



Master in Life Sciences

A cooperation between
BFH, FHNW, HES-SO, ZFH

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| 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 | <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 |

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| 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 | 10.05.2019 / JPB |