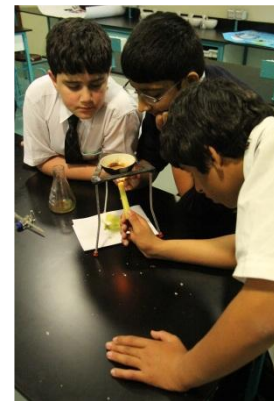


Parent Handbook NISL Secondary 2024 - 25

Middle School and Upper School

Newton International School, Lagoon

*"An international community of learners striving for excellence
and celebrating success"*





Our Vision, Mission Statement and Values

Our Vision

An international community of learners striving for excellence and celebrating success.

Our Mission

We aim to provide the highest quality of education possible for students of all abilities. In doing so, we aim to positively encourage each student to achieve academic excellence, enjoy creative diversity, develop critical thinking skills and become lifelong learners and responsible citizens.

To achieve this, we will provide a diverse education in a safe, supportive environment that promotes self-discipline and motivation. We will provide and maintain a calm, trusting and caring atmosphere where teaching and learning are meaningful and developed. We will work in partnership with our staff, students, parents and wider community to achieve our vision.

Values

RESPECT	Self- respect, respect for students/ staff/ parents and respect of personal and community property
HONESTY	Honesty in all our actions
TRANSPARENT COMMUNICATION	Open and effective communication among students, staff and parents
EMPATHY	Understanding and appreciation of the feelings of others
SUPPORT	Support the development of each individual to his/her fullest potential
DIVERSITY	Appreciation of all languages, traditions, religions and cultures
SOCIAL RESPONSIBILITY	Development of responsible citizens through community service
PERSONAL ACCOUNTABILITY	Highest personal commitment to taking responsibility for our actions



Structure of the Day

The School day begins at 7:00. Students are expected to go directly to their tutor room. It is vitally important that students are present at 7:00 as this is when the attendance register will be taken and, perhaps even more importantly, where any important matters pertaining to their day and the school are discussed.

Middle School

	7:00- 7:10	7:10- 8:00	8:00- 8:50	8.50- 9.10	9:10- 10.00	10:00 - 10:50	10:50 - 11:10	11:10 - 12:00	12:00 - 12:50	12:50 - 13:40
Sun	R E	Lesson 1	Lesson 2	Break 1	Lesson 3	Lesson 4	Break 2	Lesson 5	Lesson 6	Lesson 7
Mon	G I	Lesson 1	Lesson 2	Break 1	Lesson 3	Lesson 4	Break 2	Lesson 5	Lesson 6	Lesson 7
Tues	S R	Lesson 1	Lesson 2	Break 1	Lesson 3	Lesson 4	Break 2	Lesson 5	Lesson 6	Lesson 7
Wed	R A T	Lesson 1	Lesson 2	Break 1	Lesson 3	Lesson 4	Break 2	Lesson 5	Lesson 6	Lesson 7
Thurs	I O N	Lesson 1	Lesson 2	Break 1	Lesson 3	Lesson 4	Break 2	Lesson 5	Lesson 6	Lesson 7



Upper School

	7:00- 7:10	7:10- 8:00	8:00- 8:50	8.50- 9.40	9:40- 10.00	10:00 - 10:50	10:50 - 11:40	11:40 - 12:00	12:00 - 12:50	12:50 - 13:40
Sun	R E	Lesson 1	Lesson 2	Lesson 3	Break 1	Lesson 4	Lesson 5	Break 2	Lesson 6	Lesson 7
Mon	G I	Lesson 1	Lesson 2	Lesson 3	Break 1	Lesson 4	Lesson 5	Break 2	Lesson 6	Lesson 7
Tues	S R	Lesson 1	Lesson 2	Lesson 3	Break 1	Lesson 4	Lesson 5	Break 2	Lesson 6	Lesson 7
Wed	R A T	Lesson 1	Lesson 2	Lesson 3	Break 1	Lesson 4	Lesson 5	Break 2	Lesson 6	Lesson 7
Thurs	I O N	Lesson 1	Lesson 2	Lesson 3	Break 1	Lesson 4	Lesson 5	Break 2	Lesson 6	Lesson 7

Tutorial

The form tutor is very instrumental in developing a student's school life. As such, any issues a student has should be raised with their tutor and, likewise, the tutor should be the parent's primary link with the school. Day to day issues can be raised through written comments in the Planner; more detailed comments should be addressed on a letter or through appointment after school. The tutor is the teacher with the overall view of the student and can thus serve the student best when all issues are first addressed through them.



Assembly

Whole School, Key Stage and House Assemblies are important opportunities for the school body to meet at different levels. Here students are provided with the opportunity to lead and share ideas and philosophies important to them all. Assemblies are an opportunity to develop the key values as presented in the school's mission statement. Our PSHE programme will lead and guide students through the assemblies. It is also expected that each student should have the opportunity to take part in an assembly.

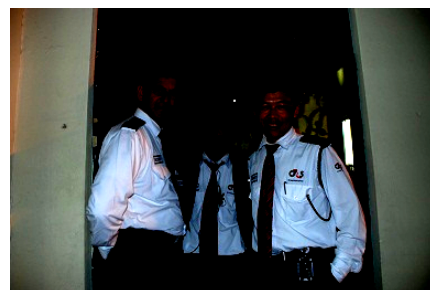


Key Procedures

Security and Visitors to the School

All visitors to the school must obtain authorisation to enter the school from the security staff and wear a visitor's badge.

Visitor's details will be entered into the Visitors' Control Book.



Dropping off and the Collection of Children

Parents and drivers are asked to be extremely vigilant and cautious when dropping off and fetching children. We encourage our students to practise Road Safety and would encourage you to ensure that your child wears their seat belt whether seated in the front or back of your vehicle.

Parents, nannies and drivers are asked not to come into the school building to collect Secondary children. Secondary students are responsible enough to meet parents or drivers at the entrance of the building or even at the school gate.

Absence and Late Procedure

It is vital that students attend school every day in order that they are able to keep up with work. Students who regularly miss days through sickness or other reasons often have problems catching up with work and tend to become frustrated. This can often affect their behaviour. It is essential that all students attend the school and for this reason the school calendar and Attendance Policy is available on our website.



Health and Safety

Good health will help your child's ability to learn and achieve at school and throughout his/her life. Therefore, we stress the importance of good nutrition, adequate sleep, good hygiene and regular exercise. We also would like to highlight the fact that we endeavour to promote environmental awareness amongst our students. We encourage you to send a water bottle to school with your child to prevent the use of plastic cups.

Medical

Parents are notified of any problems. Injured and ill children are assessed and treated accordingly. Many of our teaching staff and support are trained in basic First Aid.

If a student is ill or injured during the day, the school doctor will assess the child and will contact parents if necessary. Students may not contact home directly if they are unwell; they must report to the doctor for assessment. Parents may not come into school to remove a student on the grounds of ill health without notification from the doctor.

Students are not allowed to use the elevator unless a documented medical condition warrants use.

Fire Safety

School officials are required to conduct fire drills throughout the school year. The purpose of these drills is to ensure safe evacuation in the case of an emergency. Students should become familiar with the evacuation plan for each classroom on their schedules. Students should exit the building in an orderly manner and remain with the teacher. Students should refrain from talking during emergency drills. Please ensure you read through the health and Safety Policy with your child.

Access to the internet enables students to explore thousands of libraries, databases, and bulletin boards while exchanging messages with Internet users



throughout the world. Families are warned that some material accessible via the Internet may contain items that are illegal, defamatory, inaccurate, or potentially offensive to some people. To this end, we ask that you read and abide by the School's E-Safety policy which is found in the policy section of the handbook.

