



# THE INTERNATIONAL BACCALAUREATE AT SALEM

*Approach and Course Overview*





## Building character

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## The IB at Salem

Salem has been offering the IB Diploma programme since 1992 and has been its pioneer in the German educational landscape. Since then continuity and growth have created unique experience and a unique and enriching interaction with the German Abitur, leading to our school being bilingual and to many of our staff being equally competent in both systems. The holistic dimension of the IB, especially CAS, shows the affinity to the educational programme of Salem – not surprisingly as Kurt Hahn was also involved in the creation of the IB. The principle of educating students to be self-responsible learners is shared by Salem and the IB alike.

From five students in the first cohort, the Salem IB family has meanwhile grown to an average of 50 students per year group, and the IB staffroom counts over 30 members. The teaching infrastructure is fully integrated with the teaching of the German Abitur, classrooms and equipment being shared by both systems to considerable mutual benefit. Planning of the school year takes the needs of the IB with its particularly intense phases into account, but in a school offering a wealth of opportunities students also need to learn to manage their day.

Our results and pass rates are continuously above world average, with a number of students achieving extremely good results. Our students progress to universities, colleges and gap year schemes that can be highly prestigious, highly unusual or both. This success is built on students discovering and embracing their potential through the united impact of the Salem boarding context and the IB programme – and it is built on the realization that it is their own hard work that ultimately brings achievement.



# IB Diploma Programme Overview



## IB DIPLOMA PROGRAMME

IB I + II = Grades 11 + 12



## Undertaking the IB Diploma Programme

The IB Learner Profile stipulates IB Diploma candidates to be young people ready to embark on a multi-dimensional experience of personal and intellectual growth, to become thinkers, communicators, risk-takers, to become knowledgeable, principled and open-minded. This tallies with Salem's traditional aims. Both the IB and Salem build on each student actively 'opting in', committing to the aims of the school, of the programme.

Simply to want to enjoy a boarding school environment, or simply to aim at top grades for what is envisaged to be 'a career', or to want to professionalize one's English is not enough in terms of motivation to give strength for the demanding two years that lie ahead. Having been top of the class through middle school, the intellectual demands of the IB may well push one back into mid-field for a while. The diploma follows a pre-university analytical-exemplary approach, where the highest grades can only be gotten by real ability on top of self-discipline and hard individual work, but not just by industrious preparation and step-by-step instruction or intense tutoring.

Furthermore, the IB is a rigorous academic system that does not show any grade inflation as it is criteria-oriented, and criteria must be met. The pass rate of the IB world-wide is around 75 – 80 %. With this in mind parents and students ought to think carefully whether the Diploma Programme is appropriate for the respective applicant. Each candidate needs to bring a self-driven passion for learning and for personal development. Key failing conditions in the IB are to have less than 24 points overall and less than 12 in the Higher Level subjects. Should these failing conditions prevail at the end of IB1, a student cannot progress to IB2, but must repeat. Other factors suggestion a repetition can be to be behind in CAS, with the Extended Essay or generally showing lacking readiness for the demands of IB2, for example not keeping internal deadlines for assignments or missing lessons unexcused.

Your children are not your children.  
They are sons and daughters of life's longing for itself.

You may give them your love but not your thoughts, for they have their own thoughts.  
You may strive to be like them, but seek not to make them like you.

Kahlil Gibran



# Diploma Programme

## Extended Essay (EE)

### The assignment

After defining a research question in a chosen subject, the student develops a response based on well supported argument and analysis. The essay follows academic convention, comprising Introduction, Main Body, Conclusion, Bibliography and if appropriate an Appendix. The essay also follows academic standards in its rigour regarding authentic individual scholarship and the absolute negation of collusion (including parental involvement) and plagiarism. Assessment is external and based on the criteria – both general and subject-specific - in the Extended Essay Guide that is issued to the students.

### The method

The Extended Essay is a huge and often very rewarding step towards academic proficiency for our students and they are accompanied throughout. In line with IB requirements, we follow an internal calendar from the first introduction in February of Year 1 through the choice of subject, supervisor and topic to the pre-summer draft deadline and the final submission in the autumn of Year 2. While cooperation between student and supervisor is at the core of EE success, we also offer workshops on how to organize data and how to properly reference one's research at appropriate stages of the process.

Bismarck and the Kulturkampf  
HISTORY

A comparative analysis of the role of light  
in aspects of Buddhism and Christianity  
WORLD RELIGIONS

Survival of E-coli bacteria under UV-light  
BIOLOGY

Death in the poetry of John Donne  
ENGLISH

Extended Essay topics by recent Salem graduates.

Overall, the EE is coordinated by a team of members of staff and our school librarian, who specifically introduces the students to referencing methods and styles, helps with the sourcing of specific requests, and maintains an EE Resources file accessible to the students on the school intranet. The IB Coordinator also becomes involved if students struggle so that their EE might become a failing condition. The final school deadline is set just prior to most of the university application deadlines, as it is our policy not to process university applications unless this most demanding of all Diploma assignments, a true test of self-organization and intellectual curiosity, has been brought to the requisite conclusion.



## Diploma Programme

### Theory of Knowledge (TOK)

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#### The content

In this modern, technological age, we are constantly bombarded by knowledge from different sources- from school to Instagram. The media often state that this is a 'post-truth' age where people have 'had enough of experts' but we need somehow to **separate fact from 'fake news'**! Plato argued that knowledge is '**justified, true belief**'- but how can we believe anything today, let alone successfully justify our beliefs to others?

