

Announcement and Invitation

The Department of Biological, Geological and Environmental Sciences, University of Catania, is hosting Professor Alfred Micallef from the Department of Geosciences, University of Malta, for the period 15 September - 15 October 2025.

During his stay, Professor Micallef will deliver a short intensive course entitled, *Atmospheric Processes*. The course is open to all those affiliated to the University of Catania, but it is primarily intended for undergraduate and beginning postgraduate students that are new to atmospheric science, and who would like to enrich and widen their knowledge in the geosciences. A comprehensive set of lecture notes will be provided to all attendees. At the end of the course, students will be assessed through a class test of 90-minute duration.

The set of lectures (14 hours in total), to be delivered in person, will cover the following topics:

- o basics, scales, interactions, stability and feedback mechanisms);
- o blackbody, solar and Earth's radiation;
- Earth system energy balance and the greenhouse effect;
- o aerosol characteristics;
- o aerosol sources, sinks and effects;
- o atmospheric stability;
- o laws of motion;
- o local wind systems;
- o general circulation;
- o ventilation, stagnation, inversions and air pollution case histories;
- wind velocity and turbulence

The lectures will be delivered in English and held at Palazzo Ramondetta, Corso Italia 57, Catania, as per the following schedule:

Tuesday, 7 October 12:00-14:00 Aula G. Ponte

Wednesday, 8 October 12:00-14:00 Aula A

Thursday, 9 October 12:00-14:00 Aula A

Friday, 10 October 12:00-14:00 Aula G. Ponte

Monday, 13 October 12:00-14:00 Aula G. Ponte Tuesday, 14 October 12:00-14:00 Aula G. Ponte

Wednesday, 15 October 12:00-14:00 Aula A

Attendees are free to ask questions during and after the lectures. Professor Micallef (alfred.micallef@um.edu.mt) will be available for consultation/tutorials at most times while in Catania.

Source of Funding: University of Catania

