



Schedule of the PhD courses 2012

upgrade October 26th, 2012

Most of courses can be given in English, if required.

Please check detailed programs and contact teacher(s) or course manager(s) by e-mail.

 winter term,
 spring term,
 summer term,
 fall term,

	Title	Period / dates	CFU
1	<i>Theoretical and practical learning course for TEM-EDS utilization</i>	Monday-10 th Friday 14 th September	5.5
2	<i>Introduction to Crystallography</i>	Aula Cannizzaro (via P-Giuria 7) Monday 4 th June 15-17 PM Tuesday 5 th June 15-18 PM Wednesday 6 th June 15-18 PM	2
3	<i>On-line bibliographic research tools</i>	Aula informatica 4 – Torino Esposizioni Wednesday 9 th May 9-13 AM Thursday 10 th May 9-13 AM Thursday 10 th May 14-16 (Open Access)	2
4	<i>Geothermometry of Hydrothermal fluids.</i>	Thursday 3 rd May (14-17) Aula 3 Tuesday 8 th May (14-17) Aula Ruffini Wednesday 9 th May (14-17) Aula Ruffini Wednesday 16 th May (9-12) Aula 3	3
5	<i>Stable isotope studies on sedimentary rocks</i>	Cancelled	3.5
6	<i>Medium enthalpy geothermal fields: exploration strategies and techniques</i>	Monday 12 th November 9:30-13:30 Friday 16 th November 9:30-13:30	5
7	<i>Microprobe methods for characterization of geological materials</i>	Aula Sturani (Via Valperga Caluso, 35, 3° floor) Wednesday 18 th April: 10-12 AM Thursday 19 th April: 10-12 AM Friday 20 th April: 9-11 AM / 14-16 PM Monday 23 rd April: 11 AM - <u>Final test</u> SEM-EDS Lab Wednesday 18 th April: 14-18 PM Thursday 19 th April: 14-18 PM	4
8	<i>Modelling of groundwater flow and pollutant transport by numerical methods</i>	Aula Sturani (Via Valperga Caluso, 35, 3° floor) Tuesday 6 th November: 9-12 /14-17 PM Tuesday 13 th November: 9-12 /14-17 PM	3
9	<i>Principles and applications of cathodo-luminescence in sedimentary geology</i>	Aula Sturani (Via Valperga Caluso, 35, 3° floor) Monday 15 th October: 14-18 PM Tuesday 16 th October: 14-18 PM Wednesday 17 th October: 14-18 PM Thursday 18 th October: 14-18 PM	4
10	<i>Introduction to Geographic Information Systems (GIS) for geothematic cartography: theory and applications in geology.</i>	February 2013	7
11	<i>Introduction to Remote Sensing: Tools and methods for analyzing, processing and interpretation of remotely sensed data in geology.</i>	February 2012	7



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12	<i>Introduction to Digital Photogrammetry from airphoto and from satellite for stereoscopic analysis of territory: from digital stereo model to digital orthophoto.</i>	February 2013	6
13	<i>Forecasting of landslides and debris flows</i>	Aula Sturani (Via Valperga Caluso, 35, 3° floor) Monday 8 th -October Tuesday 9 th October	2.5
14	<i>X-ray microfluorescence: principles and applications to geology, chemistry, material science and Cultural Heritage</i>	Aula Sturani / Laboratorio micro-XRF (Via Valperga Caluso, 35, 3° floor) Monday 14 th May: 10-12 / 14-17 Tuesday 15 th May: 10-12 / 14-17	2.5
15	<i>Rock magnetism: contribution to volcanology</i>	Cancelled	3
16	<i>Convergent margins and subduction zones: deformation processes at the plate interface</i>	Monday 12 th November Tuesday 13 th November Wednesday 14 th November (flyer)	6
17	<i>An introduction to Matlab and applications</i>	Aula informatica 4 – Torino Esposizioni Thursday 12 th April: 9-12 AM Friday 13 th April: 14-17 PM Friday 27 th April: 14-17 PM Wednesday 2 nd May: 14-17 PM Monday 7 th May: 14-18 PM	4
18	<i>Geomaterials' rheology</i>	Aula 4 (Via Valperga Caluso, 35, 1st floor) Monday 26 th November: 15-18 Tuesday 27 th November: 11-13 Wednesday 28 th November: 15-18 Aula 3 (Via Valperga Caluso, 35, 1st floor) Thursday 29 th November: 11-13	3
19	<i>Utilizzo di GIS Open Source nella progettazione geo-ambientale</i>	Aula informatica – Torino Esposizioni Friday 23 rd March	2
20	<i>Raman spectroscopy applied to geological and environmental sciences.</i>	Aula Sturani (Via Valperga Caluso, 35) Wednesday 16 th May: 14-17 PM	0.75
21	<i>Raman microspectroscopy: practical course.</i>	Laboratorio microRaman (Via Valperga Caluso, 35) Thursday 17 th May: 9-18 Friday 18 th May: 9-18 Final Test 23 rd May 14-17 PM	3
22	<i>In situ high-pressure single-crystal X-ray diffraction</i>	Laboratori del DST e del centro CRISDI Friday 13 th April: 9-13 Monday 16 th April: 13-17 Tuesday 17 th April: 9-17 Wednesday 18 th April: 13-17 Thursday 19 th April: 13-17	5