Textbooks

When textbooks are issued to students, the student becomes responsible for returning the assigned book in the same condition as when issued - except for normal wear. Charges will be assessed for lost and damaged books. Issuing of end of year reports will be held until all financial obligations are met.

Library and Resources

As a developing school we are constantly looking to provide an increasing range of resources for the school to utilise. This year we have added many Secondary level books to our library and to further develop our secondary library resources, we have increased the ICT provision throughout the school. All books are now accessed electronically, by our school management system.

Uniform

Students should be dressed in full uniform each day. Students may not come to school in their PE kit on PE days. A detailed outline of the required uniform is found on the next page and in the student planner. It is an expectation that both parents and students adhere strictly to the required dress code and ensure that students are neatly and appropriately presented at all times. Please refer to the Uniform Policy for further details.





KS3 & KS4 Uniform

Girls	Boys
• McKenzie Tartan or navy straight cut skirt, calf to ankle length or loose fitting navy blue trousers • White cotton shirt with school logo on left side • White ankle socks • Plain, flat, black leather shoes- no motif, no trainers, no heels • Plain white t-shirt or vest to be worn under the shirt (optional) • School Tartan scarf- to be tied properly • School Jersey or Jacket (optional) • Plain black or navy coat – no logos • Plain black or navy headscarf (optional) • <u>School cap for break times</u> • Jewellery: a watch and stud earrings only • No Make-up is permitted	• Navy blue trousers • White linen shirt with school logo on left side • Dark socks • Plain, black leather shoes- no motif, no trainers • Plain white t-shirt or vest to be worn under the shirt (optional) • School Tartan tie- to be tied properly and worn to the neck • School Jersey or Jacket (optional) • Plain black or navy coat- no logos • <u>School cap for break times</u> • Hair should be natural and well-groomed • <u>Jewellery: a watch only</u>

General Equipment

• black/blue ballpoint pens • hb pencils • Pencil sharpener • Eraser • Ruler • 2GB –Flash Drive	• Set square set • Protractor • Pack of colour pencils • Pack of felt tip pens • Pencil case • Calculator • A3 Sketch Book for Art
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- Plastic Clear Bag Folder for each subject

**** PLEASE NOTE THAT SPECIALIST SUBJECTS MAY HAVE FURTHER REQUIREMENTS ****



Communication

At NISL we encourage open communication between parents and staff at all levels. Our web page (<https://newtonschoools.sch.qa>) is the main link between parents and the school. Class Dojo is also an important tool/app in maintaining our communication, we will also send regular emails. Please can we ask that all contact details are up to date as your child progresses through the school, please inform the school reception of any changes. Parents are also encouraged to visit the school and meet with their child's teacher. Please ensure you make an appointment with the teachers you wish to meet.

Contact Information

Good communication is key to a child's development at school. Please assist by making sure that we have up to date contact and medical information on your child. A page has been allocated in the planner for this; however, student records should be up to date with the registrar as well. We like to keep parents informed about the day to day occurrences at school. Please read and sign your child's planner on a weekly basis and feel free to comment or question. Parents are encouraged to contact form tutors and subject teachers to monitor the child's progress. Although staff are discouraged from giving the personal mobile numbers to parents, a list of staff email addresses is made available to parents at the beginning of each year. Staff, like parents, have a real interest in the student's development.

Information / Parent Meetings

At the beginning of the year, parents are invited to attend a Welcome Evening where they will be given the plan and vision for the academic year. Parents will be introduced to the curriculum and will have an opportunity to ask questions. Senior Secondary staff will be present at these meetings to answer any queries you may have.



Parent-Student-Teacher Consultation evenings are held in Term 2. These are an important time to discuss your child's targets and progress. Please ensure that you attend these meetings.

There are times when other meetings are called, for instance Year 9 and Year 11 Option evenings. Your presence here is essential and we ask that you make sure you attend in order that you may assist your child to make an informed and significant decision in their higher education.

If a parent wishes to meet with any teacher during other times of the year, please telephone the school and **make an appointment**.

Reports

Reports are usually issued at the end of each term. The information in these reports should help parents understand their child's academic strengths and become aware of areas where there is room for improvement.

Targets

Constant reflection and target setting by both teachers and students is an essential part of preparing an independent learner. As such students are encouraged to set targets on a termly basis, and to reflect upon them as they progress. Teachers also set at least one target per subject in the report. Whenever possible in lessons, students will be asked to reflect on how they can achieve their target.

An Evaluative School

Newton International is an evaluative school. The SMT and staff ensure that pupils are supported and guided in all areas of their school life. To this end we constantly evaluate all events, activities and processes at our school to reflect on what was done and to look at ways of improving in the future. As of this year, students, through the student council, will also be involved in the evaluation process.



Parental Involvement and the PTA

We encourage all parents to become involved in their child's learning. Educational research shows that children, whose parents are involved in any form or manner at their school, are more motivated and committed to their studies. It is also important to note that older children are just as reliant on their parents' support as younger children.

We welcome any assistance you might be able to provide. As our school grows and improves so does the breadth of opportunities we can provide for your child and you can offer the school.

We have an active PTA who supports teaching and learning as well as special events at the school. If you feel you would like to support the school or if you want to be a part of the PTA group which helps focus parental participation in school life, please do not hesitate to contact the school.

How to Help Your Child Succeed at School

Parents have expectations of the school and the school also has expectations of parents; the goal being to develop the child into a successful member of society. We ask parents to support their child and the school so that together we can achieve this goal.

- Discuss what has happened at school and what they have learned.
- Make a fuss when the child has been complimented or rewarded.
- Meet your child's teachers whenever you can. If you have concerns sit down with the form tutor, subject teacher, counsellor or members of the SMT. Find out what your child thinks. Find out if the school know something you don't or if you know something the school doesn't.
- Do not hesitate to contact the school to discuss issues. We are here to help in any way we can.



- Encourage your child to participate in extra curricular activities.
- Ensure your child arrives at school on time, and has all equipment ready for lessons.
- Ensure your child has the time and opportunity to do his homework and complete it daily.
- Ensure that your child has enough sleep.

Student Planners

Please note that the school planner is not just a record of homework but a crucial link with parents. Planners have been organised and arranged in such a way as to ensure that students regard it as an essential document. Changes have been made which guarantee that communication between home and school is documented and it also keeps a record of all required information. Please note that these should be signed by form tutors and parents at least once per week. Please take some time to look through your child's planner with them.

Homework

Homework is an integral part of the school experience. A copy of the Secondary Homework Policy can be found in the Policy section of this document. Homework in the Secondary School is organised to take account of the variety of requirements across subject areas. For example frequent short homework is ideal for reinforcing techniques in Mathematics, whereas longer project style work spread over two weeks is more appropriate in Geography. To accommodate this variation, the homework timetable sets total expectation of time spent on homework each week. It is important that students tackle homework early to avoid accumulation of work on one night. This will be monitored by tutors in Key Stage 3 and 4 and students are encouraged to take on the responsibility for the organisation of work as they progress through the school. All students are issued with a Planner into which they should note the day's homework and the date by which it is due. Parents, again, are asked to check the diary regularly and to sign it on a weekly basis. If a homework assignment is missed, teachers will note it in the Planner. Repeated failure to do



homework may result in disciplinary action. Our aim as a school is to develop independent learners and a key aspect to this is building into lessons the need to develop self study skills.

