

IB Diploma Program Course Offerings

Robert E. Fitch High School

STEM Students



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.

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!

Creative Arts Students



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. Musicians perform and create their own music.

Humanities and Liberal Arts Students



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.



IB – It's a Small World, After All.



IB Science Courses

IB Biology HL – 2 Credits

This course is designed to provide a selection of in-depth biological concepts and principles. IB Bio is organized around 4 central themes: structure and function, universality vs. diversity, equilibrium within systems, and evolution. Assessments will include practical exams, term projects, simulations as well as actual laboratory and fieldwork. Students may take the AP exam at the end of this course, but additional AP material is the responsibility of the student.

AP/IB Physics – 2 Credits

This course is part of the IB curriculum and prepares students for the IB Standard Level Physics Exam. It is suggested that students will best benefit from the IB course, if they first complete the AP Physics 1 course. The AP course is 1 credit and the IB course is an additional 1 credit. Students should have strong mathematics skills to take these courses.

IB Sport Exercise Health Science SL –2 Credits

Interested in a future in Sports Medicine, Athletic Training, Biology, Medicine, or Physical Therapy? This course incorporates the disciplines of human anatomy and physiology, biomechanics, psychology, and nutrition, which are studied in the context of sport and exercise. Students will acquire the knowledge necessary to apply scientific principles and analyze human performance. Competition and ethical issues within sport are addressed.

IB Chemistry HL – 4 Credits

(Pre-Requisite: Honors Chemistry in Grade 10)

This course is designed to provide an in-depth understanding of chemical concepts and principles. A large portion of class time 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 Environmental Chemistry and Drugs and Medicines. A multi-disciplinary group project will be designed and carried out. Assessments will include lab reports, problem sets, unit exams and research projects. Students may also take the AP Chemistry exam.



IB Theater Arts

2 Credits



Theater is about transformation. It is the application, through play, of energy and imagination to frame, reflect, expose, critique, and speculate. The Diploma Program theater course is designed to encourage students to examine theater in its diversity of forms from around the world. This may be achieved through critical study of the theory, history, and culture of theater, and will find expression through workshops, performances, creation of plays, staging of performances, and management of theater in all its forms.

IB Visual Arts – 2 Credits

Compelled to make the world a more beautiful place? (Or at least to leave your mark on it, in a very tangible way?) In the IB Visual Arts class, students work on two-dimensional and three-dimensional art forms such as painting, collage, mixed media, drawing sculpture, print making, ceramics, photography, computer graphics and design. This is a studio arts course and students will work independently on specific areas of interest that will enrich self-expression and personal growth through research, workbooks, and studio art. Students will be expected to discover, analyze, and interpret art from other cultures. Most importantly, students will be asked to reflect on how they view themselves in relation to our global society through the

IB Music HL/SL -- I Credit -- Pre-requisite -- AP Music Theory

IB Music SL/HL (Prerequisite: AP Music Theory)

Through IB Music students engage in a journey of imagination and discovery through partnership and collaboration. The course challenges students to engage practically with music as researchers, performers, and creators, and to be driven by their unique passions and interests while also broadening their musical and artistic perspectives. Students develop and affirm their unique musical identities while expanding and refining their musicianship. Explorations within the processes of performing and creating shift to many different parts of the world and music cultures previously unknown. Students gain hands-on experience with different types of music as they are encouraged to experiment with diverse musical material in order to develop and transform their ideas that shape the way they create and perform music. Through realizing and presenting samples of musical works with others, students will learn to communicate critical artistic intentions and purposes. context.





IB Languages

Language A

English Literature HL – 2 Credits

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 – in IB English Literature, the reader's perspective is cultivated and valued. 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.

IB Spanish Ab Initio – 2 Credits:

Spanish for beginners! This course is suitable for someone who has taken Spanish 1 or 2, or no Spanish at all, and who wishes to learn conversational Spanish suitable for the casual traveler. This course can be particularly helpful for students who wish to switch from French to Spanish, or students who have taken Spanish 1 or 2 at Fitch, but don't feel confident in the language, and wish to be competitive as college applicants by taking 4 years of a language.

Classical Languages – Latin –2 Credits

This course will fulfill the language credit for the IB Diploma while allowing students to continue their experience of learning Latin. A pre-requisite of Latin 1 and 2 is required for this course.