winter term,
 spring term,
 summer term,
 fall term,



Seminars and workshops

- **DISTINGUISHED LECTURES 2011: IL CICLO DEL CARBONIO:
DALLA DEGASSAZIONE DEL MANTELLO ALLA BIOMINERALIZZAZIONE (CFU 1)**
Thursday, 23/2/2012, 10:00 AM
"Il ciclo profondo del carbonio: rilascio e trasporto di CO₂ dal mantello all'esosfera"
Thursday, 23/2/2012, 12:00 AM
"Microrganismi e ciclo del carbonio: il Grande Gioco dei flussi globali"
Aula Magna "Primo Levi" della Facoltà MM. FF. NN.
- **THE GEOTHERMAL ENERGY: FROM ENERGY SAVER TO THE INVESTIGATION FOR
POWER PRODUCTION (CFU 2)**
Thursday 21/2/ 2012, 14:30 PM
Aula Ruffini, Via Valperga Caluso 35
- **DISTINGUISHED LECTURES MSA 2011-2012 (CFU 1)**
Thursday 19/4/2012, 14:30 PM
"Crystal Chemistry in the 21st Century"
**Aula Cannizzaro (via P. Giuria 7) del Dipartimento di Chimica Inorganica, Fisica e dei
Materiali,**
Friday 20/4/2012, 11:00 AM
"Exploring Hydrogen Environments in Minerals with Neutrons",
Aula Ruffini (via Valperga Caluso, 35) del Dipartimento di Scienze della Terra
- **Lunedì 16 Aprile 2012, h.15.00**
"Accessory phase record of metamorphic recycling and yo-yo subduction / cooking the
subduction soup: nature and composition of subduction zone fluids"
Aula Pognante, CFU 0,5
- **Lunedì 7 maggio, ore 14.30**
"Disaster 2.0 - are we ready?"
Sala Principi d'Acaja, piano terra del Palazzo del Rettorato (via Verdi 8, Torino) CFU 1
- **23 maggio 2012 a partire dalle ore 10,30**
"Investigating the relations between faults, seismicity and crustal mobility in low
deformation areas"
**Aula informatica 4 del Polo didattico Torino Esposizioni, Corso Massimo d'Azeglio, 15
CFU 1,5**
- **Lunedì 11 giugno ore 10.30 – 17.30**
"La geologia dell'Himalaya, Karakoram e Tibet meridionale: stato dell'arte delle
conoscenze geologiche"
aula Ruffini, Dipartimento di Scienze della Terra via Valperga Caluso 35, Torino CFU 1,5



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➤ **Venerdì 12 Ottobre ore 9:00-13:00**

Frammenti della crosta ercinica nelle alpi occidentali interne

aula Ruffini, Dipartimento di Scienze della Terra via Valperga Caluso 35, Torino CFU 1

➤ **Venerdì 9 Novembre ore 10:00-11:00**

Sul ruolo del Geologo nel rilievo degli effetti dei sismi:

aula Ruffini, Dipartimento di Scienze della Terra via Valperga Caluso 35 Torino, CFU
0.25

Short courses:

➤ **LO STUDIO DELLE EVAPORITI: DALL’AFFIORAMENTO AL LABORATORIO.**

(CFU 8)

7-11 May 2012

Dipartimento di Scienze della Terra