



DELEDDA INTERNATIONAL SCHOOL

MYP Sciences

Course description and aims

With inquiry at the core, the MYP sciences framework aims to guide students to independently and collaboratively investigate issues through research, observation and experimentation. The MYP sciences curriculum explores the connections between science and everyday life. As they investigate real examples of science applications, students discover the tensions and dependencies between science and morality, ethics, culture, economics, politics, and the environment.

Scientific inquiry fosters critical and creative thinking about research and design, as well as the identification of assumptions and alternative explanations. Students learn to appreciate and respect the ideas of others, gain good ethical-reasoning skills and further develop their sense of responsibility as members of local and global communities.

The MYP sciences group aims to encourage and enable students to:

- understand and appreciate science and its implications
- consider science as a human endeavour with benefits and limitations
- cultivate analytical, inquiring and flexible minds that pose questions, solve problems, construct explanations and judge arguments
- develop skills to design and perform investigations, evaluate evidence and reach conclusions
- build an awareness of the need to effectively collaborate and communicate
- apply language skills and knowledge in a variety of real-life contexts
- develop sensitivity towards the living and non-living environments
- reflect on learning experiences and make informed choices.

Curriculum overview

The MYP promotes inquiry in sciences by developing conceptual understanding within global contexts.

Key concepts such as *change*, *relationships* and *systems* broadly frame the MYP curriculum.

Related concepts promote deeper learning grounded in specific disciplines. Examples of related concepts in MYP sciences include *energy*, *movement*, *transformation* and *models*.

Students explore key and related concepts through MYP **global contexts**.

- Identities and relationships
- Orientation in space and time



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- Personal and cultural expression
- Scientific and technical innovation
- Globalization and sustainability
- Fairness and development

Assessment criteria

Each sciences objective corresponds to one of four equally weighted assessment criteria. Each criterion has eight possible achievement levels (1–8), divided into four bands with unique descriptors that teachers use to make judgments about students' work.

Criterion A: *Knowing and understanding* Students develop scientific knowledge (facts, ideas, concepts, processes, laws, principles, models and theories) and apply it to solve problems and express scientifically supported judgments.

Criterion B: *Inquiring and designing* Students develop intellectual and practical skills through designing, analysing and performing scientific investigations.

Criterion C: *Processing and evaluating* Students collect, process and interpret qualitative and/or quantitative data, and explain conclusions that have been appropriately reached.

Criterion D: *Reflecting on the impacts of science* Students evaluate the implications of scientific developments and their applications to a specific problem or issue. Varied scientific language is applied to demonstrate understanding. Students should become aware of the importance of documenting the work of others when communicating in science.

"Myp-brief sciences 2015" Ibo.org. IBO, 2015. Web. 28 Apr. 2019