Theory of Knowledge (TOK) is designed to help us navigate this brave new world. It is the backbone of the IB Diploma and explores the frameworks of the subjects studied in the Diploma, asking **reflective and critical** questions about the value of the knowledge gained. Put simply, it asks, "*What exactly do we know about the world? What does this subject help us understand? How much should we trust what it tells us? How can the knowledge within help us progress?*"

The TOK course has the aim of helping students develop **analytical and evaluative skills** of the sort that are essential for successful completion of university qualifications. These ideas will be discussed by all teachers across the IB course. The concepts introduced and insights gained will also be necessary for successful completion of compulsory assignments like the Extended Essay and subject Internal Assessments. Becoming aware of, and capable of, analysing *how* and *why* we think is a demanding and sometimes frustrating process, but it is also greatly rewarding!

In the course of IB Year 1, we cover key issues of TOK, looking in detail at various ways we interact with knowledge using **Ways of Knowing** like **Language** and **Reason**. We look at how these work in the **Areas of Knowledge** like **Mathematics, History** and the **Sciences**. In the second year, the focus is on successfully completing the assessed components.

#### The method

The course is taught in normal classes with an assigned teacher, in group activities with your peers and in plenary sessions that are team-taught by all TOK teachers together. The group activities allow exploration of the huge range of different experiences and world views the student population represents, the plenary sessions enable the year group to experience the different approaches and areas of expertise of the TOK teachers and occasionally other subject teachers as well, while the seminars enable teachers and students to get to know each other in in-depth discussions and closer scrutiny of an area of study. All should help to develop the skills necessary to tackle the assessments. The TOK course is assessed through two methods- an essay answering a specific title and through an exhibition put on by the pupil. The work is usually completed by the end of February in the second year and the assessments are marked and moderated externally. Theory of Knowledge is often especially valued in retrospect as it prepares an analytical mind-set prerequisite for any challenging degree course.

“Can there be knowledge without proof?”

A typical TOK essay question.



## Diploma Programme

### Creativity, Activities, Service (CAS)

Students build their own creativity, activity, service (CAS) programme by participating in a minimum of one creative CAS Experience, one service and two sports courses (or one sport as a member of a school team and therefore attend two training sessions) each week for an 18 month period (September in IB1 - February in IB2).

- **Creativity:** artistic and other experiences that involve creative thinking, such as ceramics, sculpture, theatre workshop, debating, maths club, jazz band, orchestra etc.
- **Activity:** a wide variety of sports courses encouraging physical exertion which contribute to a healthy lifestyle and therefore complements our students' academic work.
- **Service:** unpaid, voluntary interaction with others, either at school or in the local community, that is of learning benefit to the student whilst respecting the rights, dignity and autonomy of all those involved. A wide range are offered including Salem's traditional 'Dienste': fire brigade, technical assistance, nautical service and Red Cross, as well as sustainability, social services, music service etc.

Using ManageBac, an on-line data base, students develop their own CAS portfolio detailing their involvement in their CAS Experiences. Here they are expected to reflect on and evaluate their participation and development within each of their chosen CAS Experiences on a weekly basis, taking into account the 7 CAS Learning Outcomes, all of which must be covered at least once across the breadth of the activities.

- **LO 1:** Identify their own strengths and develop areas for growth.
- **LO 2:** Demonstrate that challenges have been undertaken, developing new skills in the process.

- **LO 3:** Demonstrate how to initiate and plan a CAS Experience.
- **LO 4:** Show commitment and perseverance in CAS Experiences.
- **LO 5:** Demonstrate the skills and recognise the benefits of working collaboratively.
- **LO 6:** Demonstrate engagement with issues of global significance.
- **LO 7:** Recognise and consider the ethics and choices of action.

#### CAS Project

All students also plan and participate in a chosen CAS Project which must take place over a minimum of six weeks. This must have a service element at its core and also include creativity or activity, or both. The project should be a real, purposeful activity, with significant outcomes and must be personally challenging to the student. The planning of the project must show thoughtful consideration and personal goal setting as well as planned outcomes. The final evaluation should be a reflection against the CAS Learning Outcomes.

Students are supported through their CAS programme by the CAS Advisor / CAS Coordinator. Students must fulfil all the CAS programme requirements in order to pass the IB Diploma.

“Pursuing the IB is not simply about academic learning. It is about learning from experiences and rising to a challenge within an holistic education.”

CAS Illustrated, Global interpretations of CAS, 2012





## Group 1: Language A

### English

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#### **English Language and Literature**

English Language and Literature aims to develop skills in textual analysis. The course draws on a mixture of both literary and non-literary texts. It encourages students to reflect on the role context plays in shaping meaning in a text and in the audience's response to a text. Teachers are given flexibility to construct the course in a manner which reflects the students' and the teachers' interests. Non-literary texts can include works such as advertising campaigns, newspaper articles and opinion pieces, speeches and a range of mass media. The analysis students undertake of these texts is informed by ideas such as the relationship language has to power or gender or race. It looks at issues such as societal taboos or how language develops over both time and place. The literary texts chosen for study reflect a range of genres and historical periods and are examined in the form of close critical study, attention to literary devices and the contexts of both production and reception.

#### **English Literature**

The English Literature course introduces students to the foundations of literary study through a variety of texts in English from different periods, styles, and genres. The course aims for students to develop an ability to reflect critically on their reading through the study of a wide range of literature. Works are studied in their literary and cultural contexts, through close study of individual texts and passages, and by considering a range of critical approaches. In view of the international nature of the IB and its commitment to intercultural understanding, the Literature course does not limit the study of works to the products of one culture or the cultures covered by any one language. The study of works in translation is also important in introducing students to other cultural perspectives through the study of literature. The response to the study of literature is through oral and written communication, thus enabling students to develop and refine their command of the English language.



## Group 1: Language A

### German A Literature

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#### The content

The target group of the **Language A Literature** course are students with **German** as their mother tongue or those who are very fluent in German as written and spoken language at least. Primarily it focuses on German literature chosen from all epochs and genres and taken from the prescribed list of authors, but there is also a fine selection of works in translation offered, taken from various epochs and languages of origin.