What to Do When You Don't Know the Answer

There is a pretty good chance that sometime during Secondary school, your child will come to you with a problem that even you cannot solve. What can you do to help when you don't know the answer? Here is a list of constructive ways to assist your child.

- **Be positive.** While it's acceptable to briefly empathise with your frustrated child, try to respond optimistically so the child knows that there is a solution and you will help him or her find it. Don't demean your child's struggle; all students have problems at some point. There is nothing wrong with struggling to understand something.
- **Listen to your child.** Ask your child to explain exactly what it is that he or she doesn't understand. If it is a textbook-related question, have your child show you where it is found in the book.
- **Get the whole picture.** Ask your child if the teacher provided any extra materials such as handouts or Web resources, which might help. If it is an assignment that takes several days or weeks to complete, have your child check with the teacher to be sure he or she has everything.
- **Re-read the question or homework task.** Once you have all the material, re-read the question or problem together. Break down the problem into component parts, if possible. Take an analytical approach and work through the steps together. It is acceptable to guide your child through the steps, but beware of completing the work for him or her. Your child will not learn the material and will ultimately suffer.
- **Use the textbook as a resource.** Textbooks are usually filled with examples and supplementary materials that help relate concepts to the real world. Be



certain to also check the textbook Web site, if there is one. There are many sites that offer a wide array of text-related materials, including illustrations, web links, and games that help students learn in a fun and interactive environment. e.g. http://www.bbc.co.uk/schools/websites/11_16/index.shtml

Learning Support

Our aim is to give our students a level of education that matches their ability and potential. In some cases a student's progress may be inhibited by a learning difficulty. Statistics suggest that about 10% of the population have some form of specific learning difficulty and about 4% are severely dyslexic. Please inform us of any previous learning support your child may have received so that we may, where possible, continue to provide proper support. If you feel that your child might be experiencing some unexpected difficulties with his/her school work, please bring it to the attention of his/her form/subject teacher. We can then take a closer look and decide upon a course of action, if necessary.

As part of regular assessment, we monitor for signs of learning difficulties and may ask the learning support teachers to take a closer look at individual students as a consequence. We will inform parents of any support that may be needed and make recommendations should further diagnosis be required.

Apart from learning difficulties, your child may have fallen behind in a previous school because of extended absence. Please let us know if this is the case and we will discuss with you what extra provision could be made to recover lost time. If there is anything of this nature which you have not yet discussed with us, please advise us as quickly as possible.



Pastoral

Throughout their time at Secondary, every student has the right to develop as a person both in and out of the classroom. Teachers promote positive relationships within the school community, and these are reinforced in lessons, assemblies and at breaks. The Form Tutor is a key factor in the overall responsibility for student guidance. Form Tutors see students at the beginning of each day and are the primary contact between the school and home. In tutor time, students are encouraged to build an important relationship with their tutor; one based on trust and confidence. The tutor is the first point of contact and as such it is whom students should speak to if they have any concerns or worries. However, all Secondary teachers have a pastoral role, and students can speak to another teacher if they prefer.

Tutor Time

At the beginning of each day, students meet in form groups for 10 minutes with their Form Tutor. Attendance is taken and the tutors also distribute any school notices and deal with important matters relating to the form. The tutor plays a vital pastoral role and he/she will take the opportunity to help and guide students with their concerns. The tutor deals with behavioural issues in the form, which includes the issuing and follow up of any merits and demerits. Tutors will also make themselves available to listen to any individual concerns of students in their form.



The House System

All students are placed in one of four Houses in Secondary (Bell House, Curie House, Edison House and Wright House), and they remain in the same House throughout their career in the school. Year





12 students will be elected as House Captains to encourage students and build team spirit.

There are a number of School events throughout the year like Sports Day, Mathematics Quiz, the Spelling Bee etc. where the students have an opportunity to participate and score points for their House. This fosters the spirit of competition and cooperation within the House group, and the staff who are assigned to each House encourage this positive ethos during these events.

Extra-Curricular Activities (Tuesday and Wednesday - weekly)

A range of after school activities takes place from 1.50pm until 2.30pm. These activities are arranged by staff and senior pupils. These activities include sports, musical, photography, craft and drama activities, and even pastimes like chess and other board games. These activities are advertised in advance and students are given the opportunity to select an activity of their choice in each term.



Extra-curricular activities are encouraged as they are enjoyable and promote cooperation and friendship. They may even stimulate a life-long interest.

Prefects

Staff and students participate in the selection of prefects from Year 12 who will play an important part in the day to day running of the Secondary School. The prefects have important leadership roles amongst the students, and they have a number of responsibilities. Prefects are expected to be good role models, motivate and work cooperatively with all students in the school. Some roles outlined include: assisting the Sports and Art Departments, assisting and speaking at assemblies, as well as assisting at parent meetings and other school events.



Student Council

Students in each class (Years 7 to Year 12) elect two representatives (one boy and one girl) to sit on the School Council. This elected body meets regularly with the Head of Student Council, the Head of Pastoral and occasionally with the Principal to discuss important Secondary School issues. At these meetings the representatives convey the views of the students to Management and this helps to shape policies within the Secondary School.

School Counsellor

Secondary students are able to speak with the School Counsellor if they have any personal or school related problems. These meetings are dealt with in confidence. Students are encouraged to use break times for visits, but if it is an emergency she is available to assist at any time. The Counsellor is also called upon by management and staff to look into student issues within the school.

Special Events



There are special events in the school calendar and in which Secondary students are encouraged to participate. Important events include the School Fair when funds are raised for a worthy cause, Sports Day for athletic competition and the School Concert for musical performances. In addition there are events

which follow a particular theme such as Healthy Eating Week, Science Week and English Week. These events promote good principles amongst our students as well as providing opportunities for fun and enjoyment.

School Trips

Activities outside of the classroom are seen as a way of enriching learning, and in some cases, they are an essential part of the academic course. The PE department arranges sporting fixtures with other schools in Qatar, and other



departments including Art, Arabic and Science organise trips to locations within Doha.



In addition it is likely that there will be at least one overseas trip. All trips are properly supervised, and risk assessments are made by the teacher in charge. However, it is essential that permission is given by a parent/carer before a student is allowed to go on the trip. As these trips are an important learning experience it is expected that students will attend if required.



The Secondary Curriculum

The curriculum followed throughout the Secondary School is based upon the British Curriculum; with each subject curriculum being drawn from the British QCA approved National Strategy (2007). Each individual curriculum is then evaluated as to its appropriateness and importance to the school community that we have and balanced with the needs of the Supreme Education Council. We constantly evaluate the school plans to assure that we offer the best possible curriculum that we can and are always seeking to improve upon this.

The KS4 curriculum is essentially drawn from this same curriculum and the examination boards we use, Edexcel and CIE, are both respected British Examination boards. The IGCSE share international renown as one of the best middle level examinations in the world. Subjects taught in each Key Stage are indicated on the table below:

Subjects			
KS3		KS4	
Arabic	I.C.T.	Accounting	English Second Language
Art and Design	Islamic Studies	Arabic	French
Citizenship	Mathematics	Art and Design	Geography
English	P.E.	Biology	History
French	Science	Business Studies	I.C.T.
Geography		Chemistry	Mathematics
History		Design & Technology	P.E.
		English First Language	Physics





Assessments

There are a wide range of assessments throughout the academic year, both formative (ongoing assessments) and summative (end of unit and end of term assessments). These are graded according to the QCA Levels, mark schemes being drawn from the National Strategy documents. Records are kept by each subject teacher and recorded on the school management system. The overall result of these assessments will be reflected in the end of term grade and report.

