Time In Minutes	Tittle	Method & Materials	Learning Goals
Phase I: Introduction and sensitisation			
10 Mins	Introduction of myself (Meet & Greet)	Introduce myself and my background using my presentation slides, and then use Mentimeter to gauge students' knowledge on current climate and sustainability trends.	The students get to know me and why I joined WUS, while I also gain an overview of students' understanding of climate issues and sustainable development. This is expected to create excitement for both the teacher and students.
Phase II: Problem Statement			
15 Mins	Population growth and climate change effects on food and energy supply	In my lecture slides, I guide students through the impact of population growth and climate change on global food and energy supplies. This leads to conflicts over land use between agriculture and ground-mounted (GM) solar photovoltaic (PV) systems. What are the implications of this for the Global South, particularly in Ghana?	Students learn how population growth and climate change impact food and energy security, as well as the consequences they pose for countries in the Global South, such as Ghana, both currently and in the future.
Phase III: Concept Introduction			
25 Mins	Introduction of the Agrivoltaics concept	This presentation will guide students through the novel agrivoltaics concept, highlighting its benefits and connections to the SDGs, particularly goals 2 and 7.	Students learn about agrivoltaics as an innovative solution to address the increasing challenges of food and energy insecurity.

5 Mins	Play video on agrivoltaics	Show a 3-minute video on agrivoltaics, explaining why it solves the land use conflict between agriculture and energy production.	Students gain a deeper understanding and appreciate the potential of agrivoltaics as a solution to SDG 2 (zero hunger) and SDG 7 (clean and affordable energy).
15 Minutes (Break) Pause			
15 Mins	Exercise I	Using flip charts and/or fresh apples, students will draw or cut the apples to illustrate the percentage distribution of water and land on Earth. They will also demonstrate the distribution of land use among agriculture and pasture, human settlements, forests, Antarctica, and other categories. Students will use images displayed on the presentation slides to guide their drawings or cuts.	This provides students with a practical understanding of land scarcity and the importance of using it sustainably to meet the needs of future generations. Therefore, there is a necessity for agrivoltaics, which combines agriculture with solar photovoltaic systems, to harness the dual benefits of producing food and generating electricity.
7 Mins	Discussion (questions and answers) on Exercise I	After the exercise, a discussion will allow students to ask further questions and share their understanding of what they learned through their drawings or the cutting of the apple.	This is to ensure that Students internalise what they have learnt so far.
15 Mins	Exercise II	Students will be divided into four groups for an activity. Two groups will draw the overhead agri-PV system, and the other two will illustrate the interspace agri-PV system, as shown on the presentation slide using flip charts and markers.	This gives students an understanding of the different agrivoltaics systems.

7 mins	Discussion (question and answers) on exercise II	A 7-minute Q&A will allow students to ask further questions and share their understanding of what they learned through their drawings.	This is to ensure that Students internalise what they have learnt about agrivoltaics
10 Minutes (Break) Pause			
Phase IV: Explaining the Link between Agrivoltaics & the SDGs			
10 Mins	Explain Slide 12	Explain how agrivoltaics is linked to the SDGs, especially SDGs 2 and 7, as well as the other SDGs.	Students get to understand the linkage between agrivoltaics and the SDGs.
Final Stage			
10 Mins		Reflection & Learning Outcomes	Students share their understanding and takeaways.
5 Mins	Closing Remarks	The teacher thanked the students for their active participation and encouraged them to advocate for agrivoltaics for sustainable food and livestock production, as well as energy generation.	