

	Implementation schedule	Physically/ Remotely	Contact hours	Autonomous work for students (max hours)	Learning outcomes
Activity 1	Introduction & Foundations of PBL	Physically/ Remotely	4	6	Understand the concept of PBL, its theoretical background, and relation to constructivist learning. Research phase: Group formation & brainstorming possible research topics.
Activity 2	PBL Process & 21st-Century Competencies	Physically/ Remotely	4	8	Analyze the phases of the PBL process; connect PBL with critical thinking, collaboration, creativity, and communication (4C model). Research phase: Define research topic & question, submit 1-page proposal.

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Activity 3	PBL and Education for Sustainable Development (ESD)	Physically/ Remotely	4	10	Explore connections between PBL and Education for Sustainable Development (ESD); design a small-scale research plan. Research phase: Write 2–3-page research plan (objectives, methods, sample, timeline). Instructor feedback.
Activity 4	Mini-Research Project Implementation	Physically/ Remotely	8	20	Apply research methods (surveys, interviews, content analysis); collect and analyze data on PBL practices; develop teamwork and inquiry-based skills. Research phase: Data collection.

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Activity 5	Data Analysis & Reporting	Physically/ Remotely	8	20	Process collected data (quantitative/qualitative). Research phase: Data analysis + writing the final report (8–10 pages).
Activity 6	Project Presentations	Physically/ Remotely	2	4	Present and defend research findings; practice academic communication and peer-feedback.
Activity 7	Reflection & Course Wrap-Up	Physically/ Remotely	2	10	Produce a reflective essay and final written report; evaluate personal and team learning outcomes; develop reflective and critical thinking skills.
Total Hours			32	78	