Examinations

Examinations play an increasingly important role in student progress and as such are taken extremely seriously in Secondary. In house examinations are held with strict rules in order to prepare students for the public examinations they will sit in KS4 and KS5. Strict guidelines will be issued to each student and these should be followed to the letter. Anyone not following these guidelines will receive a null grade. This is in line with the strictness and values of public examination boards.

	Term One	Term Two	Term Three
KS3 Years 7,8 & 9	Baseline Assessment Mid-term assessment End of Term Examinations	Mid-term assessment End of Term Examinations	Mid-term assessment End of Year Examinations
Ks4 Year 10	Baseline Assessment Mid-term assessment	Mid-term assessment End of Term Examinations	Mid-term assessment End of Year Examinations



	End of Term Examinations		
Ks4 Year 11	Mock 1 Exam	Mock 2 Exam	Public Examinations
Ks5 Year 12	Mock 1 Exam	Mock 2 Exam	Public Examinations



Middle School

Introduction to Key Stage 3

Key Stage 3 is the collective name given to Years 7, 8 and 9. All students follow the British National Strategies for all subjects.

Our Key Stage 3 curriculum builds on the experiences students have had at their Primary school. Our aim is to maintain the strengths of the primary approach as we introduce teaching by subject specialists. In particular, we want our students to use their skills across the curriculum and not to confine them to the subject in which they happen to be learned. Information Technology equips students with skills which are used and reinforced across all subjects.

Thirteen subjects are offered: English, Mathematics, Science, ICT, History, Geography, French, Arabic, Islamic Studies or Citizenship, P.E., Art & Design and English, Science and Mathematics are taught each day of the academic week. Within the structure of the National Strategies, the Programme of Study sets out what students should be taught, and the attainment target sets out the expected standards of students' performance. The aim of KS3 is to focus upon the practical development of the skills needed as to develop our students to become successful learners who enjoy learning, make progress and achieve; confident individuals who are able to live safe, healthy and fulfilling lives and responsible citizens who make a positive contribution to society.

The pastoral care of students includes the general discipline of all students in KS3 as well as the monitoring of uniforms, attendance, lateness and making parent contact when required. School policies are enclosed in this Handbook. You are strongly advised to read through these with your child and support the school by ensuring that your child (and you where applicable) abides by all school policies.



What follows is a brief explanation of what each subject entails. I look forward to an exciting year with parents, students and staff; our primary aim is to continue to raise our standards in Key Stage 3.

English

Another rewarding year of teaching and learning lies ahead in English. As in all the core subjects in Key Stage 3, the National Curriculum of England and Wales will be followed, covering all essential areas of study.

Students receive 5 English lessons per week, comprising written work; comprehension and language, speaking and listening and literature. Drama activities and ICT have also been included in the planning of lessons. This year extra attention will be given to spelling and vocabulary in an effort to raise Literacy



levels across the Key Stage. All students are encouraged to read privately on a daily basis and two English homework tasks will be set each week.

Students are encouraged to join Extra-curricular activities which focus on English Literacy and Drama.

We are a student centred, dynamic faculty and we look forward to the challenges and opportunities that lie ahead, both for the students and ourselves

Mathematics

Years 7, 8 and 9 follow the National Curriculum for England and Wales. Every week the students receive 5 lessons in mathematics, each being topic based. Class work is then consolidated by homework given twice a week to each student. Homework is an integral part of the course as it helps to highlight any problems the student may be experiencing and can be quickly rectified. A class test is given at the end of each topic.



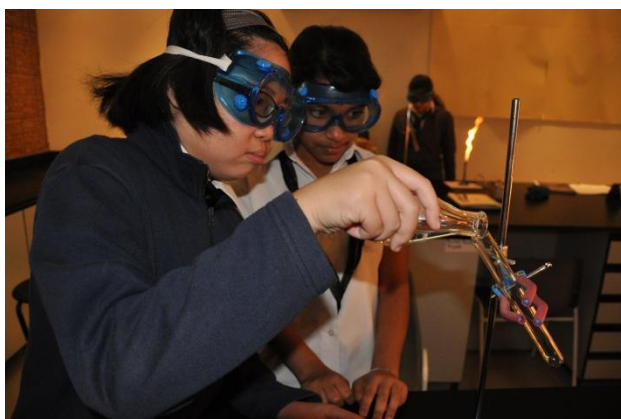
The topics come under the headings of Number, Algebra, Shape, Space & Measure and Handling Data all of which are examined at the end of each calendar year and end of school year. We also participate in a Mathematics Challenge and Mathematics Quizzes which the students thoroughly enjoy. Each year we take part in the "Mathletics" Competition held on a worldwide scale. By the end of Year 9 students should be able to accurately apply mathematics in the classroom, communicate mathematics effectively and use mathematics tools and methods preparing them for entry into KS4 in Year 10.

Science

At Newton International School our Key Stage 3 Science offers opportunities for students to enjoy and experience a broad, well rounded introduction to Science. The course is split into discrete units of Biology, Chemistry and Physics spaced throughout the year. These are arranged specific topics which will then build into the contents taught at GCSE. As an additional resource, we in the Science Department recommend the CGP KS3 Science Revision Guide.

Students will:

- build in their Scientific knowledge and understanding from Key Stage 2 and make connections between different areas of Science
- use Scientific ideas and models to explain phenomena and events
- understand a range of familiar applications of Science
- think about the advantages and drawbacks of Scientific and technological developments for the environment and in other contexts, considering the reasons for different opinions
- carry out investigations of different types, on their own and in groups, making use of reference sources and evaluation their work.





- communicate what they did and its significance
- learn how Scientists work and the importance of experimental evidence in supporting Scientific ideas.

We, the Science Department look forward to welcoming all students this academic year and we want them to share our goal of continued excellence and progression.

History

The teaching of History follows the National Curriculum of England and Wales. The development of society is studied via the role of explorers, writers, composers, artists, soldiers and politicians, amongst others. However, as of this year, each year group has included a unit on the History of Qatar.

Topics take a thematic approach, helping students to see links between topics, spot changes, and note continuity over time. Students are taught the importance and relevance of the more significant periods. Students will have 3 lessons per week and will be expected to complete one hour of homework as well.

History has always been regarded as an ideal training for the brain. Students are taught methods and processes which make them best suited for jobs as varied as lawyers, politicians, soldiers and journalists.

Geography

The teaching of Geography in Key Stage 3 follows the National Curriculum and it is a subject that stimulates an interest in and a sense of wonder about places. It helps young people make sense of a complex and changing world. Geographical issues are examined in the local, regional and





global scales, and students have opportunities to investigate a variety of themes.

Topics such as physical landscapes and mapping are studied in Year 7, population and weather in Year 8, while earth forces and resources are taken in Year 9.

In addition to classroom teaching students are encouraged to carry out individual research, and there will be fieldwork activities done outside of the classroom.

There are 2 classroom lessons each week and students will be expected to complete one homework assignment each week.

Arabic

Students are streamed into two groups: Easy Arabic (for beginners) and Hard Arabic (for native speakers). In Hard Arabic students are taught grammar rules, reading comprehension and composition. The books used for this subject are provided from the government. In Easy Arabic students are taught spelling, speaking and writing skills. An excursion will be organised in KS3 to Souq Waqif to promote the Arab culture and enhance their descriptive abilities.

Islamic Studies

Islamic Studies in Secondary is taught once a week for Muslims students who have Arabic as a first language. The books used for this subject are provided by the SEC. Students learn skills such as: listening and understanding the Qu'ran and on how to lead a good life as a Muslim. An excursion will be organised to the Islamic Centre and to the Islamic Museum to explore and understand the Arab heritage.

