

Teaching Plan 42°Cycle a.y. 2026/2027

Course	Teacher(s)	SSD	hrs	credits	Educational form	Type of activity	Chosen/ Mandatory
Science: Observation and Prejudice	Eduardo Garzanti	GEOS-02/B	8	1	Lecture	Intercurricular	Chosen activity
Communication of Climate Change	Claudia Pasquero	GEOS-04/C	8	1	Lecture	Intercurricular	Chosen activity
The Climatic Role of Atmospheric Aerosol in the Arctic	Luca Ferrero	CHEM-01/B	8	1	Lecture	Intercurricular	Chosen activity
Ice Core Science	Barbara Delmonte	GEOS-03/A	8	1	Lecture	Intercurricular	Chosen activity
Advanced Techniques for Sample Preparation	Veronica Termopoli	CHEM-01/A	16	2	Lecture	Intercurricular	Chosen activity
Scanning and Transmission Electron Microscopy, Principles and Applications	Giancarlo Capitani, Paride Mantecca, Giovanni Maria Vanacore	GEOS-01/A	28	3	Lecture & laboratory training	Intercurricular	Chosen activity
Raman Spectroscopy: A Flexible Tool for an Integrated Research Approach	Sergio Andò, Maria Luce Frezzotti + didattica seminariale	GEOS-02/B	16	2	Lecture	Intercurricular	Chosen activity
Scanning Microscopy and Spectroscopy: Principles, Applications, Image Handling	Marcello Campione, Valerio Cerantola	PHYS-03/A	20	2	Lecture & laboratory training	Intercurricular	Chosen activity

Isotopes as Environmental Tracers	Barbara Leoni, Marco Rotiroti	BIOS-05/A	20	2	Lecture & laboratory training	Intercurricular	Chosen activity
From Environmental monitoring to human health: effects on contaminants, tools and models	Chiara Urani	BIOS-04/A	18	2	Lecture & laboratory training	Intercurricular	Chosen activity
Natural Capital, Ecosystem services and nature based solutions	Sandra Citterio	BIOS-01/A	26	3	Lecture & laboratory training	Intercurricular	Chosen activity
New Lignin-Based Sustainable Materials: Science and Technological Aspects	Luca Zoia, Ruggero Barni	CHEM-05/A	8	1	Lecture	Intercurricular	Chosen activity
Ecological Baseline and Conservation Paleobiology	Daniela Basso, Valentina Bracchi	GEOS-02/A	16	2	Lecture	Intercurricular	Chosen activity
Carbon and noble gases systematics in the Earth's interior	Andrea Luca Rizzo	GEOS-01/C	8	1	Lecture	Intercurricular	Chosen activity
Machine Learning for Multivariate Data Analysis	Davide Ballabio	CHEM-01/A	20	2	Lecture & laboratory training	Intercurricular	Chosen activity
Monte Carlo Approach to Scientific Data Analyses: An Introduction	Nicola Piana Agostinetti	GEOS-04/B	20	2	Lecture & Laboratory training	Intercurricular	Chosen activity
Open-Source Software for Spatial Data Analysis	Micol Rossini	GEOS-03/A	16	2	Lecture	Intercurricular	Chosen activity

Spatial Variability of Environmental Characteristics and Mapping Methodologies	Chiara Ferrè	AGRI-06/C	16	2	Lecture	Intercurricular	Chosen activity
Time Series Analysis of Environmental Data	Tullia Bonomi + didattica seminariale	GEOS-03/B	20	2	Lecture & laboratory training	Intercurricular	Chosen activity
UAV/ROV and Immersive Virtual Reality for Research in Earth Sciences	Fabio Luca Bonali, Luca Fallati	GEOS-02/C	18	2	Lecture & Field activity	Intercurricular	Chosen activity
Challenges and Tools in Chemical Sciences	Marco G. Malusà, Davide Ballabio	CHEM-01/A	8	1	Lecture	Chemistry Curricular	Chosen activity
NMR spectroscopy applications to ligand-receptor studies	Cristina Airoidi	CHEM-05/A	20	2	Lecture & laboratory training	Chemistry Curricular	Chosen activity
Introduction to photochemistry	Luca Bertini, Claudio Greco, Antonio Papagni	CHEM-02/A	24	3	Lecture	Chemistry Curricular	Chosen activity
Enhancement of Fragile Cultural Heritage	Ezio Bolzacchini, Chiara Rostagno, Luca Ferrero	CHEM-01/B	20	2	Lecture & laboratory training	Chemistry Curricular	Chosen activity
Challenges and Tools in Geological Sciences	Marco G. Malusà, Elisa Malinverno	GEOS-02/A	16	2	Lecture	Geology Curricular	Chosen activity
Advanced Numerical Modelling Towards Digital Twins for Geomaterials	Giovanni Battista Crosta, Riccardo Castellanza, Bianca Di Blasio	GEOS-03/B	36	3	Lecture	Geology Curricular	Chosen activity

Introduction to geodynamic and landscape evolution numerical modeling	Pietro Sternai	GEOS-04/A	20	2	Lecture, computer work	Geology Curricular	Chosen activity
Challenges and Tools in Environmental Sciences	Marco G. Malusà, Sara Villa	BIOS-05/A	8	1	Lecture	Environment Curricular	Chosen activity
TOT. 28			462	51			

Other Activities

Activity	Type of activity	SSD	hrs	credits	Educational		
"Non Solo Ambiente ma Dialoghi di Scienza"	Compulsory didactic seminar		12		Seminar		
PhD Day SCGA	Annual event organized by PhD students in collaboration with the PhD Committee, which includes seminars with international speakers, including foreign members of the Teaching Committee, poster sessions and oral presentations by PhD students.		8				