



Module	Genetic Resources and Grapevine Production
Code	MLS_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	<p>Name Jean-Philippe Burdet</p> <p>Phone +41 22 363 40 50</p> <p>Email jean-philippe.burdet@changins.ch</p> <p>Address CHANGINS, Viticulture and Enology Route de Duillier 50, Case postale 1148, CH-1260 Nyon 1</p>
Lecturers	<ul style="list-style-type: none"> • 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	<p>After completing the module students will be able to:</p> <ul style="list-style-type: none"> • 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	<p>Application of observation and evaluation methods to obtain information about the grape vine concerning</p> <ul style="list-style-type: none"> • state of health and viruses • agronomic and enological suitability • genetic variability, clones and rootstocks • adaptation potential to climate-physiology • physiology of vine <p>Acquisition of new information for interpretation, resulting in</p> <ul style="list-style-type: none"> • breeding programs for crosses or tolerant varieties • vineyard planting programs with polyclonal selections <p>Synthesis and analysis of the collected information and proposition of planting strategies</p> <ul style="list-style-type: none"> • report writing

Teaching / Learning Methods	Lectures, field trips, literature study, case study. Active participation is requested
Assessment of Learning Outcome	Oral presentations (20%) Case study (40%) Written exam (40%)
Bibliography	Literature will be provided during the lectures
Language	English
Comments	
Last Update	11.06.2020 / JPB