#### The method

The assessment that will take place throughout the course varies from written assignments to oral presentations, linked to the four parts of the syllabus. Divided into four sections, the first part of the syllabus is named **Works in Translation** (HL: 3 works, SL: 2 works). Students will undertake an interactive oral, will write a reflective statement, do some supervised writing and finally develop a suitable topic for their literary essay on one work studied in part 1.

Part 2 is the **Detailed Study** (HL: 3 works, SL: 2 works), for which students will have to do an oral commentary under supervised conditions. This individual oral commentary is a literary analysis of an extract taken from one of the works studied in part 2 of the syllabus (SL) or, concerning HL-students, a mandatory commentary on a poem (10 min.) plus another 10 min. literary discussion on one of the other part 2 - works studied.

Part 3, the **Literary Genres** (HL: 4 works, SL: 3 works), will focus on plays of different kinds, e.g. from the classical 5-act-drama to plays built up by scenes, the theatre of the absurd etc. A comparative essay will be written as part of the final exam (the so called paper 2, while paper 1 is a commentary on a poem or a piece of short prose also done during the final exam session). Last, but not least, part 4 are the **Options** (HL & SL: 3 works), chosen freely by the teacher who will take into consideration the preferences of the students; an oral presentation will be done here on a topic of the student's own choice. Thus, students attending this course should enjoy independent reading and should be truly interested in discussing how literature manages to express thoughts and feelings, considering the given cultural context, focusing not only on what authors are talking about, but also how they use literary features to make struggling with a book such a fascinating experience for us!



## Group 1: Language A

### German A Language and Literature

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#### **The content**

What do poems and advertising have in common?  
Is the television news coverage really objective? Does the word 'love' in a play written 2,000 years ago have the same meaning as in a play of our time? Do dictators and democratic politicians work with the same strategies of persuasion?

In this course completely different texts are looked at. Approximately one half of the time is taken up with literature. In Standard Level, students read four Literary works (Higher Level: six), whereby the selection also depends on the requirements and interests of the course. The other half of the lesson time is spent analysing non-literary texts such as newspaper articles, advertising, speeches. The relationship between reader, author and text and the reader's active role in creating meaning are pivotal.

Current topics, such as the reporting on the climate crisis, or the discussions about the impact of digital media are also included in the course. The students' own individual interests can also be taken into consideration here. Apart from texts, the analysis of pictures and films also plays an important role.

#### **The method**

The course is suitable for students with German as a first or second language. The ability to read fluently and express oneself is a prerequisite, and the participants should have at least already had experience in German as a school subject. Being able to speak and write without making mistakes is not necessary, so students with German as a second language can also pass the course, if they are prepared to work at their language abilities. It is crucial that students have a strong interest in reading, the readiness to do research and written work independently and enjoy taking part in critical discussions on literary and topical texts.

In addition to the teacher's input, discussions and presentations play an important role during the course. Going on outings together to the theatre or cinema complement our work. Homework consists of preparatory reading, online research, independent work on the respective topics and writing essays and analyses. The results are obtained by assessing the homework, oral presentations and tests in the format of the examination papers. Participating in two group 2 courses in different languages constitutes the basis for acquiring the bilingual diploma.



## Group 1: Language A

### Self-taught mother tongue

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#### **The content**

Salem International College has supported the IB policy of mother-tongue entitlement since the IB programme was established at the school. Over the past few years we have offered Italian, Korean, Chinese, Greek, Lithuanian and Persian, just to name a few.

Following the IB philosophy, we believe that it is important to promote “respect for the literary heritage of a student’s home language” and to provide “an opportunity for students to continue to develop oral and writing skills in their mother tongue while studying in a different language of instruction”.

(Adapted from the Guidance for the support of other tongue in the Diploma Programme)

This course is offered only at standard level.

#### **The method**

Students are expected to read a selection of texts in their self-taught language as well as some works in translation. In total, students are expected to read **9** works over the two years chosen from a list of authors that the IB has created, called the Prescribed reading list.

- a minimum of two works studied linked to each of the areas of exploration of the course
- coverage of at least three of the four literary forms (poetry, drama, fiction, non-fiction)
- coverage of at least three periods
- a minimum of four works originally written in the language A being studied
- a minimum of three works translated
- works from a minimum of three places as defined by the Prescribed reading list in relation to the language A being studied, covering at least two different continents.

#### **Role of the school/supervisor**

Students receive the Literature Guides from the school, as well as additional support material published by the IB. There is a coordinator who meets and supports the students on a regular basis and monitors their progress, gives advice on the nature of all assessments and supervises the written assignment.

#### **Role of the student**

Students are expected to attend regular meetings with the coordinator and meet school deadlines. They must find a tutor who will support them throughout the course. The tutor should be familiar with the new IB programme and should be in contact with the student on a regular basis (skype, email, telephone...).



## Group 2: Language B

### German B

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#### **The target group**

The German B course should be chosen by students who are no beginners in German (not on levels A1, A2) and who are not confident enough to choose one of the German A courses which are suited for native speakers and learners with very good language skills (C1, C2). Students with B1 should take German B as a Standard Level course, B2 students could, C1 students should choose the Higher Level course.

#### **The content**

SL and HL largely follow the same syllabus but differ in teaching hours (4 and 6 hours per week respectively), in the depth of coverage, the level of differentiation, the demands of assessment and the assessment criteria. Both groups will improve their proficiency and gain some insight into cultural, political and social phenomena of today's German speaking world. The five topics studied in SL and HL courses are: Identities, Experiences, Human Ingenuity, Social Organisation and Sharing the Planet. Our sources will be a German B text book as well as films and current media texts. In addition to these five topics HL students will read two pieces of literature as well as some short stories.

#### **The method**

Teaching methods and the choice of course material are focused on developing the following skills: Receptive skills cover understanding authentic, spoken German (radio, film and internet) and reading a wide range of written texts such as newspaper articles, letters, brochures, blogs and literature. Productive skills cover speaking and writing on every-day matters as well as on more sophisticated topics. Students will learn how to produce different text types by applying different registers, stylistic devices and structuring techniques. Interactive skills will be given special attention: students are expected to develop linguistic sensitivity in spontaneous communication as well as awareness of intercultural dos and don'ts.

