

IB ESS YEAR 2

Teacher(s)	IB ESS PLC	Subject Group and Course	Group 4 - ESS		
Course Part and Topic	Topic 2.5 (tentative) Investigating Ecosystem (tentative) Practical Work IA Proposal and Design	SL or HL / Year 1 or 2	SL Year 2	Dates	2 weeks
Unit Description and Texts		DP Assessment(s) for Unit			
<ul style="list-style-type: none"> Students complete their rough and final drafts for the IA. 		<ul style="list-style-type: none"> IA rough draft with extensive written feedback IA final draft 			

INQUIRY: establishing the purpose of the unit

<p>Transfer Goals</p> <p><i>List here one to three big, overarching, long-term goals for this unit. Transfer goals are the major goals that ask students to “transfer” or apply their knowledge, skills, and concepts at the end of the unit under new/different circumstances, and on their own without scaffolding from the teacher.</i></p>
<p>Statement of Inquiry</p> <p>Students can apply what they have learned in this course to begin their own independent investigations into the natural world and human societies. Ecosystems can be better understood through investigation and analysis of changes through time (tentative).</p> <p>Phenomenon:</p> <p>Students choose the overarching phenomenon they will focus on. Environmental systems, issues, and changes allow for inquiry and investigation (tentative).</p> <p>Review Significant Ideas</p> <ul style="list-style-type: none"> The IA is an individual investigation of a student-designed research question related to environmental systems and societies.

ACTION: teaching and learning through inquiry

Content / Skills / Concepts - Essential Understandings	Learning Process
<p><u>Students will know the following content - Knowledge and Understanding:</u></p> <ul style="list-style-type: none"> • Research can be accomplished through a number of school and online databases accessed through the Cobb County Library catalog system or through the open internet. • Experimental design for the IA follows a rigorous set of standards for independent variables, dependent variables, and controls. • Life sciences use the APA citation format for bibliographies and in-text citations. <p><u>Students will develop the following applications and skills:</u></p> <ul style="list-style-type: none"> • Research using academic catalog resources. • Experimental design • Writing for a formal academic summative paper 	<p><i>Check the boxes for any pedagogical approaches used during the unit. Aim for a variety of approaches to help facilitate learning.</i></p> <p>Learning experiences and strategies/planning for self-supporting learning:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Small group/pair work <input checked="" type="checkbox"/> PowerPoint lecture/notes <input checked="" type="checkbox"/> Interdisciplinary learning <p>Other(s):</p>
	<p>Formative assessment(s):</p> <p>IA rough draft</p> <p>Guidance:</p>

	<ul style="list-style-type: none"> ● Students will receive informal guidance in class ● Students will receive extensive written feedback on their IA rough draft.
<p>International Mindedness:</p> <p>Most of the students' secondary IAs will be focused on comparing national-level demographic and environmental data. (See Y1 Unit 3 for the Human Development Data Project)</p>	<p>Summative assessments:</p> <p>IA rough draft -- summative worth 5% of the course grade</p> <p>IA final draft -- summative worth 15% of the course grade</p> <p>Differentiation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Affirm identity - build self-esteem <input checked="" type="checkbox"/> Value prior knowledge <input checked="" type="checkbox"/> Scaffold learning <input checked="" type="checkbox"/> Extend learning <p>Details:</p> <ul style="list-style-type: none"> ● <i>SWD/504 – Accommodations Provided</i> ● <i>ELL – Reading & Vocabulary Support</i> ● <i>Intervention Support</i> ● <i>Extensions – Enrichment Tasks and Project</i>
<p>Approaches to Learning (ATL)</p> <p>Check the boxes for any explicit approaches to learning connections made during the unit. For more information on ATL, please see the guide.</p>	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Thinking <input checked="" type="checkbox"/> Social <input checked="" type="checkbox"/> Communication 	

Self-management

Research

Details: This topic provides students with a vast amount of information that can be studied in many ways. The ATLs used for this subtopic will vary depending on the individual students and groups approach to showing their understanding of the material

SEP: Asking Questions and Defining Problems

Developing and Using Models

Analyzing and Interpreting Data

Engage in Argument from Evidence

Language and Learning

Check the boxes for any explicit language and learning connections made during the unit. For more information on the IB's approach to language and learning, please see [the guide](#).

TOK Connections

Check the boxes for any explicit TOK connections made during the unit

CAS Connections

Check the boxes for any explicit CAS connections. If you check any of the boxes, provide a brief note in the "details" section explaining how students engaged in CAS for this unit.

<input checked="" type="checkbox"/> Activating background knowledge <input checked="" type="checkbox"/> Scaffolding for new learning <input checked="" type="checkbox"/> Acquisition of new learning through practice <input type="checkbox"/> Demonstrating proficiency Details: <i>Connections:</i>	<input checked="" type="checkbox"/> Personal and shared knowledge <input checked="" type="checkbox"/> Ways of knowing <input checked="" type="checkbox"/> Areas of knowledge <input checked="" type="checkbox"/> The knowledge framework Details:	<input checked="" type="checkbox"/> Creativity <input checked="" type="checkbox"/> Activity <input checked="" type="checkbox"/> Service Details:
Resources <i>List and attach (if applicable) any resources used in this unit</i>		
<ul style="list-style-type: none"> ● Oxford Environmental Systems and Societies ISBN 978-0-19-833256-5 ● Biozone Environmental Science Student Workbook ISBN 978-1-927173-55-8 ● Hodder Education Environmental Systems and Societies Study and Revision Guide ISBN 978-1-471-89973-7 ● IB ESS Schoology Group 		