

ROBERT E. FITCH HIGH SCHOOL
Groton Public Schools

**INTERNATIONAL BACCALAUREATE
DIPLOMA PROGRAMME
2020-21 INDUCTION HANDBOOK**

WELCOME TO ROBERT E. FITCH HIGH SCHOOL'S IB DIPLOMA PROGRAMME

Dear Parents and Students,

Welcome to the International Baccalaureate Diploma Programme at Robert E. Fitch High School. We have been proud members of the IB World Schools community for over 20 years.

Things are changing in today's world at a rapid pace. It can be hard to predict what knowledge will be important to your career future six years from now. What we do know will be important is your ability to think critically, communicate effectively, work collaboratively, maintain an open-mind, and consider things from an international perspective. The International Baccalaureate Diploma Program will prepare you with all of these skills, and help you cultivate a balanced and integrated approach to learning. The Diploma Program at Fitch is focused on getting you ready for the world.



As part of your Diploma Programme experience, you will be challenged to go beyond the classroom in your learning. You will complete an Extended Essay of 3000-4000 words on a topic of your own choosing. You will engage in Creativity, Action, and Service (CAS) experiences, and complete a CAS project of your own. You will explore what you know and how you know it through the Theory of Knowledge class. At the end of your two years of IB, you will have the time management and academic skills necessary for success to and through university.

You have begun a journey that will never end – you are a life-long learner. The IB Program at Fitch exists to guide you in your learning experiences. You will have a small, close-knit cohort of fellow students and teachers who will provide you with support and assistance as you grow and develop. We're so glad to have you in the program!

Sincerely,

Kelley Donovan

Kelley Donovan,
Robert E. Fitch High School IB Diploma Programme Coordinator
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IB learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be:

INQUIRERS

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

KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS

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

COMMUNICATORS

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

PRINCIPLED

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

OPEN-MINDED

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

CARING

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

RISK-TAKERS

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

BALANCED

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

REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

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



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WHAT IS AN IB EDUCATION?

Imagine a worldwide community of schools, educators and students with a shared vision and mission to empower young people with the skills, values and knowledge to create a better and more peaceful world.

This is the International Baccalaureate (IB). In 1968 the first programme offered by the IB, the **Diploma Programme (DP)**, was established. It sought to provide a challenging yet balanced education that would facilitate geographic and cultural mobility by providing an internationally recognized university entrance qualification that would also serve the deeper purpose of promoting intercultural understanding and respect.

With the introduction of the **Middle Years Programme (MYP)** in 1994 and the Primary Years Programme in 1997, the IB identified a continuum of international education for students aged 3 to 19. The introduction of the IB Career-related Programme in 2012 enriched this continuum by providing a choice of international education pathways for 16 to 19 year old students.

Each of the IB programmes reflect a central desire to provide an education that enables students to make sense of the complexities of the world around them, as well as equipping them with the skills and dispositions needed for taking responsible action for the future. They provide an education that crosses disciplinary, cultural, national and geographical boundaries, and that champions critical engagement, stimulating ideas and effective relationships.

These aspirations are summed up in our ambitious mission:

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

THE IB DIPLOMA PROGRAMME AT ROBERT E. FITCH HIGH SCHOOL is an integrated interdisciplinary course of studies designed to ensure our students can successfully compete with honors students from all over the world for positions at prestigious universities, and the world of work beyond the classroom. Our IB students are compassionate, creative learners, who are comfortable in cooperative learning situations that require critical thinking in inquiry-based settings. You don't need to be a genius to succeed in IB – but you need to be ready to work.

THE DIPLOMA PROGRAMME MODEL

The IB DP is a rigorous, academically challenging and balanced programme of education designed to prepare students aged 16 to 19 for success at university and in life. The DP aims to encourage students to be knowledgeable, inquiring, caring, open-minded and to develop intercultural understanding and the attitudes necessary to appreciate a range of viewpoints.

The DP provides the opportunity to develop both disciplinary and interdisciplinary knowledge that meets the rigorous standards set by institutions of higher learning around the world.

To ensure both breadth and depth of knowledge and understanding, students choose courses from the following subject groups: studies in language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts. Most subjects may be taken at either standard level (SL) or higher level (HL).

To earn the full diploma a student must take at least three subjects at HL. In addition, three core elements—the extended essay, theory of knowledge and creativity, activity, service—are compulsory and central to the philosophy of the programme.



APPROACHES TO TEACHING AND LEARNING

IB programmes are taught by teachers who explicitly help students learn how to develop the attitudes and skills they need for both academic and personal success.

Approaches to teaching

There are six key pedagogical principles that underpin all IB programmes. Teaching in IB programmes is:

- based on inquiry
- focused on conceptual understanding
- developed in local and global contexts
- focused on effective teamwork and collaboration
- differentiated to meet the needs of all learners
- informed by assessment (formative and summative)

Approaches to learning

This area develops essential skills that include skills of behavior and emotional management, skills that allow the student to monitor their own effectiveness in their learning and skills that allow them to process information effectively (often called “study skills” in a school environment). Although these skills may be in use when developing a certain natural ability or talent, they are different from both ability and talent themselves because proficiency in any skill can be increased through the deliberate use of techniques and strategies, feedback and challenge. Skills are therefore highly teachable. Teaching and learning in the DP therefore incorporates the development of:

- thinking skills
- communication skills
- social skills
- self-management skills
- research skills

Although these are presented as distinct categories, there is some overlap and close connections between them. These categories should be seen as interrelated, as well as linking closely with the attributes highlighted in the IB learner profile. IB students work to become inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced and reflective.