The assessment (IB exam) consists of 3 reading and 3 listening comprehension texts (Paper 2, 50% of mark) as well as a written task (Paper 1, 25%). There also is an individual oral presentation followed by a discussion which is marked by the teacher and moderated externally (25%). For SL students, this is based on a visual stimulus, for HL students on literary extracts from texts covered in the course.



## Group 2: Language B

### German Ab Initio

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#### **The content**

This course enables the learners to express themselves adequately in German in everyday situations. Such situations might be shopping (food, beverages, clothes), travelling, living in German surroundings, hobbies and leisure. The course is suited to beginners without prior knowledge, but interested in learning a new language that is being spoken all around them.

Communicating in German will be an important aspect, but short texts such as letters, e-mails, interviews and stories are being both read and produced. Listening comprehension is also being practiced, especially the ability to filter accurate information from spoken German.

#### **The method**

The language of instruction is German. Grammar is conveyed visually, supported by explanations in English. Most tasks and command terms are given in both German and English in the first year, purely in German in the second year. Learning outcomes are recorded and consolidated for example through visual representation (posters) by the students themselves.

Living in a German environment facilitates both the acquisition and the consolidation of new vocabulary. New terms and expressions can then be applied using structures acquired in the lessons. The boarding school context makes it possible to leave the classroom and instantly apply what has been learned.



## Group 2: Language B

### Spanish B

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Both Standard and Higher Level are aimed at students with 3-5 years of language experience who wish to improve their proficiency and gain some insight into cultural, political and social phenomena of today's Hispanophone world. As a rule, Spanish courses are of a very privileged size; it is therefore expected that students play a creative part in class and are ready to communicate.

#### The content

SL and HL largely follow the same syllabus, but differ in teaching hours (4 and 6 hours a week respectively), in the depth of coverage, the level of differentiation, the demands of assessment and the assessment criteria.

There are five prescribed themes to be dealt with:

- Identities
- Experiences
- Human ingenuity
- Social organization
- Sharing the planet

The themes allow students to compare the target language and cultures to other languages with which they are familiar. The themes also provide opportunities for students to make connections to other disciplinary areas in the DP. And all these prescribed themes must be addressed equally in the Language B.

In addition to these five themes, only students of HL will read two literary works originally written in the target language.

#### The method

This course aims at developing the students' intercultural understanding of the Spanish speaking regions by looking at different aspects of everyday life as well as current issues. During the two years the students will develop the necessary skills to understand and use Spanish in a range of contexts and for a variety of purposes.

Teaching methods and materials of the course are aimed at developing:

- *Receptive skills*: understanding of written and spoken personal and professional works on topics of interest.
- *Productive skills*: writing texts of a variety of purposes and making oral presentations on topics of interest. (Students will learn how to produce different types of texts using different registers, stylistic devices...)
- *Interactive skills*: initiating and maintaining conversations and discussions.

The written exam consists of two papers and an individual oral examination by the student, followed by a conversation and/or discussion with the examiner.

There is a written assignment for students of HL.



## Group 3: Individuals and Societies

### Business Management

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#### The content

The Business Management syllabus consists of five core topics: business organisation and environment, human resource management, finance and accounts, marketing and operations management. Each of the topics build upon each other and are linked with the six concepts underpinning this course (change, culture, ethics, globalisation, innovation and strategy) and related to business management contexts (case studies) in order to provide a holistic or 'big picture' overview of business management.

Students learn to analyse, discuss and evaluate business activities at local, national and international levels. Correspondingly, students learn tools and techniques as well as business management strategies and practises in order to think critically about business organisations. The course covers a range of organisations from all sectors, as well as the socio-cultural and economic contexts in which those organisations operate.

#### The method

The course does not require any previous knowledge of business or commerce but an awareness of business topics, current affairs, international relations and global political and commercial trends is strongly desired. Students will work from an approved textbook but further readings are also prescribed. Classes take the form of a seminar in which students are expected to have read pre-assigned material from the textbook and take notes. Students must be prepared to evaluate case studies and work on business management related exercises in class. Students are also expected to make formal presentations and actively participate in class discussions.

Class work and oral contributions are vital to the learning process and assist in the teacher's assessment of the student's progression. Students are expected and required to complete regular homework in order to consolidate learning. Furthermore written work is supplemented by regular tests and exams, some of which take place under IB conditions.

Students who do not have a broad interest in business, who are not considering a career in business, who are not prepared to research business related to the syllabus or are not self-disciplined are not encouraged to take this course.





## Group 3: Individuals and Societies

### Economics

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#### The content

The Economics syllabus consists of four parts: Introduction to Economics, Microeconomics, Macroeconomics, and the Global Economy. Each part is integrated into the course over 18 months so that students have a comprehensive understanding of the basic concepts and economic organization.

The course focuses on the global nature of economics with attention to current events. Economics is a dynamic subject with many interfaces to other disciplines such as history, politics, science, and psychology.

The course's emphasis is to ensure that students understand that economics both explains most world events - from pandemics to global warming - and offers many of the best solutions to the world's dilemmas. Economics will help to explain some of the powerful international forces that will shape our collective, global future.

#### The method

The course does not require any previous knowledge of economics, but does demand a high level of awareness of the world outside of school and a keen interest in current affairs, international relations and global political trends. We work from a standard text book but this alone is not enough for success on the course. The student will be required to read extensively using journals such as the Economist and Newsweek and a quality newspaper (New York Times, Financial Times) or web site (BBC, CNN).

