



# Master in Life Sciences

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

<b>Module</b>	<b>Agricultural and Forest Production in Mountain Areas</b>
<b>Code</b>	MSLS_AF-51
<b>Degree Program</b>	Master of Science in Life Sciences (MSLS)
<b>ECTS Credits</b>	5
<b>Workload</b>	150 h: Contact 50 - 70 h; Exercises, excursions 20 h; Self-study 60-80 h
<b>Module Coordinator</b>	<p><b>Name</b> Dr. Karin Zbinden Gysin</p> <p><b>Phone</b> +41 31 910 21 59</p> <p><b>Email</b> <a href="mailto:karin.zbinden@bfh.ch">karin.zbinden@bfh.ch</a></p> <p><b>Address</b> Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences, Laenggasse 85, 3052 Zollikofen</p>
<b>Lecturers</b>	<ul style="list-style-type: none"> <li>• Dr. Bruno Durgjai</li> <li>• Jean-Jacques Thormann</li> <li>• Dr. Karin Zbinden Gysin</li> <li>• David Raemy</li> </ul>
<b>Entry Requirements</b>	Literature for preparation will be provided
<b>Learning Outcomes and Competences</b>	<p>After completing the module students will be able to:</p> <ul style="list-style-type: none"> <li>• apply methods of analysis and assess their respective usefulness and limitations;</li> <li>• describe and assess different methods of enterprise evaluation;</li> <li>• identify and develop strategies of farms and forest enterprises as well as processing units;</li> <li>• assess challenges, potentials and risks of novel ideas and to integrate them in planning and implementation;</li> <li>• communicate with others with respect, self-reflection and productively.</li> </ul>
<b>Module Content</b>	In the module, concepts and methods will be developed that integrate agricultural and forest production systems. Based on case studies explored during excursions, economic methods for diagnosis and planning will be introduced and applied (analysis of value chains, investment evaluation etc.). The regional dimension of agricultural and forest production will be treated in a seminar. In a synthesis, students compile values, strategies and concepts of natural resource-based enterprises.
<b>Teaching / Learning Methods</b>	Based on jointly elaborated case studies, methods for analysis will be discussed and applied, in groups and individually. Emphasis will be on seminars and discussions focusing on interdisciplinary and cross-cultural exchange. Problem-Based Learning sequences require students to involve themselves in discussions and facilitation of group processes. During the autonomous studies, students deepen their subject matter knowledge and methodological skills, supported by individual coaching. Social science aspects will be integrated with topical blocks as required (e.g. role models, rules for communication, gender issues, change of perspectives, inclusion of experience, values and attitudes).

<b>Assessment of Learning Outcome</b>	<p>1) Written report (50%)</p> <p>2) Oral exam in small groups (carrousel, 50%), closed book</p>
<b>Bibliography</b>	<p>Bätzing W, 2003. Die Alpen. Geschichte und Zukunft einer europäischen Kulturlandschaft. C.H. Beck Verlag (Kapitel 1.6, 1.7 und 2.2), München, 254 S.</p> <p>Bätzing W, 2015. Zwischen Wildnis und Freizeitpark. Eine Streitschrift zur Zukunft der Alpen. Rotpunktverlag, 184 S.</p> <p>Kobelt H, Schulte P, 2006. Finanzmathematik: Methoden, betriebswirtschaftliche Anwendungen und Aufgaben mit Lösungen. 8. Auflage, NWB Verlag, Herne, 300 S.</p> <p>Lauber S, Herzog F, Seidl I, Böni ., Bürgi ., Gmür P, Hofer G., Mann S, Raaflaub M, Schick ., Schneider M K., Wunderli R (Hrsg.) 2013. Die Zukunft der Schweizer Alpwirtschaft. Fakten, Analysen und Denkanstösse aus dem Forschungsprogramm AlpFUTUR. Eidg. Forschungsanstalt WSL, Forschungsanstalt Agroscope Reckenholz-Tänikon ART, Birmensdorf, Zürich Reckenholz, 198 S.</p> <p>Mathieu J, 2015. Die Alpen. Raum – Kultur – Geschichte. Reclam Verlag, Ditzungen, 254 S.</p> <p>Pflaumer P, 2009. Grundwissen Investitionsrechnung. epubli, Berlin, 82 S.</p> <p>Christen O, Hövelmann L, Hülsbergen K-J, 2009. Nachhaltige landwirtschaftliche Produktion in der Wertschöpfungskette Lebensmittel. Erich Schmidt Verlag, Berlin, 187 S.</p> <p>Rudaz G, und Debarbieux B, 2014. Schweizerische Berggebiete in der Politik. vdf Verlag, Zürich, 134 S.</p>
<b>Language</b>	German and English (students must be able to interact in German with local stakeholders)
<b>Comments</b>	The following sequences are compulsory for students: The three study weeks (2 weeks end of September / beginning of October; 3 <sup>rd</sup> weekend of January / beginning of February), and the sessions with Problem Based Learning (steps 1-5 and step 7). For details on compulsory sequences, please refer to the detailed schedule of the module, which will be uploaded on Moodle 4 weeks before the start of the module.
<b>Last Update</b>	20.02.2023 / Karin Zbinden Gysin