practical experience in developing these skills and more. Students will learn how to move from an idea into action using the service-learning model, which involves research, advocacy, direct and indirect service. As a result, students will understand how humans impact their environment and also explore ways in which the action they initiate can impact and influence the community and world around them.

### **Model United Nations** (Grades 9-12; 1 semester; 0.5 credit)

The Model United Nations course provides an academic learning experience through the simulation of the structures, processes, and issues of the member nations of the United Nations Organization. The Model UN class offers students a unique opportunity to learn about international relations while role-playing United Nations delegates. In this class, students will explore the purpose and functions of international organizations. The United Nations will be covered in detail. Students will be given the opportunity to simulate UN functions and debate on contemporary world issues.

**Upon successful completion of the course, students will be able to:** Define the structures and general procedures of the United Nations, Analyze an issue currently before the United Nations from the selected member nation's perspective, Understand and competently use the rules of procedure, diplomatic protocol, and negotiating techniques common to UN delegates, Explain the rationale, format, and instructional methods of the Model United Nations simulation.

### **Creative Writing 1/2** (Grades 9-12; 1 semester; 0.5 credit)

Students will explore a variety of creative writing genres including poetry, fantasy, fiction, etc., and the class will produce a literary magazine at the end of each semester. Students who enroll for Creative Writing II will focus on playwriting (monologues and 10-minute plays) and script-writing with the goal of having a performance or viewing of one of their works at the end of the semester. Both courses will encourage students to pursue online and print publication. Students may take either or both courses.

### **Photography** (Grades 9-12; 1 semester; .5 credit)

Students will learn to see the world through a lens and to think using the language of still images and effects. The first quarter will focus on the still image, and gathering a body of images. Conceptual development will be emphasized, including how techniques can be employed for desired effects. Content will explore, portraiture, urban culture and landscape images. The students will produce a portfolio of photographs, have them printed studio quality, mat and mount their works and participate in an exhibition.

*\*Please note: a personal camera or decent quality phone camera is encouraged.*

### **Multi-Media** (Grades 9-12; 1 semester; .5 credit)

This course will explore a variety of themes revolving around "identity" and "human connections". This course is for the student who want to explore themes given by the teacher, but choose their own media explorations of those themes. This could include, for example, looking at cultural identity through a series of collaged photographs that are digitally altered to emphasize meaning. It could be a series of pencil and ink drawings that express connections between humans. The course opens up all media possibilities to students. An art journal will be used to document the studio process, and students will participate in class critiques and school wide exhibitions.

### **Computer Applications Development** (Grade Levels: 9–12, 1 semester)

An overview of web design (HTML), generalized programming, and mobile app development. Students will learn a development language or tool and create an individualized project.

### **Computer Programming** (Grade Levels: 9–12, 1 semester)

In Computer Science, students will learn to solve problems by using computers to create applications and solutions. It is a creative course, where students will create unique, ingenious solutions to problems. It is a logical and scientific course where students will carefully plan their work and analyze possible and real consequences of their decisions. Students will learn to write programs to tell computers what to do, create games and interactive multimedia projects, and understand how computers and computer networks work and are organized.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## **“Project X”**

Project X is an elective, semester-long course where students learn about the learning process by selecting a personal project that they design and engage in both independently and with the support of a learning “coach”. This course challenges student to identify a subject and issue they wish to learn about, design a methodology for how to conduct their learning, and finally demonstrate their achievement through reflection and presentation. Students will have the opportunity to explore local and online resources to create and engage in their own learning goals. They will receive taught support from the teacher on the learning process, will be challenged to reflect upon their activities and will demonstrate understanding throughout the semester.

## **Journalism** (Grade Levels: 9-12, 1 semester)

In journalism, students will explore both traditional and contemporary forms of media, with a focus on writing clearly to convey a message. Through engagement in a class newspaper, as well as blogging and documentary creation, students will understand the role that media plays in our day to day lives. This course encourages students to research topics and events happening in the world around them, and articulate their findings in the form of old and new media.



# ICS HIGH SCHOOL COURSE GUIDE 2018–2019

## Student Support Classes

**English as an Additional Language (EAL)** (Grades 9 -10; 1 semester; 0.5 credit)

**Prerequisite:** SST/Counselor Recommendation; WIDA assessment

Our Secondary English as an Additional Language (EAL) program offers intensive but limited support in English for speakers of other languages. It includes listening, speaking, reading, writing, viewing and visually representing with particular emphasis on pronunciation, comprehension and academic vocabulary. The goal is to increase academic language proficiency so that students can participate to a greater degree in their regular English grade level.

**Academic Resource** (Grades 9-12; 1 semester; 0.5 credit)

The Academic Resource class uses individualized learning strategies and supports in order to help students across subject areas. Additionally, through work with the subject classes, and during specific instruction, students work towards goals outlined in their Individual Learning Plan (ILP).

**Transitions: Career Literacy** (Grade 9-12)

**Recommendation by SST/Transition teacher**

The Transition class of Career Literacy uses a student's Individual Learning Plan (ILP) to develop an English plan that focuses on the student's needs in reading, writing, and functional academics. Each student in this class is working on their own individualized program. Students may be working on activities that revolve around personal information, foundational writing skills, research, and applying their knowledge to real life scenarios.

**Transitions: Consumer Math** (Grade 9-12)

**Recommendation by SST/Transition teacher**

**Transitions: Functional Life Skills** (Grade 9-12)

**Recommendation by SST/Transition teacher**