Classes take the form of a seminar in which students are expected to make formal presentations, contribute to informal, spontaneous class discussion, participate in simulations and debates, and engage in lectures. The class work and oral contributions are as important as the written work in the learning process and are an important part of the assessment process. Students are expected to complete regular homework to a high standard - this may take the form of written work which is graded, or preparation for the next session of class work. The ongoing written and class work forms the basis of the teacher assessment and this is supplemented by regular tests and exams, some of which take place under IB conditions.

Students who have a broad interest in economics and the world around them, are prepared challenge themselves with the material, work on their own to extend their understanding, and want a deeper awareness of the social and economic impacts that decisions have on others are encouraged to take Economics.



## Group 3: Individuals and Societies

### Medieval History

#### The content

The Medieval History course aims to promote the traditional historical skills of understanding why people do things in a context encouraging advanced transfer abilities. The medieval world offers a range of political, religious, cultural and intellectual dynamics to explore, and it offers the analysis of hostility and expansion as well as that of long periods of peaceful coexistence. The course, as taught at Salem, takes the Prescribed Subject: Military Leaders – Genghis Khan and Richard I the Lionheart as its starting point. Here, we will look at the different leadership styles and evaluate popular myths surrounding these figures. What military leadership means in a medieval context is a key conceptual question, as is the connection of military organization with social, political and economic factors.

This is followed by the study of two Topics. The class will work through Topic 1 – Society and Economy, where we look at the growth and complexity of medieval societies, events such as famines and the Black Death and trace learning, art and culture from the ancient world to the first European cathedral schools and universities. In Topic 2 – Causes and effects of medieval wars the genesis and nature of local conflicts, invasions and the Crusades are covered. Topic 3 – Dynasties and Rulers: Building on Charlemagne as the prototype of the medieval ruler, the Norman and Plantagenet dynasties of England and the Capetians of France are studied. We look at concepts of law and government, the nature of power and rule, the role of officials, nobles and elites.

The three Higher Level Options build on this work and look at **the Monarchies of England and France 1066 – 1223, Muslims and Jews in Medieval Europe 1095 – 1492 and The Renaissance from 1400**. The Prescribed Subject is in the main assessed through Paper 1, a source analysis paper, while the Topics are examined in

Paper 2 (at Higher Level at greater depth also in Paper 3). Papers 2 and 3 are demanding essay papers. Individual choices of themes and issues are open in the internal assignment, the Historical Investigation.

#### The method

The course does not require previous knowledge of European history or the medieval period, but it does demand high levels of engagement, and committed independent knowledge maintenance. We work from original texts and university-standard resources and the latest research as well as school textbooks. Classes will have the character of a seminar, everybody being equally involved, and are densely packed with new content or with evaluation. Students come having done preparatory reading, taking turns preparing presentations, and applying content they have already mastered to new areas. Homework consists of reading, internet research, knowledge maintenance, researching presentations, and writing essays. Assessment is by homework essays, tests and timed essay papers.

“By what means and with what success, did either medieval European or Islamic rulers maintain control?”

A typical Medieval History exam question.



## Group 3: Individuals and Societies

### Modern History

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#### The content

This course approaches modern **world history** thematically, e.g. by comparing British and American industrialisation, by looking at causes, practices and effects of wars, origins and developments of authoritarian states (Paper 2).

We will specifically concentrate on moves to global war with the examples of Japanese, Italian and German expansionism in the 1930ies (prescribed subject for Paper 1, sources).

In the **Higher Level** extension we extensively study hundred and fifty years of **European history** beginning with the formation of the nation-states Italy and Germany (Paper 3).

“For what reason, and with what result, did the Sino- Soviet-split influence Cold War?”

A typical Modern History exam question.

#### The method

In class we work with different text books for different units as we go through 19th century Europe and dominantly 20th century world history. Students prepare for every class by reading, researching, essays, diagrams, analysing sources and note taking. In the group we develop structures, reflect on terminology and put the topic into a wider context and compare different views of the same event. We draw conclusions and thus create a picture of the past. Students' work also includes presentations and a Historical Investigation of 2200 words in the second year.

For constant revision students write class tests and mock examinations practicing combining detailed knowledge with analytical abstraction under time pressure in their essays.

Students keep a binder with sections of all units including their notes, revision sheets and homework.

Students who choose this course need to like independent reading and thinking and, as history is individual and collective memory, they must remember and store details to be able to identify links or red threads, to develop categories that go beyond the unique case and are basis for a shared understanding of yesterday and today.



## Group 3: Individuals and Societies / Group 4: Science (Interdisciplinary Subject)

### Environmental Systems and Societies

- An interdisciplinary course counting either as Individuals & Societies (Group 3) or Experimental Science (Group 4)
- Available only at Standard Level

- Conservation and Biodiversity
- Pollution Management
- Climate Change
- Environmental Value Systems

#### Course principles

Through studying environmental systems and societies (ESS) students are provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students are encouraged to develop skills of evaluation in respect of the scientific, ethical and socio-political aspects of these issues.

The course is intended to be accessible to students with no specific previous knowledge of science or geography. However, it aims to foster an international perspective, awareness of specific local and global environmental concerns and an understanding of scientific methods. This means that a preparatory curriculum that shares these aims would provide a useful context.

A further important aspect of the ESS course is hands-on work in the laboratory and/or in the field. In addition there is an emphasis on case studies in which the principles of the course are reflected. Case studies encourage students to develop skills of collating information, comparing different sources and weighing their relative reliability and significance.

#### Core topics

- Systems and Models
- The Ecosystem
- Human Population, Carrying Capacity and Resource Use

#### Assessment model

- External assessment consists of two written papers and provides opportunities for students to demonstrate an understanding through the application, use, synthesis, analysis and evaluation of environmental issues, information, concepts, methods, techniques and explanations.
- An Internal assessment task accounts for 25 % of the final grade. This involves the completion of an individual investigation of an ESS research question that has been designed and implemented by the student. The investigation is submitted as a written report.