Citizenship



Students have one lesson of Citizenship per week in KS3. Lessons focus on educating students about the society they live in and their Rights and Responsibilities as members not only of this school and Qatari Society but as global citizens. Students cover topics such as The Environment, Crime and Punishment and Politics and Power.

Students are encouraged to reflect on their own behaviour and attitudes and develop informed ideas through discussion, reading comprehension and project work.

French

All students have two hours of French lessons per week. Students work to develop the four main communication skills (listening, speaking, reading and writing), which are assessed using British National Curriculum Levels. At the start of Year 7 students usually achieve Levels 1-2 and it is hoped that by the end of Year 9 most students will achieve levels 5-7. A range of teaching styles and activities are used in lessons to engage students and increase their confidence. Students are taught a different topic each term, ranging from Healthy Living to Clothes, School to Free Time Activities. However, there is a clear focus on equipping students with language skills and grammatical understanding that they can adapt and use in any topic.

Students are expected to spend time at home learning key vocabulary and practising grammar points. Websites, such as www.linguascope.com, are recommended to help students revise at home.

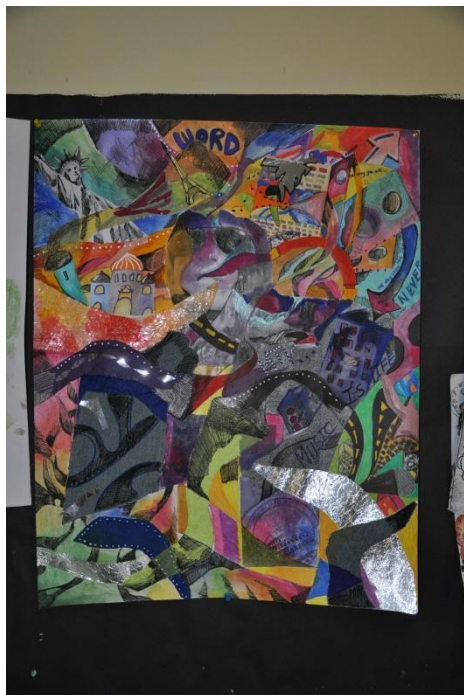
ICT

There are two ICT Laboratories in the Secondary Department. Year 7, 8 & 9 have ICT lessons twice a week.



The course followed is based on the National Curriculum of England and Wales. Students have the opportunity to learn about different devices and the effects of ICT in society. They will use the Internet & Web design packages, Microsoft Office, Network topology and computer graphics.

Art and Design



The programmes of study in Art and Design, knowledge, skills and understanding set out what students are taught and provide the basis for schemes of work.

Teaching ensures that investigating and making includes exploring and developing ideas and evaluating and developing work. Knowledge and understanding informs this process.

Art and Design covers topics such as: drawing, painting, 3-D construction, design, collage and printmaking. Students take two lessons of Art and Design a week and develop their creativity and imagination through the development of skills and extend their knowledge and experience of materials, processes and practices.

Homework is mandatory and an important process of Art and Design. Out of school trips are organised to support and enhance learning in a given topic.

P.E.

KS3 students experience a wide range of sports and physical activities within the PE curriculum. Despite the huge popularity of Football, students also learn and enjoy Handball, Fitness, Gymnastics, Badminton, Floor Hockey, Rounders and Athletics and advance their skills in Basketball and Volleyball. Students from Y7, 8 and 9 also develop their theoretical understanding of anatomy, healthy active



life style and rules and tactics of all sports they participate in their practical lessons.



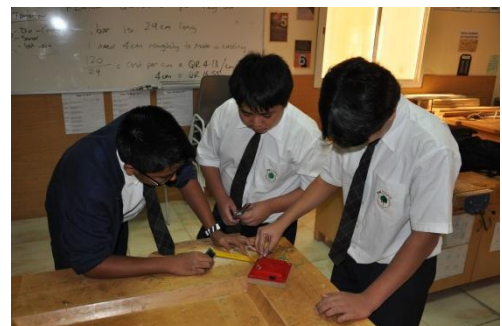
We work to the National Curriculum for PE and all students take part in 2 PE lessons per week. Practical lessons are split into three main parts. The lessons begin with a warm up and stretch for all students, followed by the lesson objectives. The students then are led through practical demonstrations of specific skills relating to

the sport and are then given a chance to put the practical demonstrations into play during a game situation.

All students in secondary have the opportunity to take part in sports within the ECA (Extra Curricular Activities) programme after school throughout all three terms. Many of our students prove to be very talented in Sport, participate successfully in House competitions and join various teams which represent NIS in the in sporting competitions organized by QUESS and Qatar Schools Olympic Program. KS3 boys create Football class teams which compete with each other in the NIS KS3 Football league.

Design Technology

Design and Technology (DT) at KS3 is an introductory course to the IGCSE at KS4. Each week students have two periods where they will learn how to draw and design products. After the product has been designed, students move to the workshop where they realise their design in a variety of materials



(wood, metal or plastic). The Years 7, 8 and 9 are on a semester system and will design and make two projects per semester. Emphasis in DT is put on the



designing and making of products and as the school develops more technological aspects will be included.

EAL

The EAL programme is run along similar lines in Key Stage 3 and 4. The goal of the EAL programme is the integration of the individual student into English, the medium of instruction at Newton International School. It aims to develop the student's ability to communicate effectively in English, both academically and socially. The EAL teacher works with students on the language skills and concepts required to participate in mainstream classes and to function socially within the school and wider community.

The English Curriculum in the EAL programme is part of the mainstream curriculum enabling the students to make a smooth transition into mainstream. A communicative approach to language learning is applied. In particular, emphasis is on the integration of the following skills:

- Reading and listening comprehension
- Grammatical structures
- Speaking and pronunciation
- Vocabulary building
- Writing skills

A range of teaching activities are employed to develop these skills including role-play, pair-work, student presentations, projects, journals, field trips as well as more formal text based exercises.

EAL lessons are student centred and aim to enhance learners' appreciation of the nuances of the language, to enable them to communicate in various English speaking environments and to help them deal effectively with the school's curriculum.



Upper School

Introduction to Key Stage 4

Key Stage 4 comprises Years 10 and Year 11. During these two years your children have taken on the task of attaining their IGCSE certificate which will open doors to Tertiary education, either in Qatar or in overseas institutions.

In consultation with Senior Management and parents, teachers are responsible for preparing classes and subjects appropriate to your child's needs. This process starts toward the end of Year 9 when your child applies to study subjects which he/she enjoys and fulfil some of their needs for higher education. There are some limitations on the courses offered but we do try to place each child in their chosen areas of learning.

During Year 10 we support each child with their studies as this year constitutes one half of the IGCSE course. In Year 11 students complete the IGCSE course and take external examinations set by the examination boards.

The general discipline in KS4 includes such things as uniform, attendance, lateness and parent contact when required. Form tutors and lead teachers are responsible for student welfare, examination procedures and Extra Curricular Activities.

It is extremely important that staff and parents work together to achieve the best possible academic outcomes for the child at KS4 level.

What follows is all the IGCSE subjects offered at Newton International School. P.E. is compulsory, but a non-examination subject. English, Mathematics and at least two Science subjects are compulsory. Students will study 8 IGCSE subjects in KS4.

English Language (CIE)

Students will be sitting the CIE First Language English Award, designed for students for whom English is, or is equal to, their first language. This is an essential



award as it carries a great deal of weight with English speaking Universities, avoiding the need to take an extra English proficiency examination. This course contains written coursework.

