

ESS is an interdisciplinary group 3 and 4 course that is offered only at standard level (SL). It is designed to combine the methodology, techniques and knowledge associated with group 4 (sciences) with those associated with group 3 (individuals and societies).

It is a complex course, grounded in both a scientific exploration of environmental systems in their structure and function and in the exploration of cultural, economic, ethical, political, and social interactions of societies with the environment.

The students will learn how to recognize and evaluate the impact of our complex system of societies on the natural world. The interdisciplinary nature of the course requires a broad skill set from students and includes the ability to perform research and investigations and to participate in philosophical discussion. Students should be encouraged to develop solutions from a personal to a community and to a global scale.

beliefs and circumstances. Studying this course will lead students to critically examine and develop their own value systems. They should also become acquainted with the diverse range of EVSs of people from different cultures and backgrounds.

The main concepts of the course so called “the big questions” include sustainability, equilibrium, strategy, biodiversity and EVSs. “The big questions” provide a focus in a variety of ways as the course progresses and encourage a holistic perspective on the relationship between human societies and natural systems such as:

Topic 1— Foundations of environmental systems and societies

Topic 2—Ecosystems and ecology

Topic 3—Biodiversity and conservation

Topic 4—Water and aquatic food production systems and societies

Topic 5—Soil systems and terrestrial food production systems and societies

Topic 6—Atmospheric systems and societies

Topic 7—Climate change and energy production

Topic 8—Human systems and resource use



Completion of an individual investigation of an ESS research question that has been designed and implemented by the student. The investigation is submitted as a written report.

- focus on a particular aspect of an ESS issue and apply the results to a broader environmental and/or societal context.
- The report should be 1,500 to 2,250 words long.

Students of ESS are required to spend a minimum of \_\_\_\_\_ on practical activities (excluding time spent writing up work), with 10 hours for the internal assessment investigation (IA). During the first year the students will participate in various field trips and collect their data for internal assessment.

Each topic will be ended with a revision test. Throughout the course students will be given handouts and exercises to revise and solidify what they learned. Additionally, there will be individual and group presentations on given topics. The first year of the course will be summarised by the end-year exam and during the second year the students will have to take mock exam from the course.

- Strong writing skills
- Good command of English
- Biology IGCSE grade C or higher



“The comparative significance of different sources of carbon dioxide pollution in New York and Sacramento” is better than “Impacts of global warming

CAS enables students to embody the attributes of the IB learner profile in real and practical ways, to grow as unique individuals and to recognize their role in relation to others. The three strands of CAS are:

- creativity—exploring and extending ideas leading to an original or interpretive product or performance
- activity—physical exertion contributing to a healthy lifestyle
- service—collaborative and reciprocal engagement with the community in response to an authentic need.

There are strong links between ESS and CAS that both teachers and students can explore. In ESS students actively engage with environmental issues and create innovative solutions where possible.

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