International-mindedness is a view of the world in which people see themselves connected to the global community and assume a sense of responsibility to its members. It is an awareness of the inter-relatedness of all nations and peoples, and a recognition of the complexity of these relationships. Internationally-minded people appreciate and value the diversity of cultures in the world and make an effort to learn more about them.

IB DIPLOMA PROGRAMME CORE

Theory of Knowledge, Extended Essay, And Creativity, Action, and Service (CAS)

THEORY OF KNOWLEDGE

Theory of knowledge (TOK) plays a special role in the IB DP, by providing an opportunity for students to reflect on the nature of knowledge, and on how we know what we claim to know. The TOK requirement is central to the educational philosophy of the DP and a mandatory course for all students. Students study how individuals from various disciplines view the world in order to develop their own ways of thinking. By stimulating analysis of knowledge across disciplines, TOK seeks to help students make sense of school and the world.

How is TOK structured?

As a thoughtful and purposeful inquiry into different ways of knowing, and into different kinds of knowledge, TOK is composed almost entirely of questions.

The most central of these is “How do we know?”, while other questions include:

- What counts as evidence for X?
- How do we judge which is the best model of Y?
- What does theory Z mean in the real world?

Through discussions of these and other questions, students gain greater awareness of their personal and ideological assumptions, as well as developing an appreciation of the diversity and richness of cultural perspectives.

Assessment of TOK

The TOK course is assessed through an oral presentation and a 1,600 word essay. The presentation assesses the ability of the student to apply TOK thinking to a real-life situation, while the essay takes a more conceptual starting point. For example, the essay may ask students to discuss the claim that the methodologies used to produce knowledge deepness on the sue to which that knowledge will be used.

What is the significance of TOK?

TOK aims to make students aware of the interpretative nature of knowledge, including personal ideological biases – whether these biases are retained, revised or rejected. It offers student sand their teachers the opportunity to:

- Reflect critically on diverse ways of knowing and on areas of knowledge.
- Consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world.

In addition, TOK prompts students to:

- Be aware of themselves as thinkers, encouraging them to become more acquainted with their complexity of knowledge.
- Recognize the need to act responsibly in an increasingly interconnected but uncertain world.

TOK also provides coherence for the student, by linking academic subject areas as well as transcending them. It therefore demonstrates the ways in which the student can apply their knowledge with greater awareness and credibility

EXTENDED ESSAY

The extended essay is a required component of the IB DP. It introduces students to the demands and rewards of independent work. Emphasis is placed on doing personal research and communicating ideas effectively culminated with a 4,000 word paper in an area of personal interest.

What is the significance of the extended essay?

The extended essay provides:

- Practical preparation for undergraduate research.
- An opportunity for students to investigate a topic of personal interest to theme, which relates to one of the student's six DP subjects, or takes the interdisciplinary approach of a world studies extended essay.

Through the research process for the extended essay, students develop skills in:

- Formulating an appropriate research question.
- Engaging in a personal exploration of the topic.
- Communicating ideas
- Developing an argument.

Participation in this process develops the capacity to analyze, synthesize and evaluate knowledge.

An extended essay can also be undertaken in world studies, where students carry out an in-

depth interdisciplinary study of an issue of contemporary global significance, across two IB diploma disciplines

How is study of the extended essay structured?

Students are supported throughout the process of researching and writing the extended essay, with advice and guidance from a supervisor who is usually a teacher at the school.

Students are required to have three mandatory reflection sessions with their supervisors. The final session, a concluding interview, is also known as *viva voce*.

The extended essay and reflection sessions can be a valuable stimulus for discussion in countries where interviews are required prior to acceptance for employment or for a place at university

How is the extended essay assessed?

All extended essays are externally assessed by examiners appointed by the IB and marked on a scale from 0-34.

CREATIVITY, ACTION, and SERVICE (CAS)

CAS is an experiential learning component of the IB DP. Students complete a wide variety of extracurricular, community service and athletic options to fulfill this requirement.

Creativity, activity, service (CAS) is one of the three essential elements that every student must complete as part of the DP. Studied throughout the DP, CAS involves students in a range of activities alongside their academic studies

It is not formally assessed. However, students reflect on their CAS experiences as part of the DP, and provide evidence of achieving the seven learning outcomes for CAS

How is CAS structured?

The three strands of CAS, which are often interwoven with particular activities, are characterized as follows:

Creativity – arts, and other experiences that involve creative thinking.

Activity – physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the DP

Service – an unpaid and voluntary exchange that has a learning benefit for the student. The rights, dignity and autonomy of all those involved are respected.

In order to demonstrate these concepts, students are required to undertake a CAS Project. The project challenges students to:

- Show initiative
- Demonstrate perseverance
- Develop skills such as collaboration, problem solving and decision making

What is the significance of CAS?