Students will study a variety of texts on a number of levels- whole text, sentence and word level. They will look at imagery and subtext as well as context and will look to utilise what they learn in their own written work.

Lessons are five times a week. Homework will be set twice a week and will include a vocabulary list.

It should be noted that this is NOT a course designed to teach the language but rather a course that explores how the language is used, looking at implicit and explicit understanding and usage of text. Students who feel they still require lessons in English should look at the school's Tutoring Scheme. All students should practise their English speaking/writing skills on a regular basis; reading regularly, speaking in English at every opportunity, writing a journal and maybe even joining the extra-curricular Creative Writing Club.

English as a Second Language (CIE)

Students will be sitting the CIE Second Language English Award designed for students whose mother tongue is not English, and who wish to learn functional English. This course contains speaking coursework.

They will have five periods a week of 50 minutes each and homework will be given twice a week. This will take the form of assignments and written work which will be assessed on an ongoing basis to keep track of the student's progress. We will focus on listening, reading and writing skills and exam practice will form the core of most of the work. The lessons will cover topics of interest to the students so that they maintain focus and experience an enjoyable learning process as far as English is concerned.



A thorough knowledge of English opens up a world of opportunity for further study, as well as opportunities for travel and translating.

Maths (Edexcel)



Students in Years 10 and 11 follow the certificated Edexcel Syllabus. Mathematics is a core subject therefore 5 lessons per week are devoted to covering the 2 year course leading to an IGCSE (International General Certificate of Secondary Education) at the end of this time. In Year 10 the students are

split into 2 groups, those following the Foundation Course where the highest grade attainable is C and those following the Higher grade where they can achieve the maximum of an A*.

To ensure success in their final exam numerous Past Papers from previous exams are made available. Lessons are topic based and students are encouraged to work in groups or with a partner. Emphasis is placed on homework and it is the student's responsibility to complete the weekly assignment. In KS4 they develop skills such as planning, independent thinking, reasoning and questioning.

To enable students to choose the right career we invite representatives from local tertiary institutes to come along and give a talk and advice to our students. The information they receive is about entrance requirements and the courses available. Mathematics equips students with uniquely powerful ways to describe, analyse and change the world. A degree in Mathematics can lead to careers in: Local Government, Finance & Accountancy, Banking and Education.



The Core Ideas behind Science IGCSE

- 1.1 Explanations, argument and decisions
- 1.2 Practical and enquiry skills
- 2 Organisms, behaviour and health
 - 2.1 Life processes
 - 2.2 Variation and interdependence
 - 2.3 Behaviour
- 3 Chemical and material behaviour
 - 3.1 Particle models
 - 3.2 Chemical reactions
 - 3.3 Patterns in chemical reactions
- 4 Energy, electricity and forces
 - 4.1 Energy transfer and electricity
 - 4.2 Forces
- 5 The environment, Earth and the universe
 - 5.1 Changing environment and sustainability
 - 5.2 Changing Earth
 - 5.3 Earth, Space and beyond



Biology

Key subject aims:

- To give students a knowledge and understanding of biological facts, concepts and principles.
- To develop an appreciation of the significance of biological facts, concepts and principles and the skills needed for their use in new and changing situations.



- To develop an appreciation of the importance of accurate experimental work in scientific method and reporting.
- To enable students to form hypotheses and design experiments to test them.
- To sustain and develop an enjoyment of, and interest in, the study of living organisms.
- To enable students to evaluate, in terms of their biological knowledge and understanding, the benefits and drawbacks of scientific and technological developments, including those related to social, environmental and economic issues.

Assessment and progression:

- Single-tier; two exams; no coursework
- Grading A*-G
- Provides a sound foundation for progression to Edexcel GCE Advanced Subsidiary (AS) and Advanced level, and other comparable post-16 qualifications.

Chemistry

Key subject aims:

- To develop students' understanding of the unifying patterns and themes of chemistry
- To further students' appreciation of the practical nature of chemistry and develop experimental and investigative skills based on correct and safe laboratory techniques
- To develop an appreciation of the importance to scientific methods of accurate experimental work and reporting
- To develop students' ability to form hypotheses and design experiments to test them
- To develop a logical approach to problem-solving in a wider context
- To develop an understanding of the widespread importance of chemistry and the way materials are used in the world



- To show how the work of the chemist has social, industrial, technological, environmental and economic consequences for the community
- To prepare students for more advanced courses in chemistry or courses which require them to have a knowledge of chemistry.



Assessment and progression

- Single tier. Two exams. No coursework
- Grading A* to G
- Provides a sound foundation for progression to Edexcel GCE Advanced Subsidiary and Advanced level Chemistry, and other comparable post-16 qualifications.

Physics

Key subject aims:

- To impart a systematic body of scientific knowledge and the skills needed to apply this in new and changing situations in many domestic, industrial and environmental contexts
- To foster an appreciation of the practical nature of physics, and develop experimental and investigative skills based on correct and safe laboratory techniques
- To develop an appreciation of the importance of accurate experimental work and reporting to scientific method
- To enable students to form hypotheses and design experiments to test them
- To enable students to evaluate, in terms of their scientific knowledge and understanding, the benefits and drawbacks (including social,



environmental and economic) of scientific and technological developments

- To enable students to select, organise and present information clearly and logically, using appropriate scientific terms and conventions.

Assessment:

- Single tier. Two exams. No coursework
- Grading A* to G
- Provides a sound foundation for progression to Edexcel GCE Advanced Subsidiary (AS) and Advanced level, and other comparable post-16 qualifications.

Business Studies (Edexcel)

As students enter Key Stage 4 both they and their parents look for an education which will fit them for their future. There is perhaps no more direct route for this than Business Studies. Aside from its direct relevance to management and entrepreneurship all companies look for candidates who can understand the business side of their operations.

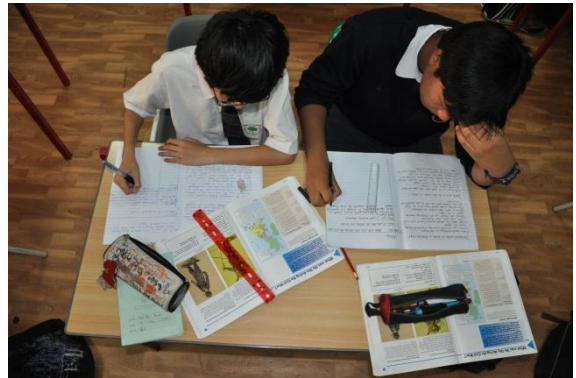
The two year course combines the elements of Production, Marketing, Accounting and Finance, Human Resources and finally Business Activity and the Changing Environment. Classes are introduced to all concepts through studying actual businesses and their activities. Students are given the tools to understand the qualitative and quantitative data presented, and shown how to use them to present coherent, informed judgements. In all areas the role of stakeholders including government is discussed and explained.

There will be three teaching periods and one hour of homework per week. The IGCSE Examinations are taken at the end of the second year.

History (Edexcel)



The IGCSE History programme is a 2 year course geared towards preparing students for the Edexcel examinations at the completion of Year 11. Students will be covering the World Wars as a depth study and will also examine the factors which contributed to the 1st World War.



A comparison between modern warfare and the warfare used at the turn of the 20th century will also be covered.

Though students will be taught many facts and findings pertaining to the great wars, students will also be required to develop their intuitive and interpretative skills, an important life skill and a fundamental ingredient for students to do well in their exams. Through history students are granted an opportunity of gaining a deeper insight and understanding of the world around them and are given a brief glimpse into the souls of the different characters who have helped shaped the world as we know it today.

