

## ISE and Science Standards in the United States

The foundation of scientific inquiry is the core of science pedagogy at ISE. It is our intent that students will gain a broader understanding of the world around them and be able to apply scientific concepts to social and environmental issues. Our science classes are rooted in practical laboratory experiences to develop the skills necessary to be successful in scientific research. The skills gained in our science classes are ones that are universal and will prepare them well for their science coursework in the future. The Common Core emphasizes literacy in science that is centered on critical thinking, interpreting science literature, and being able to write scientific research papers. These are skills that are emphasized in the ISE science classroom regularly. Our students are not only able to interpret the research of others, but are able to design, carry out, and document their own.

We also believe that content plays an important role. The MYP Integrated Sciences course merges the scientific disciplines in a way that students will be exposed to a variety of science disciplines and topics in each year from MYP 1 (grade six) through MYP 4 (grade nine). As learners enter MYP 5 (tenth grade) they take both biology and chemistry with integrated physics units. Our curriculum layout allows students to easily take their skills and knowledge to new schools, whether the move is international or back to the United States.

As students reach DP 1 (grade eleven), they enter the IB diploma program. Currently ISE offers four science courses; Biology, Chemistry, and Design at ISE and physics at TIK. Many of our students, especially those wanting to study science at university, take a combination of sciences in DP.

In the United States there are a new set of science specific standards, put out in conjunction with the National Science Teachers Association, that are being adopted by a number of states. These standards, called the Next Generation Science Standards, are very much in line with our IB curriculum model. If any parents are interested in the alignment of our science coursework with either the Common Core or the Next Generation Science Standards, we encourage them to set up an appointment to meet with our DP Coordinator. Together we can determine where along the content spectrum your student resides, and where they might need to be by their next school placement.