

2023-2025 COURSE OUTLINE

International Baccalaureate Chinese B SL & HL Form 5 and Form 6

The School of the Nations course outline provides parents and students with information about the overall structure of the courses of study, the assessments and expectations.

1. Course Overview

Chinese B is a language acquisition course designed for students with some previous experience of the target language. In the Chinese B course, students further develop their ability to communicate in the target language through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works, as appropriate to the level of the course. Most Chinese B subjects are available at both SL and HL. A list of languages offered at language B SL and HL is

The following aims are common to both language B and language ab initio.

- 1) Develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance.
- 2) Enable students to communicate in the language they have studied in a range of contexts and for a variety of purposes.
- 3) Encourage, through the study of texts and through social interaction, an awareness and appreciation of a variety of perspectives of people from diverse cultures.
- 4) Develop students' understanding of the relationship between the languages and cultures with which they are familiar.
- 5) Develop students' awareness of the importance of language in relation to other areas of knowledge.
- 6) Provide students, through language learning and the process of inquiry, with opportunities for intellectual engagement and the development of critical- and creative-thinking skills.
- 7) Provide students with a basis for further study, work and leisure through the use of an additional language.
- 8) Foster curiosity, creativity and a lifelong enjoyment of language learning.

2. Core Components

2.1 Creativity, Activity, Service (CAS)

Creativity, activity, service (CAS) experiences can be associated with each of the subject groups of the DP.

CAS and language acquisition can complement each other in a variety of ways. Students can enhance intercultural understanding through the active and purposeful use of their acquired language within the specific real-life contexts provided by their CAS experiences. Students may also draw on their CAS experiences to enrich their involvement in language acquisition both within and outside the classroom.

An important characteristic of the language acquisition courses is the conceptual understandings that students develop. Through the five prescribed themes around which the language acquisition courses are centred, students might be able to investigate, plan, act and reflect on CAS experiences and projects in a more informed and meaningful way. Similarly, CAS experiences can ignite students' passion for addressing particular personal, local, national and global issues.

Language acquisition teachers can assist students in making links between their subjects and their CAS experiences, where appropriate. This will provide students with relevance in both their subject learning and their CAS learning through purposeful discussion and real experiences.

The challenge and enjoyment of CAS can often have a profound effect on language acquisition students, who might choose, for example, to engage with CAS in the following ways. Nature of the subject Language B guide 9

- As a CAS experience, a student can extend engagement with the language acquisition theme of "sharing the planet" (for example, environment) by conducting a separate activity in learning the names of organic and human-made materials in the target language. The student could then walk around the school to collect human-made waste (for example, plastic) that is discarded during one day, and then display it.
- In a series of CAS experiences relating to the language acquisition theme of "social organization" (for example, social relationships, community, social engagement), a student interacts with elderly target language speakers, over a number of visits, to collect sayings, idioms or adages used by the older generations. These could then be shared in an article on the school or programme blog.

• Students can develop a CAS project linked to the language acquisition theme of "experiences" (for example, migration) in which they engage with members of a local refugee population. The students could collaborate in an investigation of how migrants balance negotiating a new culture with maintaining their cultural heritage. An outcome of this interaction could be the creation of a mural representing the cultural balance.

It is important to note that a CAS experience can be a single event or may be an extended series of events. However, CAS experiences must be distinct from, and may not be included or used in, the student's diploma course requirements.

Additional suggestions on the links between DP subjects and CAS can be found in the Creativity, activity, service teacher support material.

2.2 Theory of Knowledge (TOK)

Theory of knowledge (TOK) is one of the three core elements of the Diploma Programme (DP). It plays a special role in the programme by providing an opportunity for students to reflect on the fundamental question of how they know what they know. It aims to help students become more aware of their own perspective, as well as developing an awareness of multiple perspectives. More information on TOK can be found in the Theory of knowledge guide.

Language is itself one of the specific ways of knowing that is identified in the TOK course. In addition to this explicit exploration of language, the skills and wider conceptual understandings that students develop in TOK can make an extremely positive contribution to their study of language acquisition. TOK develops higher-order thinking skills, such as analysis and evaluation, and also helps students to make connections and comparisons across their subject areas and the DP core. In this way, language acquisition both supports and is supported by TOK.