#### Typical questions

1. Loss of biodiversity threatens human well being\*
  - a. Explain how human well-being is threatened by the loss of biodiversity.
  - b. Evaluate the role of local support, government agencies and research in the protection of a named protected area you have studied.
  - c. Evaluate species-based conservation as an approach for preserving biodiversity and suggest why trophy hunting (i.e. hunting animals for sport) may represent an acceptable method of achieving this goal.
2.
  - a. Suggest reasons for the distribution of acid precipitation.
  - b. Explain why the effect of acid deposition is regional rather than global.

\* Source: Hamdallah Zedan, Secretary of the Convention on Biological Diversity, 2003



## Group 4: Science

### Physics

#### The content

Physics seeks to explain the universe itself, from the very smallest particles (quarks) to the vast distances between galaxies. This course allows students to both develop practical skills and techniques and increase their facility in the use of mathematics, which is the language of physics. It also allows students to develop interpersonal skills, and information and communication technology competence essential to modern scientific endeavour.

Core Topics studied by all students include Measurement, Mechanics, Thermal Physics, Waves, Electricity and Magnetism, Atomic and Nuclear Physics, and Energy, Power and Climate Change. Additional Higher Level material consists of Motion in Fields, Mechanics, Thermal Physics, Wave Phenomena, Electromagnetism, Quantum and Nuclear Physics, and Digital Technology. Furthermore, all students study two options.

At Standard Level these could be Sight and Wave Phenomena, Quantum and Nuclear Physics, Digital Technology or Relativity and Particle Physics. For both Standard and Higher Level Astrophysics, Communications and Electromagnetic Waves are open. However, Relativity, Medical Physics and Particle Physics are only available at Higher Level.

#### The method

All students of Physics need to be familiar with a range of mathematical techniques, including graphing, algebra, trigonometry and geometry. Students should have undertaken Physics in Grade 10 to begin the Diploma course. Students who take Higher Level Physics must also take Mathematics Standard or, preferably, Higher Level. As with all Experimental Sciences, the use of current technology is expected. This not only includes standard commercial graphing, word-processing, database and spreadsheet software, but also data-logging and sensing technology. Approximately one-quarter of the Experimental Sciences assessment is undertaken internally, and this is exclusively laboratory-based research and reporting. Higher level Physics is a prerequisite to gain entry to engineering and physical science courses. The analytical skills developed by Physics students are highly respected by universities and useful in all occupations. Medicine, law and business schools frequently give extra credit to students who have completed Physics.

“Education’s purpose is to replace an empty mind with an open one.”

Malcolm Forbes



## Group 4: Science

### Chemistry

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#### The content

Chemistry is an essential prerequisite for degree courses such as medicine, biological science and environmental science. Both the Higher and Standard Level courses allow students to experience the wonder of the micro-world of atoms and molecules that makes up the fabric of the universe, while remaining true to the IB Learner Profile. The Chemistry programme allows students to further develop their problem-solving and analytical skills. It also provides opportunities for the students to become more aware of the moral, ethical, social, economic, and environmental implications of using science and technology. The syllabus covers physical chemistry, inorganic chemistry, and organic chemistry, and each major area is further subdivided into topics. There is also one optional topic for study, allowing the programme to be further tailored to suit the needs of the class. There are links to other topics within the Chemistry programme, as well as overlap with the other Experimental Sciences. There is a core of material that is common to both levels, while Higher Level students will delve further and deeper into each of the topics.

The important thing is  
not to stop questioning.

Albert Einstein

#### The method

As with the other Experimental Sciences, there is a significant practical programme worth 24% of the final grade. The practical programme is designed to develop skills and techniques which include the planning, performing, and evaluating of a self-designed experiment. Students will be required to work independently at times, and with other students at various times throughout the programme. The major collaborative project is called the Group 4 Project, and this involves students from all science disciplines working together for several days in smaller groups to investigate an aspect of a larger problem. This allows students to appreciate different approaches and helps to reinforce the idea that each science is linked to each other, and that no science is, in and of itself, an island.

Additionally, in the Experimental Sciences, there is a requirement for students to develop their information and communication technology skills, and to apply this in their practical work. Skills such as extracting information from a database, using spreadsheets, graphing data and analysing the graphs, computer simulations, and data logging are an integral part of a modern chemistry programme, and, thus, emphasized in our practical scheme of work. The final assessment, as in the other Experimental Science, consists of three examination papers, worth 80% of the final grade, and the internally assessed practical programme, worth 20%. This course is offered at both Standard and Higher Level. In the Higher Level, there are more mathematical problems to be solved. As a result, students who struggle with Mathematics and its concepts would likely be better suited to the Standard Level course.



## Group 4: Science

### Biology

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#### The content

The syllabus in Biology reflects the major current areas of investigation in the subject including gene and biotechnology, biochemistry, human physiology, ecology and evolution. The course provides a comprehensive foundation for further studies in the biological and medical sciences at university. This is made possible both by the course content and also by the investigative practical approach to the subject encouraged by the IB Organisation.

The subject is offered at both standard (four lessons per week) and higher level (six lessons per week).

“What is the sequence of the amino Acids that is being translated from the following mRNA sequence 5’ AUGGGUGCUUAUUGGUA3’?”

A typical Biology exam question.

#### The method

The course does not require a great deal of previous experience in the subject but students must be motivated and have well developed abilities to think scientifically. They should be interested in the natural world and be interested in discovering how it functions. Students should enjoy analysing problems and be capable of applying existing knowledge to unique situations. They must also be well organised and able to learn independently.

Like all IB science subjects Biology contains a significant practical component. This encourages the development of experimental skills, planning and conducting investigations as well as collaboration with fellow students. The practical aspect of the course culminates in the interdisciplinary Group 4 Project and the Individual Investigation, the latter being worth 20% of the final grade. We are able to take advantage of technical expertise outside the classroom when we visit Novartis in Basel for a workshop in applied genetics.