CAS enables students to enhance their personal and interpersonal development by learning through experience.

It provides opportunities for self-determination and collaboration with others, fostering a sense of accomplishment and enjoyment from their work

At the same time, CAS is an important counterbalance to the academic pressures of the DP.

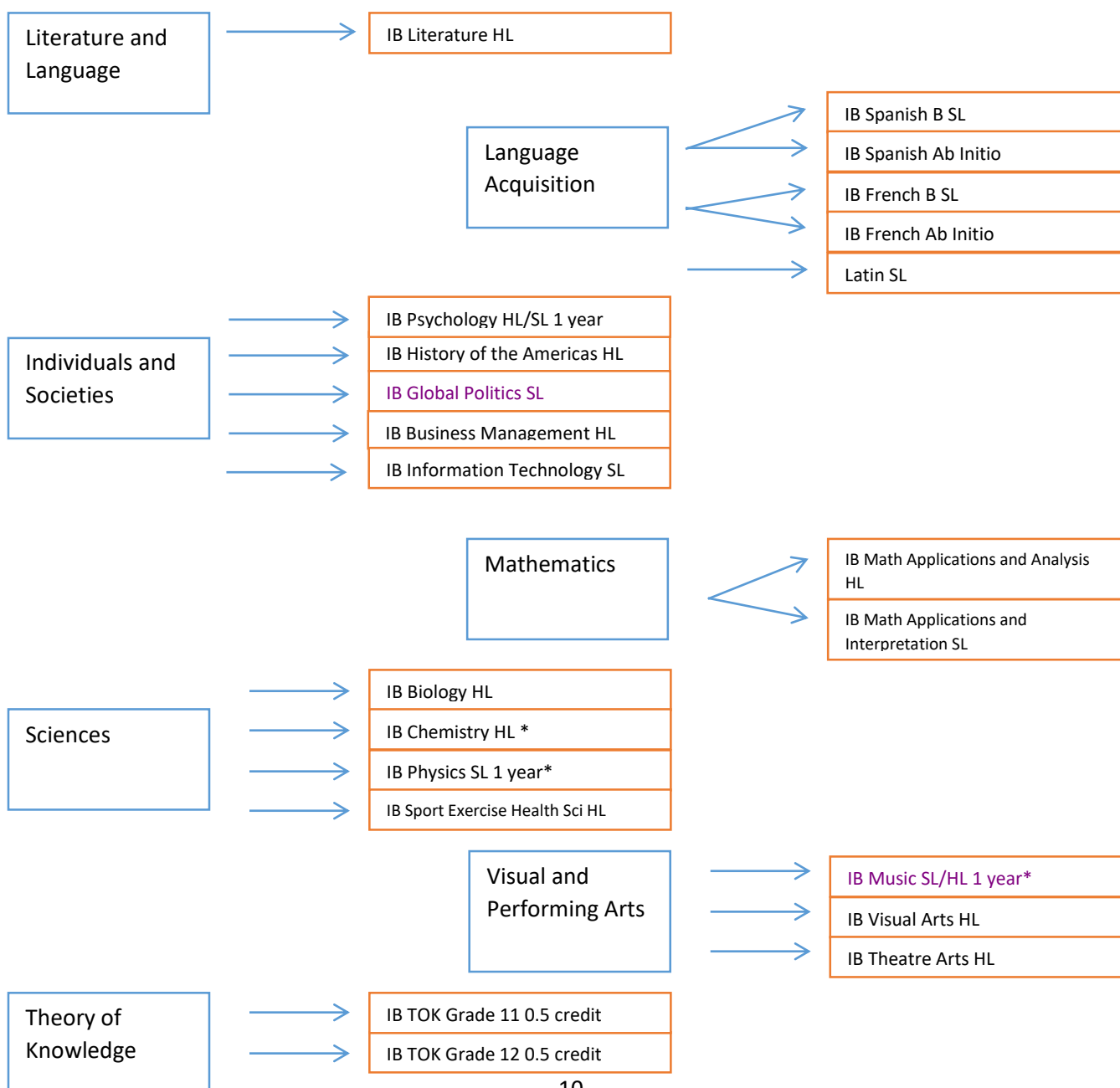
IB guidance on CAS

A good CAS programme should be both challenging and enjoyable – a personal journey of self-discovery.

Each student has a different starting point, and therefore different goals and needs, but for many their CAS activities include experiences that are profound and life-changing.

PLANNING YOUR FULL IB DIPLOMA PROGRAMME SCHEDULE AT FITCH

- You need 6 DP courses, plus TOK for a full diploma load. You must take TOK
- you must take an English, World Language, Science, Social Studies, and Math course.
- 3 of your courses must be HL and 3 must be SL
- You can only take 4 HL classes at most
- You will also choose an elective.
 - An elective can be an extra class from Science, Individuals and Societies, or Visual and Performing Arts
- All courses are 2-year and 2-credit courses unless designated otherwise
- Courses listed in violet text are pending Board of Education approval for 2020-2021
- Courses listed with an asterisk have pre-requisites – see Program of Studies



THE NATURE OF HL AND SL COURSES

It is essential for any pre university education to equip students with the depth of discipline-specific knowledge and skills that they will need for their chosen academic and career paths. However, this must be balanced with the breadth needed to develop well-rounded students who can draw connections between the different disciplines.