As well as using the skills developed in TOK in acquiring an additional language, students will also benefit from guiding questions that can connect TOK to the five themes of the language B curriculum. The following discussion questions are examples and are not meant to be either prescriptive or exhaustive.

- Is it possible to think without language?
- What would be lost if the whole world shared one common language?
- If people speak more than one language, is what they know different in each language?
- Do you think maths, logic or music should be classified as languages?
- In what ways can language be used to influence, persuade or manipulate people?
- Does language describe our experience of the world, or does it actively shape our experience of the world?
- How are metaphors used in the construction of knowledge?
- To what extent is our perspective determined by our membership of a particular culture?
- To what extent are we aware of the impact of culture on what we believe or know?
- Is there anything that is true for all cultures?

2.3 The Extended Essay (EE)

Writing an extended essay (EE) in a language of acquisition provides students with an excellent opportunity to explore one aspect of their chosen language in greater depth and to increase their intercultural understanding and international-mindedness. In line with the IB's focus on approaches to teaching and learning (ATL), the EE in a language of acquisition provides opportunities for students to develop their thinking, research and self-management skills while, at the same time, focusing on an aspect of language that is of particular personal interest and challenge.

Students must select one of the three distinct categories outlined below in order to develop a manageable research question for their EE. A simplified summary, with examples, is provided in the table below. For full details of requirements, teachers and students must refer to the Extended essay guide (first assessment 2018).

- Category 1 ("language") offers the opportunity to engage with a particular linguistic aspect in greater detail.
- Category 2 ("culture and society") allows the student to focus on one aspect of the target culture, linked to either a linguistic detail or a cultural artifact, and complements perfectly the learner profile for language acquisition, promoting reflection on the culture of the target language and the learner's role in the linguistic community.

• Category 3 ("literature") provides an opportunity for students to explore one or more works of literature in order to widen their understanding of the target language and culture from a literary angle.

Category	Nature	Description	Example
1	Language	A specific analysis of language, its use, structure, development, and so on. It is normally related to its cultural context or a specific text.	"Le parler jeune": An analysis of the vocabulary and expressions common in the language of youth in France today.
2A	Culture and Society	A socio-cultural analysis of the impact of a particular issue on the form or use of the language based on an examination of language use.	An analysis of the way in which the advent of internet marketing in China has had an impact on the language.

3. Course Content

In the language B course, students develop the ability to communicate in the target language through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works. Communication is evidenced through receptive, productive and interactive skills across a range of contexts and purposes that are appropriate to the level of the course.

The study of language requires careful attention to forms, structures, functions and conceptual understandings of language. Knowledge of vocabulary and grammar—the what of language—is reinforced and extended by understanding the why and how of language: audience, context, purpose, meaning.

Students expand the range of their communication skills by understanding and producing a wide variety of oral and written texts for audiences, contexts and purposes associated with academic and personal interests. For the development of receptive skills, language B students must study authentic texts that explore the culture(s) of the target language. In addition, the study of two literary works is required at HL.

A key aim of the language B course is to develop international-mindedness through the study of language, culture, and ideas and issues of global significance. Explicit links to TOK strengthen the ability to communicate in the target language by increasing students' self-awareness as inquirers in their own language learning process. As appropriate to the level of the course, communication skills are reinforced through the other categories of approaches to learning skills: thinking, research, social and self-management skills.

The recommended teaching time is 240 hours to complete HL courses and 150 hours to complete SL courses, as stated in the document General regulations: Diploma Programme (2016: 6, article 8.2).

4. IB Approaches to Teaching and Learning

Approaches to teaching and learning are deliberate strategies, skills and attitudes that permeate the IB teaching and learning environment.

The approaches to *teaching* are:

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

The approaches to *learning* are:

- Thinking skills
- Communications skills
- Social skills
- Self-management skills
- Research skills

5. IB Learner Profile

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

IB learners strive to be:

- Inquirers
- Knowledgeable
- Open-minded Caring
- Thinkers
- Risk-Takers
- Communicators
- BalancedReflective

Principled
 Reflective
 The IB Learner Profile closely reflects the SON Learner Profile, identifying elements of identity which prepares world citizens who will become active, positive and conscientious participants in the advancement of society and in their own development. Each element is composed of a set of attitudes, qualities, understandings, skill and habits. These are incorporated in the teaching and learning process. The details of the SON Learner Profile can

be found in the Student and Parent Handbook.

