

FORTHem Collective Short-Term Mobility

Sedimentary record of Earth’s past climate

Organising university: Johannes Gutenberg Universität – Mainz

Location of the event: Molinos, Teruel Province, Spain

Organisers: Johannes Gutenberg Universität, University of Valencia, University of Palermo, and University of Burgundy will deliver asynchronous lectures prior to the field trip to introduce students to the knowledge and methods required to complete the practical exercises. FORTHem representatives will also accompany students in the field.

Project description: The course focusses on unravelling Earth’s paleoclimates and the effects of climate change on various paleoenvironments. It serves as a base for a Digital Academy Class and will epitomize the ‘blended’ approach proposed by FORTHem. Through asynchronous lectures students will obtain the ability to describe and interpret sedimentary rocks in the field, and to analyze digital data of Molinos’ geology, which was already created by Universität Mainz. “Blended” groups comprising a mix of online and offline students will work together to interpret field and digital data to gain understanding of the paleoenvironment of the area.

Day by day programme:

Day and date	Morning	Afternoon	Evening
Day 1 27 August	Introduction to stratigraphic units and their fossil content.		
Day 2 28 August	Students will perform: (i) Field and digital mapping and guided structural exercises to determine structures present and the way that they affect the continuity of the stratigraphic sequence, leading to construction of a stratigraphic column with appropriate thicknesses; (ii) Identification of fossils in outcrop samples and remotely by using thin sections, to interpret paleoenvironments.		Exchange of field and digital observations within each group by utilizing StraboSpot, digital data transfer and video/chat discussions.
Day 3 29 August			
Day 4 30 August			
Day 5 31 August	Synopsis, write up and submission of a joint report from each group.		

Eligibility criteria and selection criteria specific to this project: 5 students will be selected from each partner institution, based on academic performance and a short ‘letter of interest’ that explains how their future work or research aligns with the objectives of the Climate & Resources lab.