TOULOUSE INP N7

Climate PBL

Component
École Nationale Supérieure d'Électrotechnique d'Électronique

In brief

› **Code:** N8EM05E
› **Open to exchange students:** No

Presentation

Objectives

At the end of the sixteen 1h45 sessions of the Climate PBL, engineering students will be able to:

- Describe the predominant phenomena of the water cycle and atmospheric circulation
- Explain the mechanisms responsible for climate change and its impacts
- Organize a sequence of processes using conceptual diagrams
- Integrate multiple pieces of information from scientific literature
- Select key facts to explain complex scientific concepts
- Generate educational resources that can be easily used by other scientists

Description

The Table below presents the program of the 16 sessions of the "Climate PBL". The first two sessions are grouped into a half-day for an introduction to the course, followed by training in the animation of the Climate Fresk. The last two sessions, also grouped into half a day, are devoted to "reverse lectures", during which three groups of students present a summary of the "Active Multimedia Conference" (AMC) they have constructed. Between these two half-days, the sessions combine lectures by teachers and group work workshops under the supervision of these experts.

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Slots		Sequencing of sessions	IC	PD	OL	OP	HR	MB	DA	OT	Total
TD	1	Presentation of the Climate PBL and "Climate Fresk" facilitation training							1	1	2
TD	2								1	1	2
CM	3	Additional greenhouse effect							1	1	2
CM	4	Disruption of the water cycle					1			1	2
CM	5	Flooding			1						1
CM	6	Freshwater resources	1								1
CM	7	Cyclones				1					1
CM	8	Carbon Cycle (three cards in the Fresk)		1						1	2
CM	9	Aerosols		1					1		2
CM	10	Air Temperature Rise							1	1	2
CM	11	Ice melting (three cards in the Fresk)			1				1		2

CM	12	Rising water temperature			1				*1*		2
CM	13	Extreme climate events						1	*1*		2
CM	14	Floods	1				1		*1*		3
TD	15	Defences of the "Multimedia Pedagogical Conferences" projects and mini-fresks					1			1	2
TD	16						1			1	2
		TOTAL	2	2	3	1	4	1	9	8	**30**