6. Grading

6.1 School Internal Grades

6.1.1 Academic Achievement

The School's grading system for the IB Diploma Programme follows the IBO scale of 1 to 7. A student's performance in individual subjects is graded as follows:

Grade	Interpretation
7	Excellent
6	Very Good
5	Good
4	Satisfactory
3	Basic Standard
2	Poor
1	Very Poor

Note: Because of School's internal requirements such as attendance, timeliness and accuracy of homework, special projects, or performance on formative and summative tests in the classroom, students' performance may vary between School assigned grades and IB assessments.

6.1.2 Effort

Effort marks are given and recorded in the report cards for Forms 5 and 6 for all subjects.

Grade	Descriptor			
5	Consistently demonstrating a high degree of effort in all areas of the subject			
4	Frequently demonstrating a high degree of effort in all areas of the subject			
3	Generally demonstrating a significant degree of effort in all areas of the subject			
2	Occasionally demonstrating effort in some areas of the subject			
1	Rarely, if ever, demonstrating effort in some areas of the subject			

6.1.3 Project Week (Form 5 only)

The mid-year assessment is comprised of a full week of collaborative project-based learning. During the project week students develop various cross curricular soft skills. Assessment and reporting of learning is based on the following rubric.

	Project Week Assessment Rubric					
Collaboration 合作	• completing assigned tasks encetively and using recuback non others		E merging 明牙	Achieving 實現中	ł	Excelling 复务
Organisation 組織	She/he demonstrates effective organisation skills by: having a clear goal and a thought-through plan of how to achieve it being methodical and systematic in approach following through with assigned tasks in a timely manner monitoring progress and addressing challenges staying focused on tasks and remaining positive despite challenges multiple being methodical being methodical and systematic in approach following through with assigned tasks in a timely manner monitoring progress and addressing challenges staying focused on tasks and remaining positive despite challenges w/他通過以下方式展示有效的組織技能: 有一個明確的目標,並對如何實現目標有一個深思熟慮的計劃 方法有條理和系統化 及時完成分配的任務 監測進展並應對挑戰 專注於任務並在面臨挑戰時保持積極的態度			A		

	She/he demonstrates critical thinking skills by:	
	 striving to independently investigate and understand issues 	
	 actively seeking answers to questions 	
	 investigating the purpose, evidencing research and producing reasoning 	
	 being open-minded and fair-minded when considering new ideas and 	
Research and	perspectives	
Critical	making connections by looking for links between ideas and concepts	
Thinking	 seeking out reliable and accurate information through independent 	
研究及批判性		
	她/他通過以下方式展示批判性思維技能:	
思維	 ● 努力獨立調查和理解問題 	
	● 積極尋求問題的答案	
	● 調查目的、證明研究和推理	
	 在考慮新想法和觀點時保持開放和公正的態度 	
	 通過尋找想法和概念之間的聯繫來建立連結 	
	● 通過獨立研究尋找可靠和準確的信息	
	She/he demonstrates effective presentation skills by:	
	 ensuring the group's presentation/project uses relevant, well-chosen 	
	descriptions/facts/details	
	 ensuring the group's presentation/project includes all the required 	
	elements	
	 ensuring the presentation/project is well structured and coherent 	
	ensuring the presentation stays within the allocated frame	
	 keeping eye contact with the audience (most of the time) 	
	using a clear voice with appropriate tone and volume	
Durantesting	 using appropriate language, demonstrating command of formal English 	
Presentation	• responding to questions from the audience	
報告及展示	她/他通過以下方式展示有效的報告技能:	
	• 確保小組的展示文稿/項目使用相關的、精心挑選的描述/事實/細	
	• 確保小組的展示/項目包括所有必需的元素	
	• 確保展示/項目結構良好且連貫一致	
	 確保展示文稿保持在分配的框架內 	
	 與觀眾保持目光接觸(大部分時間) 	
	 ● 使用清晰的聲音和適當的語氣和音量 	
	● 使用適當的語言·表現出對正式英語的掌握	
	● 回答觀眾的問題	
	She/he demonstrates effective reflection skills by:	
	 effectively analysing experiences to identify those which have led to 	
	growth/learning	
	 accurately identifying areas of strength and weakness 	
	 generating creative solutions to problems/ways to improve in the 	
Deflection	future	
Reflection	 demonstrating the ability actively and effectively reflect with her/his 	
學生反思	team members	
	她/他通過以下方式展示有效的學生反思技能:	
	 有效地分析經驗以確定那些經驗導致成長/學習 	
	 準確識別優勢和劣勢領域 	
	 為問題提出創造性的解決方案/未來改善的方法 	
	● 展示積極有效地與團隊成員進行反思的能力	