As such, the philosophy of the IB DP is that students should engage with a range of subjects while being able to explore specific areas of personal interest in greater depth. SL courses ensure students are exposed to a range of disciplines that they might otherwise opt out of, and HL courses allow students to spend more time with subjects they are more interested in by exploring options in addition to the SL core curriculum. In this sense, all DP courses, regardless of whether they are SL or HL, are integral to the programme.

CURRICULUM AND ASSESSMENT

Both SL and HL courses are meant to span the two years of the DP. SL courses are recommended to have at least 150 hours of instructional time, and HL courses are recommended to have at least 240 instructional hours.

In most cases both SL and HL courses consist of the same educational aims, core syllabus and curriculum and assessment models. HL courses typically also include a range of additional elements designed to allow students to explore areas of interest within the subject in more depth. In this sense, SL courses are not watered down versions of their HL counterparts. The assessment criteria are equally demanding for both levels, and SL exams are marked and standardized with the same rigor as all IB coursework.

ASSESSMENT AND EXAMS

The IB assesses student work as direct evidence of achievement against the stated goals of the DP courses. DP assessment procedures measure the extent to which students have mastered advanced academic skills in fulfilling these goals, for example:

- Analyzing and presenting information
- Evaluating and constructing arguments
- Solving problems creatively

Basic skills are also assessed, including

- Retaining knowledge
- Understanding key concepts
- Applying standard methods.

In addition to academic skills, DP assessment encourages an international outlook and intercultural skills, wherever appropriate. Student results are determined by performance against set standards, not by each student's position in the overall rank order.

The IB uses both external and internal assessment in the DP.

<u>EXTERNAL ASSESSMENT</u>	<u>INTERNAL ASSESSMENT</u>
<p>Examinations form the basis of the assessment for most courses. This is because of their high levels of objectivity and reliability.</p> <p>They include:</p> <ul style="list-style-type: none">• Essays• Structured problems• Short response questions• Data-response questions• Text response questions• Case-study questions• Multiple choice questions – though rarely used	<p>Teacher assessment is also used for most courses.</p> <p>This includes:</p> <ul style="list-style-type: none">• Oral work in languages• Fieldwork in geography• Laboratory work in the science• Investigations in mathematics• Artistic performance

Studies in Language and Literature

Do you like to read good books? This is a class for those who are passionate about reading, writing, and speaking about literature. You will determine how and what to think about the literature we read. We will explore challenging texts that represent a global perspective and are comprised of mostly contemporary works of literature. Students will engage in genre studies of poetry, fiction, and drama, and will improve their writing, reading, and public speaking skills. Students will read works in translation, and consider the cultural framework for the literature. This is a fast-paced course with nightly reading and writing assignments.

Studies in Language Acquisition

The study of a world language is integral to the international focus of the IB Diploma Program. This IB Language B course is based on the acquisition of measurable performance skills with an emphasis on speaking and writing in the target language. Productive, receptive and interactive skills are the focus of the Language B oral interview. This is a second language acquisition course. The overall objective is to learn, appreciate and effectively interact in a culture different from the student's own. The course content aligns with the thematic requirements of the IB guide: Identities, Experiences, Human Ingenuity, Social Organization, Sharing the Planet, all viewed within a global context. The essence of the course is to provide a range of linguistic experiences which will assist the student in developing the capacity to communicate in a language other than English. The study of some brief literary and other texts, online resources, authentic audio-visual materials including films and daily interactive tasks play an important part of this process. This course is conducted entirely in French. End-of-course oral, audio and written assessments take place in Year Two. A grade of "C+" or better in Honors French 3 and teacher approval are very highly recommended for enrollment.

IB Ab initio French

2 Years

This language acquisition course is designed for students with no prior experience of the target language, or for those students with very limited previous exposure. Students develop receptive, productive and interactive communicative skills in the target language in familiar and unfamiliar contexts. This course provides opportunities to engage with a broad range of texts, stimuli and scenarios. Topics are of personal, local or national and global significance. As with the Language B course, learners are challenged intellectually, personally and culturally. Knowledge of vocabulary and grammar—the what of language—is reinforced and extended by understanding the why and how of language: audience, context, purpose, meaning. Students expand the range of their communication skills by understanding and producing a wide variety of oral and written texts for audiences, contexts and purposes associated with academic and personal interests. Five themes are common to Ab initio and Language B: identities, experiences, human ingenuity, social organization and sharing the planet. Assessments at the end of Year Two include an internal oral interview, reading and listening comprehension and various writing tasks to assess students' full range of abilities.

