



Master in Life Sciences

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

Module	Agricultural and Forest Production in Mountain Areas
Code	MSLS_AF-51
Degree Program	Master of Science in Life Sciences (MSLS)
ECTS Credits	5
Workload	150 h: Contact 50 - 70 h; Exercises, excursions 20 h; Self-study 60-80 h
Module Coordinator	<p>Name Dr. Karin Zbinden</p> <p>Phone +41 31 910 21 59</p> <p>Email karin.zbinden@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"> • Dr. Bruno Durgiai • Dr. Markus Schaller • Dr. Karin Zbinden
Entry Requirements	Literature for preparation will be provided.
Learning Outcomes and Competences	<p>After completing the module students will be able to:</p> <ul style="list-style-type: none"> • apply methods of analysis and assess their respective usefulness and limitations; • describe and assess different methods of enterprise evaluation; • identify and develop strategies of farms and forest enterprises as well as processing units; • assess challenges, potentials and risks of novel ideas and to integrate them in planning and implementation; • communicate with others with respect, self-reflection and productively.
Module Content	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.
Teaching / Learning Methods	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).

Assessment of Learning Outcome	<p>1) Written report (50%)</p> <p>2) Oral exam in small groups (carrousel, 50%)</p>
Bibliography	<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>Kobelt H, Schulte P, 2006. Finanzmathematik: Methoden, betriebswirtschaftliche Anwendungen und Aufgaben mit Lösungen. 8. Auflage, NWB Verlag, Herne, 300 S.</p> <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>Mathieu J, 2015. Die Alpen. Raum – Kultur – Geschichte. Reclam Verlag, Ditzungen, 254 S.</p> <p>Rudaz G, und Debarbieux B, 2014. Schweizerische Berggebiete in der Politik. vdf Verlag, Zürich, 134 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>
Language	German and English (students must be able to interact in German with local stakeholders)
Comments	The following sequences are compulsory for students: The three study weeks (1st week: end of September / beginning of October; 2nd week: mid-October; 3rd week: end 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.
Last Update	08.06.2016 / Karin Zbinden