

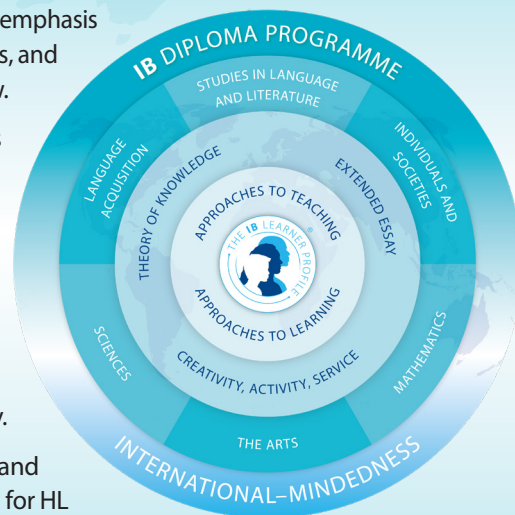
## Sciences: Sports, exercise and health science

First assessment 2026

The Diploma Programme (DP) is a rigorous pre-university course of study designed for students in the 16 to 19 age range. It is a broad-based two-year course that aims to encourage students to be knowledgeable and inquiring, but also caring and compassionate. There is a strong emphasis on encouraging students to develop intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view.

The course is presented as six academic areas enclosing a central core. Students study two modern languages (or a modern language and a classical language), a humanities or social science subject, an experimental science, mathematics and one of the creative arts. Instead of an arts subject, students can choose two subjects from another area. It is this comprehensive range of subjects that makes the Diploma Programme a demanding course of study designed to prepare students effectively for university entrance. In each of the academic areas students have flexibility in making their choices, which means they can choose subjects that particularly interest them and that they may wish to study further at university.

Normally, three subjects (and not more than four) are taken at higher level (HL), and the others are taken at standard level (SL). The IB recommends 240 teaching hours for HL subjects and 150 hours for SL. Subjects at HL are studied in greater depth and breadth than at SL. In addition, three core elements—the extended essay, theory of knowledge and creativity, activity, service—are compulsory and central to the philosophy of the programme.



### I. Course description and aims

As one of the sciences subjects in the IB Diploma Programme, sports, exercise and health science (SEHS) is primarily concerned with the scientific study of human physiology, biomechanics and psychology. Scientists working in these fields attempt to make sense of human physical and mental health and performance through a variety of approaches and techniques, controlled experimentation, and collaboration with other researchers. DP SEHS enables students to engage constructively with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond.

The course is organized under three main themes: exercise physiology and nutrition of the human body; biomechanics; sports psychology and motor learning. These themes are distinct, but also share many overlapping features; studying the similarities and connections between them is a central component of the course.

Integral to the student experience of the DP SEHS course is the learning that takes place through scientific inquiry, both in the classroom and in field work or the laboratory. With an emphasis on experimental work, teachers provide students with opportunities to ask questions, design experiments, collect and analyse data, collaborate with peers, and reflect, evaluate and communicate their findings.

Through the overarching theme of the nature of science, the course aims to enable students to:

1. develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects
2. acquire and apply a body of knowledge, methods, tools and techniques that characterize science
3. develop the ability to analyse, evaluate and synthesize scientific information and claims
4. develop the ability to approach unfamiliar situations with creativity and resilience
5. design and model solutions to local and global problems in a scientific context
6. develop an appreciation of the possibilities and limitations of science
7. develop technology skills in a scientific context
8. develop the ability to communicate and collaborate effectively
9. develop awareness of the ethical, environmental, economic, cultural and social impact of science.

## II. Curriculum model overview

The DP SEHS course promotes concept-based teaching and learning to foster critical thinking.

The DP SEHS course is built on:

- approaches to learning
- nature of science
- skills in the study of SEHS.

