



# Environmental Systems and Societies at The Abbey:

When I ask my students why they are studying ESS I receive a range of replies going from the negative, well I didn't want to study another Science, to the inspirational, "I want to be an environmental engineer". Whatever the reason, I find that students who take the course love it, no matter what their initial reasons were and many become proselytisers, saying that everyone should take the course, it's the most important course I take!

## ESS is Relevant

You will be hard pressed to find a more relevant course for today's world. Every day the news tells us something about the environment, whether it is the controversy between billionaires fighting over whether planting trees is a good thing (doh, answer is yes) to droughts, floods, access to food and water, chemicals in our bodies, fast fashion, fast food and conversely, slow food, upcycling, the right to repair, circular economy or students coming up with solutions to the climate crisis.

## ESS is Employment Ready

ESS prepares you for the job market we need now, be that Chief Sustainability Officer, Financial Investment, Conservation Biologist, Renewable Energy Advisor, Waste Management, Circular Economist, Climate Justice Advisor, Water Management Engineer, Policy and Governance Specialist, SDG Designer, Environmental Lawyer to name but a few.

## ESS is Fun

The nature of ESS means that there are many student-centred learning activities that allow you to explore the subject. These have to involve working with others to understand multiple perspectives and gaining from the collective mind in your community.

## ESS helps you Understand the World and Yourself

Before diving into how humans interact with the world, you need to understand how ecosystems function, how matter and energy flow through these systems and the very nature of systems themselves. The concepts of perspectives, value systems and sustainability then infuse the whole course.

## ESS is interdisciplinary, even multidisciplinary

As an IB Diploma course, ESS is officially classed as an interdisciplinary course between the Sciences and Individuals and Societies but one could say that it is actually truly multidisciplinary and therefore the future of education now! Students need to be able to analyse text and images for environmental messages with different perspectives; is it green-washing? Although not acquiring a new language, students need to be culturally aware and understand how different cultures, including indigenous cultures understand, and live in the environment. Skills are developed in

map interpretation, survey design, interviewing, experimental design, fieldwork, modelling and system analysis.

## ESS is Solution Focused

Once the challenges in a system are understood, the focus is very much on the solutions that could be applied to solve this situation, the perspectives that might influence the solution chosen and the effectiveness of said solution. There is scope for personalisation of the course for students to implement their own solutions.

## ESS is Inclusive and Promotes Cultural Awareness

ESS requires students to have studied local and global examples of systems, challenges and solutions in context. These may be local to the student, i.e. in their own locality, but it could and should include examples from around the world so that students are culturally aware. From 2024, students will need to have a much greater understanding of indigenous knowledge and environmental justice.

## ESS promotes Wellbeing

There is an increase in mental health problems associated with climate anxiety. By studying the solutions available and the potential for new solutions and perspectives, students can be part of the solution and increase their own wellbeing.

## ESS promotes Perspective Taking

A key part of the course is the understanding that different people and communities will have different perspectives on the challenges we face. Recognising these perspectives and learning how it may be possible to reconcile these perspectives is an important part of ESS.

## ESS is Practical and Hands-On

In the course from 2024, fifty hours of practical work is required as part of ESS (it is currently 30 hours). Ten hours have been added for the IA and ten for the Collaborative Science Project. This means that practical skill building is part of the course and allows for a fun and meaningful student-centred course. It has long been recognised that ESS is a very hands-on course that encourages student engagement.

## ESS promotes Critical Thinking

Critical thinking is an essential part of ESS. A holistic approach to the course means that students need to be able to bring together knowledge and understanding from across the course to understand the challenges and solutions available: the sort of thinking required on a day to day basis as we live our lives!