IB Spanish Language B

2 Years

The study of a world language is integral to the international focus of the IB Diploma Program. This IB Language B course is based on the acquisition of measurable performance skills with an emphasis on speaking and writing in the target language. Productive, receptive and interactive skills are the focus of the Language B oral interview. This is a second language acquisition course. The overall objective is to learn, appreciate and effectively interact in a culture different from the student's own. The course content will align with the thematic requirements of the IB guide: Identities, Experiences, Human Ingenuity, Social Organization, Sharing the Planet, all viewed within a global context. The essence of the course is to provide a range of linguistic experiences which will assist the student in developing the capacity to communicate in a language other than English. The study of some brief literary and other texts, online resources, authentic audio-visual materials including films and daily interactive tasks play an important part of this process. This course is conducted entirely in Spanish. End-of-course oral and written assessments take place in Year Two. A grade of "C+" or better in Spanish 3 Honors and teacher approval are very highly recommended for enrollment.

IB Ab initio Spanish

2 Years

This language acquisition course is designed for students with ***no prior experience*** of the target language, or for those students with ***very limited previous exposure***. Students develop receptive, productive and interactive communicative skills in the target language in familiar and unfamiliar contexts. This course provides opportunities to engage with a broad range of texts, stimuli and scenarios. Topics are of personal, local or national and global significance. As with the Language B course, learners are challenged intellectually, personally and culturally. Knowledge of vocabulary and grammar—the what of language—is reinforced and extended by understanding the why and how of language: audience, context, purpose, meaning. Students expand the range of their communication skills by understanding and producing a wide variety of oral and written texts for audiences, contexts and purposes associated with academic and personal interests. Five themes are common to Ab initio and Language B: identities, experiences, human ingenuity, social organization and sharing the planet. Assessments at the end of Year Two include an internal oral interview, reading and listening comprehension and various writing tasks to assess students' full range of abilities.

IB Latin SL

2 Years

IB Latin SL is for students who have completed two years of Latin language study at the high-school level. Students will engage in reading and translating texts from Latin, and will learn to speak and write in Latin. This course is ideal for a student who has an interest in continuing his or her Latin studies, and/or who wishes to use Latin as his or her language of choice while completing the full IB Diploma or participating in the IB Career Certificate Programme.

Studies in Individuals and Societies

IB Business Management HL

2 Years

The IB Business Management course is designed to develop student knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyze, 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. It 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

IB Global Politics SL

1 Year

The 21st century is characterized by rapid change and increasing interconnectedness, impacting individuals and societies in unprecedented ways and creating complex global political challenges. Global politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. The DP global politics course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. The course helps students to understand abstract political concepts by grounding them in real-world examples and case studies. It also invites comparison between such examples and case studies to ensure a wider and transnational perspective. The core units of the course together make up a central unifying theme of "people, power and politics".

IB History HL

2 Years

Students will come to appreciate their own cultural heritage in the broad context of the experiences of the peoples of the Americas. Students are introduced to history as a discipline and to the historian's methods. This course of study obliges students to go beyond simple narrative through in-depth comparative analysis of people, places and events. IB History: Twentieth Century World History – Grade 12 (1 Credit)
Prerequisite: IB History: The Americans This course is a two-year course starting in the 11th grade. Students enrolled in the IB Program will have the choice of studying the History of the Americas either on the standard level or the higher level beginning in grade 11. The scope of these courses will be focused on three topics: Causes, practices and effects of war, the rise and rule of single-party states, and the Cold War. The content of these courses will encompass United States History, Russian History, and Chinese History. At the conclusion of study, students will be prepared to meet the standard established by the International Baccalaureate Program.

IB Information Technology in a Global Society SL

1 Year

The IB DP information technology in a global society (ITGS) course is the study and evaluation of the impacts of information technology (IT) on individuals and society. It explores the advantages and disadvantages of the access and use of digitized information at the local and global level. ITGS provides a framework for the student to make informed judgments and decisions about the use of IT within social contexts. The aims of the ITGS course is to:

- enable students to evaluate social and ethical considerations arising from the widespread use of IT by individuals, families, communities, organizations and societies at the local and global level
- develop students' understanding of the capabilities of current and emerging IT systems and to evaluate their impact on a range of stakeholders
- enable students to apply their knowledge of existing IT systems to various scenarios and to make informed judgments about the effects
- encourage students to use their knowledge of IT systems and practical IT skills to justify IT solutions for a specified client or end-user.

IB Psychology SL

1 Year

Prerequisite AP Psychology.

IB psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior. Understanding how psychological knowledge is generated, developed, and applied enabling students to achieve a greater understanding of themselves and appreciate the diversity of human behavior.

Studies in the Sciences



IB Biology HL

2 Years

This course is designed to provide a selection of in- depth biological concepts and principles. It intends to reinforce student familiarity with the process of formulating and testing hypotheses regarding underlying mechanisms of biological phenomena. The IB biology is organized around four central themes: structure and function, universality versus diversity, equilibrium within systems, and evolution. Course topics include: cells, chemistry of life, genetics, ecology, human health and physiology, nucleic acids and proteins, cell respiration and photosynthesis and human reproduction, classification, nerves and muscles, excretion and plant science. Additionally, students will study options to include evolution, ecology and conservation. At least twenty-five percent of a student's class time will be devoted to performing laboratory work that will cover a range of topics and skills, including a multidisciplinary group science project. Assessments will include practical exams, term projects, simulations as well as actual laboratory and field work. Students may take the AP exam at the end of this course, but additional AP material is the responsibility of the student

