



Project FLAT
"Flood and Landslide Assistance and Training"

Workshop Agenda
Brindisi
14th – 19th October 2019

Workshop syllabus.

Lecture series in the workshop will represent a comprehensive overview and synthesis of landslides and flood hazard and risk concepts and practice on basic and master's level including geomorphology, engineering geology, hydrology, Geographic Information Systems, etc. The lecture will be coupled with **field trips** to look at representative example of large and impacting landslides and floods. The main topics will cover, among the others, the terminology and classification; landslides and flood typology and dynamics; ground based, aerial and satellite remote sensing techniques; landslide and flood monitoring; susceptibility and hazard mapping, risk assessment; impact of climate change. Day 5 and Day 6 will focus on the mitigation techniques and practice for all the covered risks and on the software and system open source projects for natural disaster management.

Learning outcome

The lectures in workshop will provide the audience with multidisciplinary knowledge and understanding from basic to master level of the various landslide and flood phenomena. The lectures will give an overview and an understanding of the processes from geologic and hydrologic conditioning, triggering and run-out including time dependent impacts such as climate change. It will also provide an overview of the mapping products that are used in society for planning and mitigation. The students will learn about detection and monitoring techniques and mitigation strategies. The field visits will put those concepts at work.

Times:

14/10/2019 "Landslides hazard and risks" – Relator: Santaloia Francesca

Time: 9:30 – 12:30 a.m. / 14:30 – 17:30 p.m.

Venue: "Sala Università" at Palazzo Nervegna - Via Duomo, 20, 72100 Brindisi BR

Topics:

- Landslides typology, morphology and mechanics;
- Factors controlling landslide hazard and risk;



- Hazards and risk mapping;
- Landslides monitoring;
- Selected case studies presentations.

15/10/2019 Field visit

The visit will show the example of large landslides in Pomarico (Basilicata region) and Ginosa (Puglia Region) affecting large portion of the Villages.

16/10/2019 “Flood hazard and risks” – Relator: Manfreda Salvatore

Time: 9:30 – 12:30 a.m. / 14:30 – 17:30 p.m.

Venue: “Sala Università” at Palazzo Nervegna - Via Duomo, 20, 72100 Brindisi BR

Topics:

- Basic concepts of fluvial and flood dynamics;
- Flood hazard mapping;
- Flood monitoring;
- Selected case studies.

17/10/2019 – Field Visit

The visit will show the examples of effects of large damaging floods and the actual existing risk on villages. We will visit Ferrandina Scalo and Craco in Basilicata region.

18/10/2019 “Software System support for natural disaster” – Relator: Palmas Alessandro

Time: 9:30 – 12:30 a.m. / 14:30 – 17:30 p.m.

Venue: “Sala Conferenze” at Palazzo Nervegna - Via Duomo, 20, 72100 Brindisi BR

Topics:

(Participants needs to use personal laptops for the practice)

- Intro;
- Open street Map and Humanitarian Open street map for natural disaster;
- Software for mapping and use of data (for desktop and mobile);
- Use of JOSM (examples, trials, question time);
- Maphaton.



19/10/2019 “Mitigation and risk analyses techniques and practice”– Relator: Firemen instructor

Time: 9:30 – 13:00 a.m.

Venue: “Sala Università” at Palazzo Nervegna - Via Duomo, 20, 72100 Brindisi BR

(Participants needs to use personal laptops for the practice)

Topics:

- Basic concepts of civil protection and alerts;
- Regional and national protection systems;
- Mitigation techniques;
- Risk analysis techniques.