IB Spanish SL – 2 Credits

The study of a world language is integral to the international focus of the IB Diploma program. An IB language course is based on the acquisition of measurable performance skills with an emphasis on speaking and writing in the target language. The essence of this course is to provide a range of linguistic experiences that will assist the student in developing the capacity to communicate comfortably in a language other than English. Students will study a range of texts. Students must have Spanish 3 Honors to be successful.

IB French SL – 2 Credits

The study of a world language is integral to the international focus of the IB Diploma program. An IB language course is based on writing and speaking in the target language. Students will enjoy learning the culture as well as the language, and the study of literary and other texts will play an important role in the process. Students must have had French 3 Honors to be successful.

Language A Self-Taught – 2 Credits

This course is suitable for the student who speaks another language as his 'mother-tongue' or original language. Students will work with Ms. Donovan to develop an independent learning plan to explore literature and language in their original 'first' language. This course is recommended for students who wish to earn language credit for their original language, and who are self-motivated and hard working. This will fulfill the IB language requirement for the Diploma

IB Humanities Courses and Business Management

Information Technology in a Global Society --1 Credit –Grade 11

Are you connected? Happily wired? Networked in, and social with it? ITGS is the course for you. Students will investigate issues involving hardware, software, and the responsible and ethical use of information technology. Students will develop a greater understanding and appreciation of the impact information technology has on individuals, communities and societies, as well as technical understanding of technical understanding of information technology systems and networks and the impact and role of information technology in modern global society. Students complete a real-world project for a client as the major course assessment.



History of the Americas and 20th Century History --2 Credits

Don't know much about history? How about dictators and devastation? Did you realize that "American" history encompasses places like Canada, Mexico, Central America and South America as well as the U.S.? Had enough of the same old US History replayed? Try IB. This course is a two year course starting in the 11th grade: learning 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.

Business Management -- 2 Credits

The 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.

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.

IB Global Studies SL -- 1 Credit

This course can be taken instead of IB History to fulfill the IB DP requirements for history.

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.



AP/IB Psychology – 2 Credits

Why do people steal? Why are some people quiet, while others are loud? How do we find our best friends? Why do we fall in love? The IB Psychology course helps students develop the capacity to identify, to analyze critically, and to evaluate theories, concepts, and arguments about human behavior. Students will test hypotheses, interpret complex data and source material, develop an awareness of how psychological research can be applied for the benefit of human beings, ensure that ethical practices are upheld in psychological inquiry, and develop an understanding of the biological, cognitive, and socio-cultural influences on human behavior. This is a 2-year course. Year 1, students will take the AP Psych exam, and Year 2, students will take the IB assessments.



IB Math SL – 2 Credits

Math Analysis and Approaches (**Pre-requisite Algebra 2**) caters to students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. The course consists of the study of eight core topics: number and algebra; functions and equations, circular functions and trigonometry, vector geometry, matrices and transformations, statistics, probability and calculus. Additionally, one option from a separate list of topic areas is chosen such as relations and groups, discrete mathematics, or analysis and approximation. A required portfolio will consist of three assignments based on different areas of the syllabus, representing each of the following activities: mathematical investigation, extended closed-problem solving and mathematical modeling. The portfolio provides an opportunity for the student to undertake an investigation of a mathematical nature in the context of another subject in the curriculum, a hobby or interest of his/her choice using skills learned before and during the mathematical studies course.



IB Mathematics HL – 2 Credits

Math Higher Level (**Pre-requisites -- Honors Pre-Calc and Geometry**) is for students with a good background in mathematics who are competent in a range of analytical and technical skills. The nature of these courses focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way. Students are encouraged to apply their mathematical knowledge to solving problems set in a variety of meaningful contexts. 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. The internal assessment requirement is portfolio offering students the framework for developing independence in their mathematical learning through engaging in mathematical investigation and mathematical modeling. These courses are demanding, requiring students to study a broad range of mathematical topics. Students who wish to pursue a career in physics, engineering and technology are strongly urged to enroll.

IB Core: Theory of Knowledge, Extended Essay, and CAS

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.



**SERVICE
TO OTHERS**

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.