Module	**Genetic Resources and Grapevine Production**
Code	MSLS_S13
Degree Program	Master of Science in Life Sciences (MSLS)
Cluster	Food
Specialization	Viticulture & Enology
ECTS Credits	4
Workload	Fall term 120 h: Contact & Field work 75 lessons = 56 h; Self-study 64 h
Module Coordinator	**Name** Jean-Philippe Burdet **Phone** +41 22 363 40 50 **Email** jean-philippe.burdet@changins.ch **Address** CHANGINS, Viticulture and Enology Route de Duillier 50, Case postale 1148, CH-1260 Nyon 1
Lecturers	• Jean-Philippe Burdet, CHANGINS, Viticulture and Enology • Dr. Markus Rienth, CHANGINS, Viticulture and Enology • Guest lecturers
Entry Requirements	Equivalent of a Bachelor of Science in Viticulture, Enology, or Agronomy
Learning Outcomes and Competences	After completing the module students will be able to: • Analyze the plant heritage of a large vineyard or an entire region • Evaluate the genetic variability within vineyard blocks, the plant's state of health, and the match of the rootstock- grape variety combination in relation to agronomic and enological aptitude • Develop strategies of varietal selection in the long term in relation to environmental pressure and climate changes
Module Content	Application of observation and evaluation methods to obtain information about the grape vine concerning - state of health and viruses - agronomic and enological suitability - genetic variability, clones and rootstocks - adaptation potential to climate-physiology - physiology of vine Acquisition of new information for interpretation, resulting in - breeding programs for crosses or tolerant varieties - vineyard planting programs with polyclonal selections Synthesis and analysis of the collected information and proposition of planting strategies - multi-criteria analysis

	- report writing
Teaching / Learning Methods	Lectures, field trips, literature study. Active participation is requested
Assessment of Learning Outcome	Oral presentation (30%) Case study (40%) Written exam (30%)
Bibliography	Literature will be provided during the lectures
Language	English
Comments	
Last Update	06.07.2018 / RR&JPB