

# The International Baccalaureate Diploma Programme compares favourably to the Spanish Bachillerato

The International Baccalaureate (IB) commissioned [Ecctis](#) to conduct a series of in-depth studies to assess the level of alignment between the Diploma Programme (DP) and the upper secondary education systems of Australia (Victoria), Canada (Ontario), Finland, Singapore, South Korea and the United States.

This study contributes to the body of research, evaluating DP courses and comparison courses from the Spanish Bachillerato (SB), with a focus on alignment in learning outcomes, content and demand. Below are the courses that were compared across the two curricula.

Subject area	DP courses	SB courses
Mathematics	Analysis and approaches (AA) at SL and HL	Mathematics I
	Applications and interpretation (AI) at SL and HL	Mathematics II <sup>1</sup>
Sciences	Biology at SL and HL	Biology, geology, and environmental sciences Biology
	Chemistry at SL and HL	Physics and chemistry Chemistry
	Physics at SL and HL	Physics and chemistry Physics <sup>2</sup>
Economics	Economics at SL and HL	Economics
Business	Business management at SL and HL	Business and business model design

**The findings from this study provide further evidence that DP courses represent rigorous curricula, designed to support significant depth and breadth of learning, and can readily be implemented within a variety of national contexts.**

Below is a high-level overview of key demand findings, comparing the demand of DP and SB courses.<sup>3</sup> Other outcomes can be viewed in the full report. **Overall, DP HL courses tend to be more demanding than the SB comparison courses.**

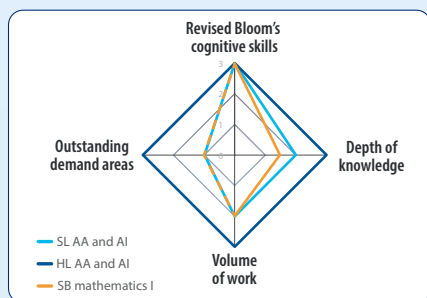
<sup>1</sup> Mathematics II requires prior study of mathematics I.

<sup>2</sup> In the first year of the SB, science courses are studied in combination (i.e. SB biology, geology and environmental sciences and SB physics and chemistry). In the second year of the SB, science courses are subject specific (i.e. SB biology, SB chemistry and SB physics).

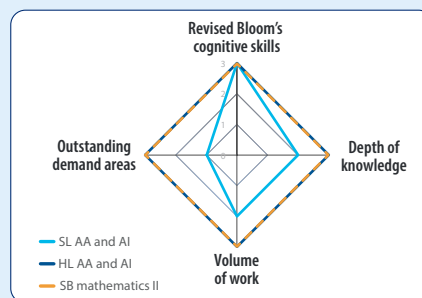
<sup>3</sup> Demand is compared using four criteria: revised Bloom’s cognitive skills; depth of knowledge; volume of work; and outstanding demand areas.

## Mathematics

### SL mathematics courses are slightly more demanding than SB mathematics I



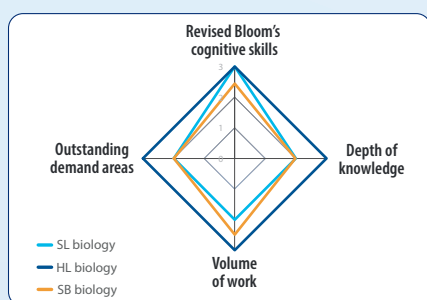
### HL mathematics courses are as demanding as SB mathematics II



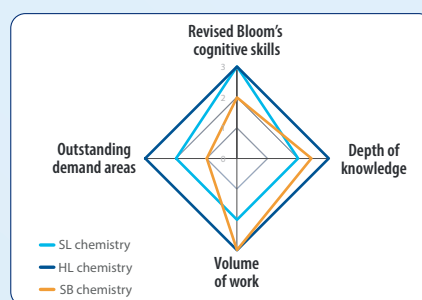
## Sciences

Note: Demand comparisons are provided between DP science courses and year-two SB science courses.

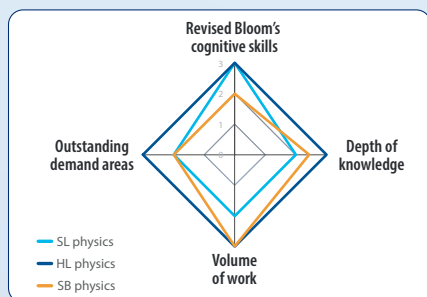
### HL biology exceeds the demand of SB biology



### HL chemistry exceeds the demand of SB chemistry

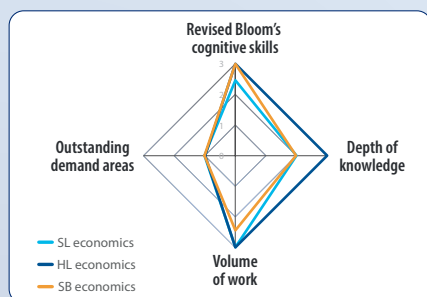


### HL physics exceeds the demand of SB physics



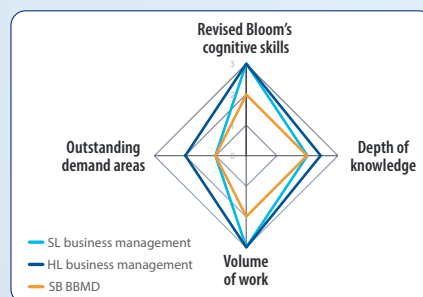
## Economics

### HL economics exceeds the demand of SB economics



## Business

### SL and HL business management exceed the demand of SB business and business model design (BBMD)



This summary was developed by the IB Research department. The full reports are available at: [www.ibo.org/en/research/](http://www.ibo.org/en/research/). For more information on these studies or other IB research, please email [research@ibo.org](mailto:research@ibo.org).