



Master in Life Sciences

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

Module Title	Expansion of Personal Scientific Knowledge
Module Code	MCLs045
Code	AF-21
Degree Programme	Master of Science in Life Sciences (MSLS)
ECTS Credits	5
Workload	150 h: Contact and field trips 20 h; Student seminars 15 h; Self-study 115 h
Module Coordinator	<p>Name Prof. Dr. Peter Spring</p> <p>Phone +41 79 467 78 23</p> <p>Email peter.spring@bfh.ch</p> <p>Address Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences, Laenggasse 85, 3052 Zollikofen</p>
Lecturers	<ul style="list-style-type: none"> • Prof. Dr. Peter Spring • Prof. Dr. Roland Stähli and UB team • Prof. Dr. Michael Studer • Principal advisors / scientific coaches
Entry Requirements	None
Learning Outcomes and Competencies	<p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> • understand basic scientific knowledge and recent developments in their field of specialisation; • utilise the acquired scientific knowledge in their research and development work; • recognise current developments in a broader scientific context and consider them in their own work; • actively participate in scientific discussions with specialists of different subject matters.
Module Content	<p>In this module, students will first define – in discussion with their principal advisors / scientific coach - a specific topic. Students will then develop strategies to set personal learning targets and to acquire the related basic scientific knowledge. They will acquire and deepen their personal basic scientific knowledge based on individual targets in different areas, such as:</p> <ul style="list-style-type: none"> • production practices in agriculture; • systems understanding e.g., renewable natural resources, nutrient cycles, or carbon sequestration; • anatomy, physiology, chemistry, and physics in agriculture; or • economics of production and resource management. <p>Contact hours, field trips and seminars focus on new developments in science and state of the art scientific information in agriculture and related fields. During the student seminars, participants present their findings and engage in discussions on the topics of their peers.</p>
Teaching and Learning Methods	Lectures to give basic scientific and methodological input; guided self-study to set personal learning targets and to reach these targets; seminar series.
Assessment of Learning Outcomes	<ol style="list-style-type: none"> 1) Oral presentation and active participation in seminar series (50%) 2) Oral exam on individual learning targets (50%)
Bibliography	Individually defined by student and scientific coach
Language	English

Comments	<p>The acquired knowledge will depend on the individual backgrounds and objectives of the students.</p> <p>The following sequences are compulsory for students: introduction, field trip, energy seminar and student seminars. For details on compulsory sequences, please refer to the detailed schedule of the module, which will be uploaded on Moodle four weeks before the start of the module.</p>
Last Update	22.12.2023 / Peter Spring