IB Chemistry HL

2 Years

Prerequisite Honors Chemistry

IB Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. This course is designed to provide an in-depth understanding of chemical concepts

and principles. A large portion of class time (over 25%) will be spent in designing and performing laboratory activities. IB chemistry topics include stoichiometry, equilibrium, thermodynamics, atomic and molecular structure, kinetics, periodic properties, nuclear chemistry and descriptive chemistry of the elements, including organic chemistry. In addition to those core subjects, students will study the following two optional topics: Environment Chemistry, and Drugs and Medicines. In addition to weekly laboratory investigations, a multidisciplinary group project will be designed and carried out. Assessments will include, but are not limited to, lab reports, problem sets, unit exams and research projects. Students may take the AP exam at the end of this course, but additional AP material is the responsibility of the student. **Students are expected to complete a summer assignment prior to beginning of school year. Please see current instructor or your counselor for details.**

IB Physics 12 SL

1 Year

Prerequisite: Students must have already completed a year of physics (and should have achieved a grade of B or higher in either AP Physics 1 or a similar Honor Physics curriculum) before enrolling in IB Physics 12.

IB Physics is a second-year, advanced Physics class that completes the Standard Level (SL) course of study for the IB Diploma Programme. This class will review and deepen the understanding of the areas covered in the first year of Physics (kinematics, dynamics, circular & rotational motion, conservation laws of energy & momentum, gravitation, electricity and circuits, waves) and expand into new areas of study (thermodynamics, optical lenses & diffraction, nuclear & quantum physics). There will be a focus on developing problem solving skills through application of algebra; although Calculus is not required for this class, many connections to the principles of calculus will be made. There will also be deeper application of data analysis skills including the propagation of error and the graphic display of data. As in all IB sciences, there will be an independent investigation required which will constitute 20% of the student's overall grade. This investigation will be selected and designed entirely by the student (with only slight guidance from the teacher). The data and initial submission for this investigation will be completed before winter break; the final submission will be completed by the end of the first semester.

IB Sports Exercise and Health Science HL/SL

2 years

IB Sports Exercise and Health Science. This is two-year course. IB Sport Exercise 12 students must successfully complete year one of the course. Interested in a future in Sports Medicine, Athletic Training, Biology, or Physical Therapy? This course incorporates the disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport and exercise. Students will acquire the knowledge and understanding necessary to apply scientific principles and analyze human performance. Also, an integration of topics such as international sporting competition and ethical issues within sport are addressed. This is a 2-year course, and students will sit for exams to earn the IB Certificate in Sport, Exercise, and Health Science.

Studies in Mathematics

IB Math Applications and Interpretation SL (replaces Math Studies SL)

2 Years

Prerequisites: Geometry, Algebra 2

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics.

IB Mathematics Applications and Analysis HL (replaces IB Mathematics HL)

2 Years

Prerequisite: Honors Pre-Calculus and Honors Geometry with a B- or higher.

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology.

Fine and Performing Arts

IB Theatre HL

2 Years

IB Theatre Arts is a two-year, full-credit course that challenges students' creativity and versatility in four roles: as Creator, Designer, Director, and Performer. At the Standard Level, students will complete a Director's Notebook on a play of their choice, a Research Project on an international theatre tradition, and a Collaborative Performance on a topic developed with classmates. At the Higher Level, students will also complete a Solo Performance founded upon theatrical theory. In addition, students will read, analyze, view, and perform plays from a variety of philosophical and cultural contexts.

IB Music HL

2 Years

The IB Diploma Programme higher level music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate. In addition, the course enables students to: enjoy lifelong engagement with the arts, become informed, reflective and critical practitioners in the arts, understand the dynamic and changing nature of the arts, explore and value the diversity of the arts across time, place and cultures, express ideas with confidence and competence, develop perceptual and analytical skills, develop their knowledge and potential as musicians, both personally and collaboratively.

Minimum of one art class or portfolio review and recommendation

letter from the teacher. In the IB Visual Arts class, students will work on two-dimensional and three-dimensional art forms such as painting, collage, mixed media, drawing, sculpture, printmaking, ceramics, computer graphics and design. Students will work independently on specific areas of interest that will enrich self-expression and personal growth through research workbooks and studio art. Additionally, students will be expected to discover, analyze and interpret art from other cultures. Most importantly, students will be asked to reflect upon how they view themselves in relation to our global society through the study of art.

Theory of Knowledge

1 Credit

Can you prove you exist? How do you know the sky is blue? Do you have faith in something you can't see? How can people on opposite sides of an argument insist that they are both right?

Theory of Knowledge, or TOK, is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge.

The course is split between the spring of grade 11 and in the fall of grade 12. The TOK course examines how we know what we claim to know. This is done by encouraging students to analyze **knowledge claims** and explore **knowledge questions**. Current events and controversial issues form the basis of our classroom materials. Students are required to write papers that challenge their beliefs. Students also have to make several class presentations. We have active discussions and we do a lot of thinking about our thinking.

Extended Essay

The extended essay is a required aspect of the IB Diploma program. Students choose a topic of interest to them, conduct research, and then write a 4000-word essay. (About 12-15 pages). Most of the work for the actual essay is done as part of the IB English HL course, and is something special that you can talk about in your college applications and interviews.