To quote David C. McCullough,

**"History is a guide to navigation in perilous times.
History is who we are and why we are the way we are."**

Accounting

IGCSE in Accounting is designed as a two-year course. As students progress through the course, they are introduced to new ideas and concepts while continuing to use and reinforce previously learned concepts and skills. Students who successfully follow this course will have a good understanding of accounting and its applications.

Key Subject Aims:



- To develop an understanding of the nature and purpose of accounting in business and non-profit-making organisations, and the principles on which accounting is based
- To develop an understanding of the use of accounting as an aid to business decision-making, and as a means of assessing the financial position of an organisation
- To develop the abilities to quantify, to judge relevance, and to write clear and concise explanations.

Assessment and progression

- Single tier. Single exam
- Grading A* - G
- Assessment opportunities in June examination series
- Provides a sound foundation for progression to AS/Level in Accounting, and other related qualifications.

Geography (Edexcel)

Two years of study in Years 10 and 11 are designed to prepare students for the Edexcel IGCSE Geography examination and this involves three teaching periods each week, and students are expected to spend at least one hour per week completing homework assignments. The subject aims to develop critical thinking, knowledge and understanding of geographical concepts, as well as an appreciation of differing views on a variety of global issues through interesting case studies.

Students who take geography will be given the opportunity to apply their learning to the real world through out-of- classroom activities and the classes will be involved in at least one practical fieldwork activity in the local area.

Topics such as river environments, hazardous environments, economic activity, natural ecosystems, urban environments, fragile environments, development and globalisation are studied throughout the IGCSE course.



Success in IGCSE Geography could be a good starting point for careers in Architecture, Civil Engineering, and Surveying as well as in Tourism and Recreation.

Arabic (CIE)



In KS4, students are taught Arabic four times a week in year 10 and year 11. Homework is given three times a week. The IGCSE is an intensive two year course and students must be fluent or native to take this course. We are currently teaching the Cambridge syllabus that consists of two exam papers: reading comprehension and

writing. Students are introduced to different type of texts such as: reports, poetry, narrative stories, and summaries.

They focus on grammar rules to reinforce their writing skills. An excursion or a trip will be organised in KS4 to a Newspaper Agency to practice their report writing abilities.

French

French is optional for students at Key Stage Four. We study Edexcel's IGCSE French.

The course has been divided into the following 9 topics; *Moi* (Personal Information and Relationships), *Mon temps libre* (Free Time and Hobbies), *Là où j'habite* (Where you live), *Allons-y* (Shopping, Fashion and Travel), *Au college* (School and Daily Routine), *Il faut bosser* (Work and Employment), *Tourisme* (Holidays and Travelling), *Mode de vie* (Healthy/ Unhealthy Lifestyles) and *Le monde en danger* (The Environment).



Students continue to study a range of grammar points and develop their listening, speaking, reading and writing skills.

Exams: French IGCSE is divided into three sections: **listening, reading and writing**. Students sit two exams at the end of Year 11. The first is a listening test, which accounts for 33% of the final grade and the second is a reading and writing test which accounts for 66% of the IGCSE. Students are not allowed a dictionary in any of the exams so it is crucial that they learn vocabulary and grammar points as they go through course. At the start of Year 11 a number of students may be asked if they would like to sit an additional speaking exam. For more information please visit the Edexcel website or speak to a French teacher.

ICT (CIE)

Year 10 & 11 have 3 ICT lessons each week. Students follow the prescribed course, as laid out by the CIE IGCSE syllabus. The curriculum content is set out in eight interrelated sections. The sections are as follows:

- Types & Components of computer systems
- Input and Output Devices
- Storage Devices and media
- Computer Networks
- Data Types
- The Effects of using ICT
- The ways in which ICT is used
- Systems Analysis & Design+



Art and Design (CIE)



The Art and Design International General Certificate of Secondary Education (IGCSE) course is designed as a two year course. Students are provided with a broad framework of Art and Design and encouraged to explore traditional and contemporary art forms, produce



a variety of creative responses through a range of materials, processes and techniques.

The syllabus covers four components: Observational/Interpretive, Design, Critical and Historical and Coursework assignments. Each of these areas promotes identifying and researching independently, relevant exploration of materials, documenting and evaluating ideas, showing knowledge of Art and Design from other cultures or history and development towards a final outcome.

Students take three periods of Art and design a week throughout Years 10 and 11 and employ methods including drawing, graphic media, printmaking, painting, 3-D construction and ICT. Homework is an integral part of the course. Out of school trips are taken when relevant to the topics studied. Art and Design IGCSE can be a gateway to employment fields such as Graphic Design, Fashion Design, Teaching and Animation.

Design Technology (CIE)

Design and Technology (DT) at KS4 follows the Cambridge course 0445. There are different options of how to run that course and at Newton International School we are presently running the Resistant Materials option.

In this option all students have to learn the importance of the design process and how best to solve any problems and how to communicate their designs. They must fully understand all the associated theory of all the tools, materials and processes used and produce well made products.

In Year 11 the students have a major project worth 50% of their final IGCSE in DT. At the end of the year there are two theory exams, one on design and one on the resistant materials theory.

The possible job opportunities from this course are all the Engineering subjects such as: Mechanical Engineering, Civil Engineering.



PE



Key Stage 4 continues on from Key Stage 3 with the National Curriculum for PE and the provision of 2 PE lessons a week. However, in KS4 the students approach the national curriculum in a more selective way. Instead of gymnastics, girls take part in pilates and aerobics and besides Swimming they also experience Aqua Aerobics. All students learn and improve their skills in Football, Basketball, Volleyball, Handball, Badminton, Athletics and Floor Hockey. Throughout the academic year KS4 students also advance their theoretical knowledge of anatomy and healthy active life style and gained a deeper understanding of rules and tactics of various sports through video analysis.

Practical lessons are split into three main parts. The lessons will begin with a warm up and stretch for all students, followed by the lesson objectives. Students will also be expected to take the rest of the class through the stretching part of the lesson each week. The students will then give demonstrations of specific skills relating to the lesson and will then be given a chance to put the practical demonstrations into play during a game situation at the end of the lesson.

All students will be given the opportunity to take part in sports within the ECA (Extra Curricular Activities) programme after school throughout all three terms. Many of our students prove to be very talented in Sport, participate successfully in House competitions and join various teams which represent NIS in the in sporting competitions organized by QUESS and Qatar Schools Olympic Program.



Key Stage 5

Introduction from the Head of Sixth Form (KS5)

KS5 or Sixth Form life is very different to the school experience of a pupil in Years 7 to 11. Sixth Form is the final section of Secondary Education where students are being prepared for their future academic development at universities and their future career. The role of the Key Stage leader therefore is twofold; on one hand to ensure that our Y12 and Y13 students are provided with a high quality implementation of the AS and A2 curricula based on demands of examinations, and on the other hand to motivate our students so they do their utmost to fulfil their potential. At NISL teaching and learning is the top priority, we value each person and foster individual learning to develop the whole person. I am confident that the whole Sixth Form community including the staff and the students will work together well in order to raise the ambitions and achievements of every student.



Although achieving the best academic results possible is obviously one of our main aims, the Sixth Form at NIS also offers opportunities to develop the whole personality. There are chances to be innovative, exercise leadership and role modelling within our Prefect System and to take part in the wide variety of extra-curricular activities that are on offer. Sixth Form subjects were carefully selected in order to provide a balanced curriculum for our students. Besides four AS subjects (each one is allocated 6 periods), and two periods of Physical Education a week, Professional Development Studies also enrich the weekly timetable. Here the students will learn about revision techniques, CV building and writing and other useful skills. Our Sixth Form students will be also helped with their university applications, which will be created in accordance with requirements of universities and alongside with the British UCAS guidelines.