These three pillars support a broad and balanced experimental programme. As students progress through the course, they become familiar with traditional experimentation techniques, as well as the application of technology. These opportunities help them to develop their investigative skills and evaluate the impact of error and uncertainty in scientific inquiry. The scientific investigation then places a specific emphasis on inquiry-based skills and the formal communication of scientific knowledge. Finally, the collaborative sciences project extends the development of scientific communication in a collaborative and interdisciplinary context, allowing students to work together beyond the confines of SEHS.

While nature of science and the three SEHS themes serve as the basis for developing conceptual understanding, the approaches to learning and the skills in the study of SEHS support students' learning processes during and beyond their IB experience. Throughout the syllabus, there are opportunities to practise and refine these skills and apply them in different areas of study.

Syllabus component	Recommended teaching hours	
	SL	HL
<b>Syllabus content</b>	<b>110</b>	<b>180</b>
<b>A. Exercise physiology and nutrition of the human body</b>		
A.1—Communication	23	28
A.2—Hydration and nutrition	16	22
A.3—Response	8	19
<b>B. Biomechanics</b>		
B.1—Generating movement in the body	12	17
B.2—Forces, motion and movement	11	31
B.3—Injury	7	9
<b>C. Sports psychology and motor learning</b>		
C.1—Individual differences	4	10
C.2—Motor learning	12	12
C.3—Motivation	8	16
C.4—Stress and coping	5	7
C.5—Psychological skills	4	9

<b>Experimental programme</b>	<b>40</b>	<b>60</b>
Practical work	20	40
Collaborative sciences project	10	10
Scientific investigation	10	10

### Skills in the study of sports, exercise and health sciences

The skills and techniques students must experience through the course are encompassed within the tools. These support the application and development of the inquiry process in the delivery of the SEHS course.

#### Tools

- Experimental techniques
- Technology
- Mathematics

#### Inquiry process

- Exploring and designing
- Collecting and processing data
- Concluding and evaluating

Teachers are encouraged to provide opportunities for students to encounter and practise the skills throughout the programme. Rather than being taught as stand-alone topics, these skills should be integrated into the teaching of the syllabus when they are relevant to the syllabus topics being covered.

## III. Assessment model

There are four assessment objectives for the DP SEHS course. Having followed the SEHS course, students are expected to demonstrate the following assessment objectives.

#### Assessment objective 1

Demonstrate knowledge of:

- terminology, facts and concepts
- skills, techniques and methodologies.

#### Assessment objective 2

Understand and apply knowledge of:

- terminology and concepts
- skills, techniques and methodologies.

#### Assessment objective 3

Analyse, evaluate, and synthesize:

- experimental procedures
- primary and secondary data
- trends, patterns and predictions.

#### Assessment objective 4

Demonstrate the application of skills necessary to carry out insightful and ethical investigations.

## Assessment at a glance

Type of assessment	Format of assessment	Time (hours)		Weighting of final grade
		SL	HL	
<b>External</b>		<b>3</b>	<b>4.25</b>	<b>76</b>
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions and questions on experimental work	1.5	1.75	36
Paper 2	Short answer and extended-response questions	1.5	2.5	40
<b>Internal</b>		<b>10</b>		<b>24</b>
Scientific investigation	The scientific investigation is an open-ended task in which the student gathers and analyses data in order to answer their own formulated research question. The outcome of the scientific investigation will be assessed through the form of a written report. The maximum overall word count for the report is 3,200 words.		10	24

**About the IB:** For over 50 years, the IB has built a reputation for high-quality, challenging programmes of education that develop internationally minded young people who are well prepared for the challenges of life in the 21st century and are able to contribute to creating a better, more peaceful world.

For further information on the IB Diploma Programme, visit: <https://ibo.org/en/dp>.

Complete subject guides can be accessed through the Programme Resource Centre or purchased through the IB store: <https://www.ibo.org/new-store>.

For more on how the DP prepares students for success at university, visit: <https://ibo.org/en/university-admission>.