Creativity, Action, and Service: CAS

During your junior year, you will begin to plan a service-learning project in which you will take a leadership role. That project will fulfill the role of the 's' in service – but might also fulfill the Creativity and Action portion as well. Creativity speaks to anything you do, well, creatively. Action is anything you do that makes you sweat (taking tests doesn't count), and Service means something you do to help other people without personal reward.

PLANNING AHEAD

Are You Ready for the World?

The world is an increasingly competitive place. Thanks to global communications, it's also a much smaller place. Do you have what it takes to be competitive on a global scale? Are your course selections preparing you for admission to the most selective universities? Will you be able to graduate from college in 4 years? Are you poised to earn college credits now?

The IB Diploma program prepares students for global citizenship and global competition. Diploma students are twice as likely to be admitted to the most selective colleges and universities as non-Diploma students. They also graduate in 4 years from college at twice the rate of non-Diploma students.

The IB Diploma program at Fitch is an integrated interdisciplinary course of studies designed to ensure our students can successfully compete with honors students from all over the world for positions at prestigious universities, and the world of work beyond the classroom. Our IB students are compassionate, creative learners, who are comfortable in cooperative learning situations that require critical thinking in inquiry-based settings. You don't need to be a genius to succeed in IB – but you need to be ready to work!

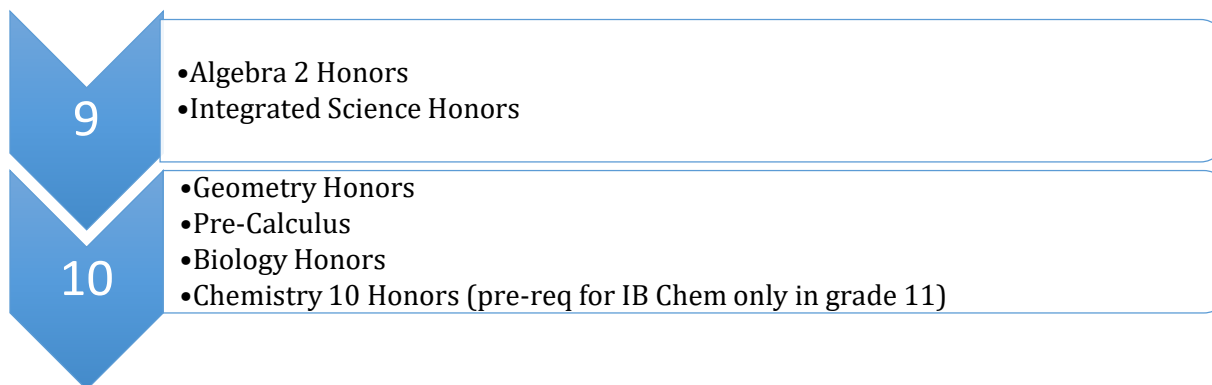
STEM STUDENTS	CREATIVE ARTS STUDENTS	HUMANITIES AND LIBERAL ARTS STUDENTS
<p>Globally, IB STEM courses are the most popular with students. The science and math that we do in IB mirrors the types of real-world math and science problems people in the research and applied mathematics fields do. The Group 4 research project enables students across scientific disciplines to work collaboratively to solve a community problem</p>	<p>IB Theater Arts and IB Visual Arts offer students an opportunity to learn new skills and applications in their creative fields. Theater students write, perform, and stage-manage productions. Visual Arts students create thematic studio art and mount their own show.</p>	<p>One of the most important aspects of a liberal arts education is the skill of thinking deeply and critically about topics. IB Humanities courses are theme-based, rather than date and fact based, and focus on recognizing how the bigger picture, globally, impacts both our past and our future.</p>



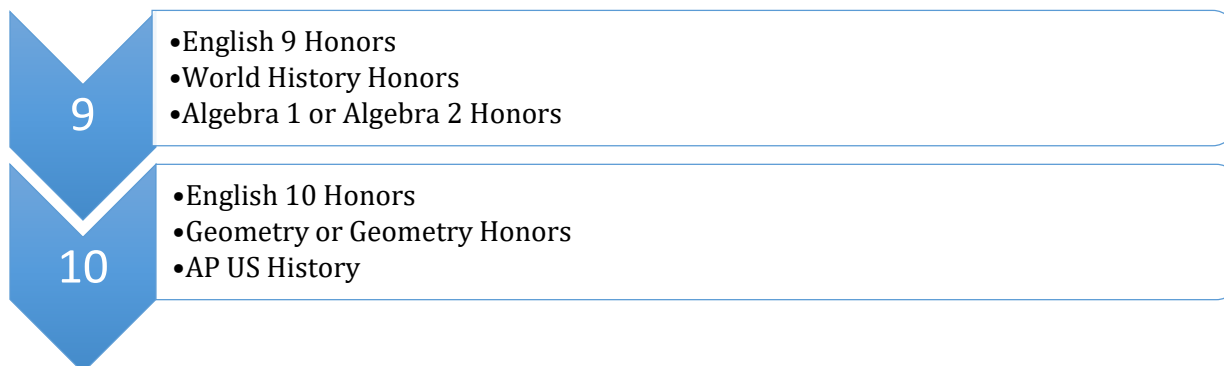
Entering Grade 9 at Fitch?