At NIS we also offer clear and recorded target setting for all KS5 students which together with our mentoring programme ensures that each student individually is well known, well understood and fully supported and advised throughout their Sixth Form career. Other responsibilities are to monitor progress of students, general discipline in the Sixth Form (including uniform, attendance and lateness), and a liaison with parents and the Senior Management Team.

In conclusion, I would like to express how delighted we are that our new Sixth Form can start in a brand new superb facility which provides an excellent stimulation for all different kinds of students and which can contribute towards the complex development of our students.

Our Programme

Outline

Our Sixth Form Programme is based around A-levels which we believe promote the best basis for higher education. Courses for Year 12 are known as AS (Advanced Subsidiary). Courses in Year 13 are A2, and are full A-level standard. We offer you a programme of four AS subjects when you enter the Sixth Form. Most of you will then take three academic subjects forward for your final A2 qualifications.

In Year 12 you will be expected:

- to study **FOUR** subjects at AS Level. These will be completed in the Summer of Year 12. Each AS will count as being equivalent to half of a full A Level
- to undertake a PSHE programme which will include Careers Guidance and a range of topics designed to broaden your education to increase your awareness and maturity. This will include the opportunity to develop personal responsibility and leadership
- To complete 1 lesson of Qatar History
- to attend 1 lessons of PE a week.



Choosing the correct Sixth Form courses is a very important educational step as it may determine a student's future career. Because the courses are far more intensive than IGCSE and because external examinations occur at the end of the first year, and in many subjects during it, it is difficult to change courses once they have started.

The school will provide much of this information and advice, but it is essential that the students talk to subject and careers staff about their suitability as A-level students and their career aspirations. It is important that students choose Sixth Form Courses that they can realistically hope to complete successfully. Having a goal in mind in terms of a particular course at university or a chosen career path is a major motivating factor for any student. For entry to some careers you will need specific subjects at A level. If you know what you would like to study at university, you should check for specific requirements by logging on to some universities' websites.

All courses offered at Newton International Secondary School are separated – there are no mixed gender classes.

For more details about all fields please see NIS Sixth Form Handbook.

MATHEMATICS (Edexcel)

Year 12 AS Level

In Year12 all students must take Core Mathematics with a choice of Statistics and Mechanics for the other two units. Students must be able to work independently as this demanding course requires a lot of time and dedication.

Unit 1: Core 1



Topics include: Algebra and Functions, Coordinate Geometry, Sequences and Series and Calculus.

This is a non calculator unit.

Unit 2: Core 2

Knowledge of C1 is assumed.

Topics include: Factor and Remainder theorem, Coordinate geometry of the circle and Trigonometry.

Unit 3: Statistics 1 or Mechanics 1

Topics include: Frequency tables & graphs, Random variables, Normal distribution, Matrices, Vectors and Trigonometry.

BIOLOGY (Edexcel)

The aims of the GCE (AS and A2) in Biology are to enable students to:

- a) develop their interest in, and enthusiasm for, biology including developing an interest in further study and careers in the subject.
- b) appreciate how society makes decisions about biology-related issues and how biology contributes to the success of the economy and society.
- c) develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of How Science Works.
- d) develop essential knowledge and understanding of different areas of biology and how they relate to each other.

CHEMISTRY (Edexcel)

The aims of the Edexcel Advanced Subsidiary GCE and Advanced Level GCE in Chemistry are to develop:

- a) students' interest in, and enthusiasm, for chemistry, including developing an interest in further study and careers in chemistry.



- b) an appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.
- c) a deeper understanding of the skills, knowledge and understanding of How Science Works.
- d) essential knowledge and understanding of different areas of the subject and how they relate to each other.

AS Content Summary:

AS level provides opportunities for students to develop the basic chemical skills of formulae writing, equation writing and calculating chemical quantities. The study of energetics in chemistry is of theoretical and practical importance. The study of atomic structure introduces s, p, and d orbitals and shows how a more detailed understanding of electron configurations can account for the arrangement of elements in the periodic table. AS develops the treatment of chemical bonding by introducing intermediate types of bonding and by exploring the nature and effects of intermolecular forces. Study of the periodic table is extended to cover the chemistry of groups 2 and 7. Ideas about redox reactions are applied, in particular, to the reactions of halogens and their compounds. Aspects of green chemistry and climate change are also studied.

A2 Content Summary:

A2 level involves a quantitative study of chemical kinetics and organic reaction mechanisms. The topics of entropy and equilibria show how chemists are able to predict quantitatively the direction and extent of chemical change. The organic chemistry in this unit covers carbonyl compounds, plus carboxylic acids and their derivatives. In the second section of the A2 level students study further chemistry related to redox and transition metals.

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY – (CIE)

ICT Theory - Main Areas of Study





The functions and uses of the main hardware and software components of ICT systems, including portable communication systems;

The ways in which organisations use ICT;

The impact on society of the use of ICT in the home

The stages of the systems life cycle

Practical - Main Areas of Study

- select the right software for the task;
- communicate effectively with other ICT users using email and search for appropriate information using the internet;
- prepare, create, amend and edit documents and interactive presentations;
- create both flat-file and relational database structures, add data, check the data entry, perform searches,
- reorganise data by sorting and present calculated values based on the data;
- create graphs and charts;
- integrate data from several sources;
- output data in different forms;
- create and test a data model using a spreadsheet, extract and summarise data

PHYSICS (Edexcel)

The aims of the Edexcel Advanced Subsidiary and Advanced GCE in Physics are to:

- a) provide seamless progression from the Key Stage 4 programme of study and enable students to sustain and develop an enjoyment of, and interest in, physics and its applications.
- b) develop an understanding of the link between theory and experiment and foster the development of skills in the design and execution of experiments.



- c) develop essential knowledge and understanding in physics and, where appropriate, the applications of physics with an appreciation of their significance and the skills needed for the use of these in new and changing situations.
- d) demonstrate the importance of physics as a human endeavour that interacts with social, philosophical, economic and industrial matters.
- e) be a suitable preparation for higher educational courses in physics and related courses.

AS - Unit 1 and 2 Content Summary:

Unit 1 involves the study of mechanics (rectilinear motion, forces, energy and power) and materials (flow of liquids, viscosity, Stokes' Law, properties of materials, Young's' modulus and elastic strain energy). Unit 2 involves the study of waves [including refraction, polarisation, diffraction and standing (stationary) waves], electricity (current and resistance, Ohm's law and non ohmic materials, potential dividers, emf and internal resistance of cells, and negative temperature coefficient thermistors) and the wave/particle nature of light.

A2 – Unit 4 and 5 Content Summary:

Unit 4 involves the study of further mechanics (momentum and circular motion), electric and magnetic fields, and particle physics. Unit 5 involves the study of thermal energy, nuclear decay, oscillations, astrophysics and cosmology.

Careers Guidance

Careers guidance aims to help students match their skills, interest, and abilities with plans that meet their educational and future goals. The objective is to challenge students at a high level in order to be successful and achieve their goals. It will help guide students through their exploration of academic, personal, social and career related activities that will develop and encourage personal awareness.



Careers education forms part of the tutorial programme to help students to make decisions about what careers may be appropriate for them.



School Policies

All Secondary and Whole School Policies which can also be found on our website:



It is the responsibility of each student and his/her parents to become familiar with policies, rules and regulations of Newton International School.