The following outlines the IBDP Chinese B SL & HL grade descriptors:

Grade	Chinese B HL Descriptor	Chinese B SL Descriptor

7	Students speak with clarity and fluency; use a richly varied and idiomatic range of language very accurately; handle ideas effectively and skillfully with active and complex interaction; demonstrate a thorough understanding of the meaning and purpose of written texts; have little difficulty with the most difficult questions; recognize almost all the subtleties of specific language usage; write detailed and expressive texts demonstrating an excellent command of vocabulary and complex structures with a consistently high level of grammatical accuracy; demonstrate clarity of thought in the organization of their work and an ability to engage, convince and influence the audience.	Students speak clearly, fluently and naturally; use a varied and idiomatic range of language accurately; handle ideas effectively with active and full interaction; demonstrate a very good understanding of the meaning and purpose of written texts; have little difficulty with more difficult questions; write detailed texts demonstrating a very good command of vocabulary and complex structures with a very good level of grammatical accuracy; adapt their writing effectively to suit the intended audience and purpose; express their ideas and organize their work coherently and convincingly.
6	Students speak clearly, fluently and naturally; use a varied and idiomatic range of language accurately; handle ideas effectively with active and full interaction; demonstrate a very good understanding of the meaning and purpose of written texts; have little difficulty with more difficult questions; recognize most of the subtleties of specific language usage; write detailed texts demonstrating a very good command of vocabulary and complex structures with a very good level of grammatical accuracy; adapt their writing appropriately to suit the intended audience and purpose; express their ideas and organize their work coherently and convincingly.	Students speak mostly clearly and fluently; use a varied range of language mostly accurately; handle ideas mostly effectively, with generally full interaction; demonstrate a good understanding of the meaning and purpose of written texts; have some difficulties with more difficult questions; write fairly detailed texts demonstrating a good command of vocabulary with a good level of grammatical accuracy; adapt their writing appropriately to suit the intended audience and purpose; express their ideas and organize their work coherently.
5	Students speak mostly clearly and fluently; use a varied range of language mostly accurately; handle ideas mostly effectively with generally full interaction; demonstrate a good understanding of the meaning and purpose of written texts; have some difficulties with more difficult questions; recognize some subtleties of specific language usage; write fairly detailed texts demonstrating a good command of vocabulary with a good level of grammatical accuracy; show a reasonable ability to adapt their writing to suit the intended audience and purpose; express their ideas and organize their work coherently.	Students speak generally clearly; use a basic range of language correctly; handle ideas adequately with full interaction at times; demonstrate an adequate understanding of the meaning and purpose of written texts; have some difficulties with almost all difficult questions and some average questions; write texts demonstrating an adequate command of vocabulary with an adequate level of grammatical accuracy; show a reasonable ability to adapt their writing to suit the intended audience and purpose; express their ideas and organize their work appropriately.
4	Students speak generally clearly; use a basic range of language correctly; handle ideas adequately with full interaction at times; demonstrate an adequate understanding of the meaning and purpose of written texts; have some difficulties with almost all difficult questions and some average questions; recognize a few subtleties of specific language usage; write texts demonstrating an adequate command of vocabulary with an adequate level of grammatical accuracy; show some ability to adapt their writing to suit the intended audience and purpose; express their ideas and organize their work appropriately.	Students speak hesitantly and at times unclearly; use a simple range of language correctly at times; handle ideas with some difficulty and with fairly limited interaction; demonstrate some understanding of the meaning and purpose of written texts; have difficulties with questions of average difficulty; write texts demonstrating a basic command of vocabulary and some awareness of grammatical structure; show some ability to adapt their writing to suit the intended audience and purpose; make some attempt at expressing their ideas and organizing their work.
3	Students speak hesitantly and at times unclearly; use a simple range of language correctly at times; handle ideas with some difficulty with fairly limited interaction; demonstrate some understanding of the meaning and purpose of written texts; have difficulties with questions of average difficulty; write texts demonstrating a basic command of vocabulary and some awareness of grammatical structure; produce an identifiable text	Students speak hesitantly and generally unclearly; use a limited range of language, often incorrectly; handle ideas with difficulty and with restricted interaction; demonstrate a fairly limited understanding of the meaning and purpose of written texts; have difficulties with some easy questions; write texts demonstrating a fairly limited command of vocabulary and little awareness of grammatical structure; produce an