The following course recommendations will help prepare you for the IB Diploma Programme in Grade 11. There are many things to consider in your plan of study. Your school counselor can assist you to be sure to include to have all your requirements met and ensure there are no barriers to your planned entry to the IB DP.

Is your future in Science, Technology, Mathematics, Engineering, or Medicine?

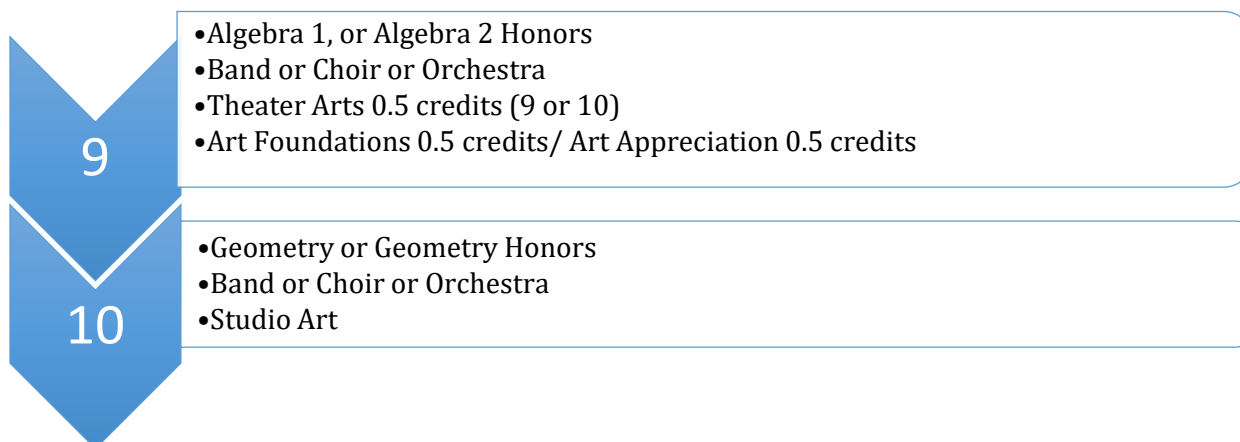


Is your future in the Liberal Arts or Humanities?



Is your future in the Fine and Performing Arts?

Depending on your field of music, theater, or visual arts, the following classes may be recommended:



Facts & Figures: The Diploma Programme Around the World

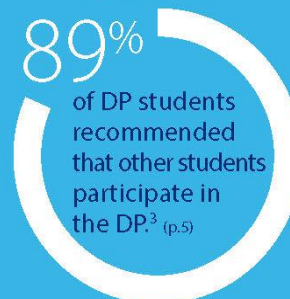


1.3 million*
DP graduates
140+ countries

*as of May 2015



In a recent DP study at the University of Oregon's Honors College,



sample size: 18 students



Alumni of the Diploma Programme attend top-ranking universities, studies find.¹

DP students not only do well academically while in high school, but also go on to perform well at the university level.²

79% of DP
graduates in China
attended universities in
the US, UK, Hong Kong,
Singapore and Canada.⁴



DP students in the US who enrolled in post-secondary education immediately after high school **enrolled in and graduated from four-year institutions at much higher rates than the national average.**

95%
of DP cohort
60% national cohort

enrollment at four-year institutions (public and private)



79%
of DP cohort
39% national cohort

average graduation rate at four-year institutions (public and private)



A+ University admissions officials say the **DP is the best qualification** for developing students' non-academic skills and preparing them for further education and careers.⁵

Encouraging independent inquiry



Developing workplace skills



Nurturing an open mind



Developing self-management skills



Developing global awareness and connectivity



DP alumni report the IB has profound, long-lasting effects on students' lives. It helps them **develop critical thinking, analytical and writing skills and a broader world view**. In addition, they point out that they earned advanced credits for university.⁶



International-mindedness means having the opportunity to have doors opened in other countries and widely renowned universities.⁷

(DP student, p.38).



A recent study among DP schools in Australia, China and India found that international-mindedness can be categorized as a tool for individual gain, an orientation towards shared understanding and a way to push boundaries for change.

1. <http://ibo.org/globalassets/publications/ib-research/dp/chinasummaryinenglishweb.pdf>
2. http://ibo.org/contentassets/d74675437b4f4ab38312702599a432f1/mexicodpresearchsummary_e.pdf
3. <http://ibo.org/contentassets/d74675437b4f4ab38312702599a432f1/ibstudentsstudyingatukhighereducationinstitutionshowdotheyfare2011.pdf>
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6. <http://ibo.org/globalassets/publications/ib-research/dp/chinasummaryinenglishweb.pdf>
7. <http://www.acs-schools.com/University-Admissions-Officers-Report-2015>
8. <http://ibo.org/globalassets/publications/ib-research/continuum/longer-term-outcomes-summary-en.pdf>
9. <http://www.ibo.org/globalassets/publications/ib-research/dp/international-mindedness-summary-en.pdf>



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