Computer literacy is developed through the use of data-logging equipment, databases, simulations and spreadsheet analysis. Statistical methods are also taught and used throughout the course.

Assessment of progress is achieved through homework tasks and class tests. These, together with end of year and mock exams, are intended as preparation for the final exams in May.



## Group 4: Science

### Computer Science

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#### The content

Once upon a time, joining a Computer Science course meant learning how to operate a computer. Nowadays, we know that children often have better computer skills than their parents. So, what are we doing in class these days?

During the course, we try to understand how a computer works; what happens behind the user interface – at different levels.

With regard to the Hardware, we start by setting up basic logic gates from single electronic components and move on to the different modules within a computer, including their interactions, to network architectures, and the considerations involved when designing a whole IT system for a client.

With regard to the Software, we initially learn to understand and apply simple algorithms. As we are acquiring sound programming skills in *Java*, we develop increasingly complex program structures. Finally, we go through the whole design and development process of an individual “customer tailored” software project, which forms the practical Internal Assessment component required by every IB Science subject. Using *Java* as an example, we are able to appreciate the advantages of programming strategies like *object-oriented programming*, which help in minimizing the risk of error when large teams are working together on an extended complex software project.

The Higher Level students learn how to efficiently organize information in abstract data structures, how the operating system of a computer manages the available resources, and how to develop small automated devices controlled by microcontroller-based systems.

#### The method

To a large extent, the course consists of *free individual work* – with all its advantages and challenges. Often, you are required to organize your tasks *individually* or in small teams. However, you can only enjoy this *freedom* successfully if you manage your work with the necessary responsibility and self discipline. Learning computer programming is time consuming *work*: you do not only learn a new language – *Java* – but also a new way of thinking in clearly structured procedures which includes developing algorithmic thinking. The required knowledge to carry this through is taught and practiced throughout the course.

Finally, the knowledge and skills acquired during the lessons and projects throughout the course are tested in three exam papers (SL: 2 papers) of 4 hours and 30 minutes in total (SL: 2hrs 30 min) which account for 80% of your subject grade (SL: 70%). The remaining 20% (SL: 30%) derive from the evaluation and assessment of your practical programming project. There is NO need of any previous Computer Science knowledge beyond the normal use of computers in daily life. HOWEVER, you must have a serious interest in exploring what happens behind the user interface. We are NOT doing a different form of mathematics, such as always solving a variety of equations. BUT, from experience, we can say that if you find mathematics particularly challenging you will quite possibly struggle in Computer Science.

Successful Computer Science students will include those individuals who are willing to develop the thinking skills required for problem-solving, who can organize themselves to work through complex problems as part of a team without necessarily being provided with answers, and who are able plan their Internal Assessment project in a timely fashion. Instead of grooming nerds, the need to create computational solutions that meet real human needs and aspirations will inspire Computer Science students and most certainly entail real personal growth.





## Group 5: Mathematics

### Mathematics

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#### The content

Within the Diploma Program the study of Mathematics is compulsory as mathematical knowledge provides an important key to understanding the world in which we live.

The syllabus in Mathematics for the IB Diploma offers a wide range of different areas including pure Mathematics that characterizes the subject as an abstract system of ideas and applied Mathematics as a useful tool. By studying the main topics Algebra, Functions, Trigonometry, Vectors, Calculus and Statistics and Probability, the aim is to enable students to develop logical, critical and creative thinking, to appreciate the multicultural and historical perspectives of Mathematics and to employ and refine their powers in abstraction and generalization. There are two courses that are offered, Mathematics: Analysis and Approaches, and Mathematics: Applications and Interpretations. Each course is offered at standard level (4 lessons per week) and higher level (6 lessons per week).

“I’m a great believer in luck,  
and I find the harder I work the  
more I have of it.”

Thomas Jefferson

#### The method

The higher level courses address students with a good background in mathematics who are competent in a range of analytical and technical skills and enjoy meeting its challenges. Of the two courses Mathematics: Analysis and Approaches concentrates more on "pure" Mathematics and prepares students well for university studies such as Mathematics, Physics or Engineering and Technology. Mathematics: Applications and Interpretations, while still offering a demanding higher level course, concentrates more on applied Mathematics such as Statistics and Probability and prepares students well for university studies such as economics or business studies. Students need a high level of self-organization and a pronounced ability of independent learning. The standard levels offer the same topics but less advanced and provide students with a sound mathematical background as well as solid mathematical skills. As the introduction of these two courses was done recently, it is advised to check with universities, which of the two and at which level is required for a given university course.

Like all IB subjects the mathematical course contains a significant internal assessment - the mathematical exploration (HL /SL) that is worth 20% of the final exam grade. This internal assessment is an individual piece of written work that involves investigating an area of mathematics. Students will start in year 1 searching for an interesting topic and finish their work in the first semester of year 2. The mathematical exploration offers an opportunity to investigate the usefulness, relevance and occurrence of mathematics in the real world. It focuses on mathematical inquiry, mathematical modelling and application and the use of technology.



## Group 6: The Arts

### Visual Arts

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#### The content

The visual arts are an integral part of everyday life, permeating all levels of human creativity, expression, communication and understanding. The IB Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. It is not essential that students have had prior experience in art at either level, although a competent use of drawing skills and creative thinking strategies is highly recommended at HL. Beyond technical accomplishment, a student should express an active interest in exploring the visual arts with a flexible approach in their creative choices. The aims of the course, therefore are to enable students to investigate past, present and emerging art forms while evaluating their contexts in connection with their own production. This is especially relevant in the written comparative study assignment which is one component in the final grade that reinforces analytical skills and art criticism. Secondly, we encourage each student to develop an understanding of art from a local, national and international perspective which strengthens confidence when visually responding to their own personal, cultural experiences. Therefore, maintaining a vibrant visual arts journal that captures the students' creative processes from the initial inspiration to the eventual refined art pieces is an integral part of the course and their assessment. The curriculum and teacher's approach are highly adaptable to the cultural background, interests and abilities of the students and, together with an awareness of curatorship practice, is ultimately celebrated in the culmination of their achievements in a final exhibition.