	type; make some attempt at expressing their ideas and organizing their work.	identifiable text type; make some attempt at basic organization; content is rarely convincing.
2	Students speak hesitantly and generally unclearly; use a limited range of language often incorrectly; handle ideas with difficulty and with restricted interaction; demonstrate a fairly limited understanding of the meaning and purpose of written texts; have difficulties with some easy questions; write texts demonstrating a fairly limited command of vocabulary and little awareness of grammatical structure; produce an identifiable text type with limited success; make some attempt at basic organization; content is rarely convincing.	Students speak hesitantly and unclearly; use a very limited range of language mostly incorrectly, handle ideas with great difficulty and with very restricted interaction; demonstrate a limited understanding of the meaning and purpose of written texts; have difficulties even with easiest questions; write texts demonstrating a limited command of vocabulary and little awareness of grammatical structure; produce an identifiable text type with limited success; lack organization to an extent that content is unconvincing.
1	Students speak hesitantly and unclearly; use a very limited range of language mostly incorrectly; handle ideas with great difficulty and with very restricted interaction; demonstrate a limited understanding of the meaning and purpose of written texts; have difficulties even with easiest questions; write texts demonstrating a limited command of vocabulary and little awareness of grammatical structure; produce a barely identifiable text type; lack organization to an extent that content is unconvincing.	Students speak very hesitantly and unclearly; use a very limited range of language incorrectly, handle ideas unsuccessfully and with very restricted interaction; demonstrate a very limited understanding of the meaning and purpose of written texts; have difficulties with almost al questions; write texts demonstrating a very limited command of vocabulary and very little awareness of grammatical structure; produce a barely identifiable text type; lack organization to an extent that content is confusing.

7. Assessments

7.1 Assessment Objectives

The following assessment objectives are common to both language B and language ab initio. The level of difficulty of the assessments, and the expectations of student performance on the tasks, are what distinguishes the three modern language acquisition courses.

- 1) Communicate clearly and effectively in a range of contexts and for a variety of purposes.
- 2) Understand and use language appropriate to a range of interpersonal and/or intercultural contexts and audiences.
- 3) Understand and use language to express and respond to a range of ideas with fluency and accuracy.
- 4) Identify, organize and present ideas on a range of topics.
- 5) Understand, analyse and reflect upon a range of written, audio, visual and audio-visual texts.

7.2 School-based Assessments

School-based assessments are ongoing and are intended to measure student learning and provide constructive feedback. These assessments include a variety of formative and summative assessments. Forms of assessment vary and may include but are not limited to assessment tools such as quizzes, topic tests, graphic organizers, reports, essays, group projects and observational evidence during lessons.

7.2.1 Weightages

The following represents the percentage weight for each academic year:

	Term 1	Term 2	Mid-Year Assessment	Term 3	Final Exam
Form 5	28%	28%	Project Week See passing criteria	28%	16%

Form 6	30%	30%	Mid-Year Exam 15%	N/A	25%

7.2.2 Passing Criteria

F5 Students whose total score is 23 points or above in the six IB Subject Groups will be promoted to the next level, along with:

- satisfactory completion of the Extended Essay requirements for DP year 1
- a final mark of a C or higher in Theory of Knowledge for year 1
- satisfactory completion of CAS (Creativity, Action & Service) activities for year 1
- a total of 12 HL points for students who are on the full diploma track
- no grade 2 or lower in any Higher Level (HL) subject
- the grade for project week is a 3 (out of 5) or higher

To graduate from Secondary at the end of F6, students must gain 23 points or above in the six IB Subject Groups, along with:

- completion of the Extended Essay
- a final mark of a C or higher in Theory of Knowledge
- completion of CAS (Creativity, Action and Service) activities
- a total of 12 HL points for students who are on the full diploma track
- no grade 2 or lower in any Higher Level (HL) subject

Should a student's academic performance falls below standard, the School reserves the rights of not registering a student for the full diploma track.

