

Course offered for the STAT PhD program starting from a.y. 2019/2020

<b>TITLE</b>	<b>GREEN TECHNOLOGIES FOR CONTAMINATED SITES</b>
Lecturer	Pietro Marescotti (PA-DISTAV), Enrica Roccotiello (RTDa-DISTAV), Gianni Vercelli (PA-DIBRIS), Mirca Zotti (PA-DISTAV)
Duration and Credits	5 CFU (1CFU Roccotiello, 1CFU Zotti, 1CFU Marescotti, 1 CFU Vercelli, 1 CFU field activities with the four lecturers)
Course description	<p>The course aims to give students principles of environmental monitoring and to furnish a basic approach to bioremediate naturally – anthropogenic contaminated soils by means of living organisms.</p> <p>Frontal lectures address the main characteristics of biotic components (plants and fungi) in contaminated sites also comparing them with natural metal-rich soils. The most common techniques of monitoring contaminated sites, biomonitoring, remediation, and bioremediation are faced and discussed.</p> <p>Innovative techniques of environmental monitoring using multispectral and imaging sensors mounted on UAVs (drones) will be presented and discussed, as well as methodologies of georeferenced data acquisition and dataset preparation.</p> <p>Activities on the field allow the students to gain experiences on the topics covered by theoretical lectures.</p>
Course organization	<p>The course encompasses both lectures and activities on the field. Field activities and surveys in natural metal-rich and contaminated sites complete the activities carried out in the classroom with direct observation and applied methodologies of sampling and monitoring of biotic and abiotic components.</p> <p>Data acquisition using UAVs (drones) will be organized in cooperation of Ce.Dro. – Research Center on Unmanned Aerial Vehicles (Drones) of University of Genoa.</p>
Teaching period	June-July