

INTERDISCIPLINARITY AT THE SERVICE OF SOCIETY: INTERPRETING THE EVOLUTION OF COVID-19

<https://identitiesproject.eu/models-modelling-and-simulation-to-highlight-the-interdisciplinarity-of-covid-19/>

Modular blocks	Goals of the block	Activities	IDENTITIES approach to interdisciplinarity					Role of participants	Mode of interaction	Suggested digital tools	Workload time	Non-editable format	Editable format	Hints for implementation
Introduction to the IDENTITIES approach to interdisciplinarity	Introducing the basics of the frameworks, terminology, and tools on which the different activities of the module are built.	Introductory videos								Assignment	15 min	https://www.youtube.com/playlist?list=PLMh87WCUmMyGHC7u6JGc6Q9m79k		The videos can be assigned to be watched by the participants themselves or during the regular classes. A moment of discussion can be foreseen.
Identifying the evolution of COVID	Analyzing the evolution of covid from the press from February 2020 to April 2021.	Introduction to the submodule								Assignment	3 h	https://identitiesproject.eu/wp-content/uploads/2022/10/COVID_sub1.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/COVID_sub1.odp	
		Presentation of the guide to the individual analysis of the news								Forum		https://identitiesproject.eu/wp-content/uploads/2022/10/SM1-1st-guide-for-ID-analysis-news.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM1-1st-guide-for-ID-analysis-news.odt	
		List of news								Assignment		https://identitiesproject.eu/wp-content/uploads/2022/10/SM1-Collection-of-news.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM1-Collection-of-news.odt	
		Template for the board for the analysis of news								Jamboard		https://identitiesproject.eu/wp-content/uploads/2022/10/SM_6-board-for-collaborative-work-1-3.pdf		
		Group's sharing (the students report the results of their analysis on the news - vertical analysis of the board)								Jamboard				The participants should be encouraged to report the results of their analysis along the grid, and in particular to focus on the role of disciplines to address specific questions related to the pandemic.
		Group discussion (the students comment on the evolution of the news throughout time - horizontal analysis of the board)								Jamboard				The participants should be encouraged to notice the evolution in the types of questions raised to address the pandemic, as well as to recognize how different disciplines were involved in the study.
Different models to address the interdisciplinarity of COVID modelling	Make students experience three different types of models to investigate the spread of the pandemic	Introduction to the submodule								Assignment	5 h	https://identitiesproject.eu/wp-content/uploads/2022/10/COVID_sub2.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/COVID_sub2.odp	
		Line 1: Analyse data to understand the evolution and formulate hypotheses								Wiki		https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-1-line-of-ID-inquiry-1.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-1-line-of-ID-inquiry-1.odt	
		Line 2: The role of mathematical models in studying the evolution of the pandemic								Wiki		https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-2-line-of-ID-inquiry-1.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-2-line-of-ID-inquiry-1.odt	
		Line 3: Simulate scenarios to make decisions on social restrictions								Wiki		https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-3-line-of-ID-inquiry-1.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-3-line-of-ID-inquiry-1.odt	Download of NetLogo is recommended for optimal functioning, but it is possible to run the simulations in NetLogo web (on browser), previously uploading the files.
		Group's sharing								Padlet				During the presentation of each group, the others are attentive to pose questions in the chat/forum related to points in common with their lines.
Questions and answers and boundaries for the COVID dialectical evolution	Meta-reflecting on the activities carried out in the previous block by constructing the so-called question & answer map. The questions-answers maps, aims to sketch the process followed through the dialectics between the specific questions that the group has faced, and the answers obtained.	Introduction to the submodule								Assignment	5 h	https://identitiesproject.eu/wp-content/uploads/2022/10/Covid_sub3.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/Covid_sub3.odp	
		Sketching the question & answer map								Jamboard				
		Sharing of findings and experiences of the three groups								Padlet				
		Presentation of the 2nd guide for ID analysis								Assignment		https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-2nd-guide-for-interdisciplinary-analysis.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/SM4-2nd-guide-for-interdisciplinary-analysis.odt	
		Collective discussion on the interdisciplinary analysis								Forum				
From teacher training to classroom practice	Engaging the participants with discussions regarding the adaptation of the teaching activities experienced for secondary school.	Collective discussion on the didactical transposition of the activities								Assignment	2 h	https://identitiesproject.eu/wp-content/uploads/2022/10/Covid_sub4.pdf	https://identitiesproject.eu/wp-content/uploads/2022/10/Covid_sub4.odp	

Legend

Keywords for the IDENTITIES approach to interdisciplinarity	Keywords for the participants' roles in the module	Keywords for the type of participants' engagement in the activities
Identities of the disciplines mathematics physics computer science Interdisciplinarity zone Boundary objects Boundary-crossing mechanisms Epidemiological activators Linguistic activators	Role of explorer Role of student Role of analyst Role of teacher-designer	Individual activity Group activity Interactive activity trainer-trainees