7.3 Official IBDP Assessments

7.3.1 Internal Assessment

Internal assessment is an integral part of the course and is compulsory for both SL and HL students. It enables students to demonstrate the application of their skills and knowledge in a different setting. In language B, the internal assessment takes the form of the individual oral assessment. The development of skills for the individual oral assessment should be woven into normal classroom teaching, although the evidence submitted for moderation must come from an individual oral assessment, which is a separate activity conducted towards the end of the course.

The internal assessment requirements at SL and at HL are different.

Internal assessment is compulsory for both SL and HL students. SL students are required to make an individual presentation in response to a visual stimulus whereas HL students will respond to a literary extract. At both levels, students will then go on to engage in a one-to-one discussion with the teacher, firstly on the topic of the stimulus and then in general conversation across the range of themes listed in the syllabus.

7.3.2 External Assessment Components

Core/Standard Level (SL)

Component	Weighting (%)	Marks	Duration (hours)
Paper 1	25	30	1hr 15mins
Paper 2	50	Listening 25 Reading 40	1hr 45mins
Internal assessment	25	30	15mins

Higher Level (HL)

Component	Weighting (%)	Marks	Duration (hours)
Paper 1	25	30	1hr 30mins
Paper 2	50	Listening 25 Reading 40	2 hours
Internal assessment	25	30	15mins

7.3.3 External Assessment Details

SL

Paper 1

Duration: 1 hour 15 minutes Weighting: 25% Marks: 30

• One writing task of 250–400 words (300-480 個漢字) from a choice of three, each from a different theme, choosing a text type from among those listed in the examination instructions.

Paper 2

Duration: 1 hour 45 minutes

Weighting 50%

Marks: 65

- Paper 2 consists of two sections, listening and reading.
- Listening comprehension (45 minutes) (25 marks)
- Reading comprehension (1 hour) (40 marks)
- Comprehension exercises on three audio passages and three written texts, drawn from all five themes.

HL

Paper 1

Duration: 1 hour 30 minutes Weighting: 25% Marks: 30

• One writing task of 450–600 words (540-720 個漢字) from a choice of three, each from a different theme, choosing a text type from among those listed in the examination instructions.

Paper 2

Duration: 2 hours

Weighting 50%

Marks: 65

- Paper 2 consists of two sections, listening and reading.
- Listening comprehension (45 minutes) (25 marks)
- Reading comprehension (1 hour) (40 marks)
- Comprehension exercises on three audio passages and three written texts, drawn from all five themes.

8. Academic Integrity

Students are expected to uphold a high standard of academic honesty and integrity. All homework, assignments, tests and exams are expected to represent the student's own effort. All forms of cheating or copying on assignments, tests or exams, plagiarism and other forms of deception to obtain credit are universally recognized as improper and dishonest conduct. Such behaviour is not acceptable and marks will not be awarded for work that does not represent the students' personal effort. For details of the policy regarding academic integrity please refer to <u>Student and Parent Handbook</u>.

9. Late Submission of Work

Assignments and homework are an important component of the teaching-learning process and are expected to be completed with quality and submitted on time. Assignments and homework tasks will be posted Managebac.

The following policy will apply for late work submission:

School-based Assessments

Late submission of work may result in a lower effort grade.

IB Official Assessments

Students may receive a zero for a given component of work if it is not submitted by the assigned deadline. Missing any of the required component grades may result in 'no grade' in the official IB results.

10. Classroom Materials and Procedures

Students will need to bring the following items to their lessons unless otherwise specified by the teacher:

- notebook
- folders
- assigned textbook and workbooks (if any)
- pen, pencil, eraser, ruler, highlighter
- calculator

Students will be informed in advance if any additional items, such as laboratory coats, safety goggles or other items are expected to be purchased.