#### Areas of possible individual studio work and investigation:

- Two-dimensional forms: Drawing, painting, print-making, graphic design and illustration
- Three-dimensional forms: Ceramics, sculpture, media (including television, film and theatre) product design, installation and fashion
- Lens-based, electronic and screen-based forms: Analogue and digital photography, experimental imagery, computer-aided design, advertising, digital imaging, film, video and animation

#### The method

The student-centred approach enables development of their knowledge about visual arts and allows individual exploration and different approaches through both studio production and the process portfolio. This integrated relationship between studio work and investigation is essential throughout the course at both levels. Teacher-guided sessions, including gallery visits and specialised workshops, set standards and develops techniques. At least one, extended arts trip to a major cultural city, usually within Europe, is standard within the two-year duration of the course. Apart from exposing the students to a wealth of diverse practices, these excursions enable the study of curatorial practice to be observed more profoundly which will later be incorporated into their own final visual arts exhibition.

The HL students will need to produce more studio work and pages in the visual arts journal as well as being more reflective on their artistic practice than the SL students, but otherwise the general requirements are the same for both levels.



## Group 6: The Arts

### Theatre Arts

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#### The content

The study of theatre will take you far beyond the scope of the creative industries; it is a wide-ranging examination of what it is to communicate, collaborate and create in the twenty-first century. You will work on your feet, exploring the ways in which we have shaped our collective conversations over thousands of years and across world cultures. You will hone a sense of where you fit within those conversations, and consider how you might most effectively bring about change in the modern world.

A key feature of the Theatre Arts course is how it allows you to pursue your own interests while developing the core skills. If you might study psychology later in life, we will look at writers influenced by Freud and Lacan. Really enjoying your maths? We'll take in Complicite's 'A Disappearing Number'. Do you speak French? We can cover Moliere. In this way, you can ensure that your applications and interviews for University are full of the interesting and creative ways you have drawn connections between your learning experiences. Theatre Arts teaches you essential skills – the content is guided by you.

#### The method

Your lessons will be practical and collaborative, with major projects which require you to produce a Director's Notebook, give a Research Presentation and contribute to solo and group performances across the two years. There is no final written examination so you will be taught how to plan for the long term and manage your projects over time. Furthermore, you do not need to be an accomplished performer in order to achieve at the highest level; you will learn and develop a range of directing, researching and presentation skills but you do not need previous experience.

You will complete the course not only with a firm grounding in the skills and techniques required for employment in the twenty-first century, but with a strong sense of how to express yourself, your beliefs and your vision in the complex and crowded world of mediated communication.



## Careers Counselling

We try to stimulate the inherent curiosity of our students at Salem so that they enjoy the experience of learning for its own sake. But most students expect that the work they do with us will lead them on to a fulfilling university course where they can continue to develop intellectually and prepare for the world of work. The task of the careers counselling service is to assist and advise the student and their family in that endeavour. The first and most important decision is for the student to decide what it is they want to study at university - and why. This is very much a personal choice. Each student has their own ambitions and aspirations and the choice of courses available is huge – from the traditional professions such as law or medicine to the ‘sunrise’ industries of IT or global marketing. Students are encouraged to discuss their future carefully with family, close friends and teachers before making their choices. Having set their personal objective, the students can then turn to the Careers Counselling service and rely on the professional support which we offer to help them set realistic goals and then realise their plans.

Many IB students look to continue their education at English speaking universities either in the USA or UK. In this case we encourage students to start preparing for their university application in the Spring of Year 1. Students should begin to research the Universities which they would like to attend – possibly making a trip to visit them during the Easter or summer break. They should also ensure that they meet any of the course requirements beyond the IB: do they need to take the IELTS or TOEFL exams to demonstrate English language proficiency? When would they like to sit the SAT test

needed for entry into a University in the USA? Would their CV be enhanced by relevant work experience over the summer vacation? All these things need to be thought about and planned for now!

When they return for the start of Year 2 in September, students should be ready to continue and complete their applications. Registrations need to be made and basic information entered on either of the web sites used collectively by Universities in the USA (Common App), the UK (UCAS) or by individual Universities in other countries. A personal statement is needed in which the student presents their profile and explains why they want to pursue their chosen area of study. Teachers need to be approached for references – with plenty of time so that they can do the student justice. The careers counsellor will need to co-ordinate the applications, the presentation of academic transcripts and the predicted grades. It is a busy time for the student and staff alike. For the process to run smoothly, with each application having its optimum chance of success, time is needed. Rushed applications made at the last minute are seldom successful. For this reason we insist that students liaise with the Careers Counsellor as soon as they return in September for Year 2 and that the application is completed well before the Christmas break in December. There is plenty to do for everyone involved – students, staff and families alike. But, working together, we aim to ensure that every student has the best possible chance of getting the right place at a university of their choice on a course of their choice.



Cambridge (UK), Durham (UK), St. Andrews (UK), Edinburgh (UK),  
Warwick (UK), University College London (UK), King's College London (UK),  
Imperial College London (UK), Goldsmith College (UK),  
Queen Mary University of London (UK), London City University,  
London Metropolitan University (UK), University of Westminster (UK),  
School of Oriental and African Studies (UK), University of Groningen (The Netherlands),  
University of Leiden (The Netherlands), University of Hong Kong (China),  
University of Toronto (Canada), Sciences Po (Paris Institute of Political Studies (France),  
ETH Zürich (Switzerland), European Business School, WHU – Otto Beisheim School  
of Management (Germany), Exeter (UK), Bath (UK), York (UK), Nottingham (UK),  
Coventry (UK), Birmingham (UK), Aberdeen (UK), Stirling (UK), Glasgow (UK),  
Leeds (UK), Manchester (UK), Surrey (UK)





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