

# Master in Life Sciences

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

<b>Module title</b>	<b>Sustainable Natural Resource Management</b>
<b>Code</b>	E3
<b>Degree Programme</b>	Master of Science in Life Sciences
<b>Group</b>	Environment
<b>Workload</b>	3 ECTS (90 student working hours: 42 lessons contact = 32 h; 58 h self-study)
<b>Module Coordinator</b>	<p><b>Name:</b> Dr. Dominic Blaettler  <b>Phone:</b> +41 (0)31 910 22 50  <b>Email:</b> <a href="mailto:dominic.blaettler@bfh.ch">dominic.blaettler@bfh.ch</a>  <b>Address:</b> Berner Fachhochschule, HAFL, Länggasse 85, 3052 Zollikofen</p>
<b>Lecturers</b>	<ul style="list-style-type: none"> <li>• Dr. Dominic Blaettler, BFH-HAFL</li> <li>• Sandra Wilhelm, éducation21</li> <li>• Guest lecturers</li> </ul>
<b>Entry requirements</b>	<p>To be able to successfully participate in this module, students should:</p> <ul style="list-style-type: none"> <li>• Have knowledge of the core concepts of natural resources management (NRM) and sustainable development, especially in their own field of expertise or study;</li> <li>• Have a basic understanding of concepts such as human behaviour, stakeholders, institutions and governance in NRM or environmental issues;</li> <li>• Take a strong interest in current issues at the human/environment interface.</li> </ul> <p>Documents covering these aspects will be made available on Moodle, along with key questions students should be able to answer (self-test). To prepare specifically for the module, students will have to read up literature before the start of the module in order to be well prepared for contact teaching. At the beginning of each day during the module week, a Quick Learning Assessment will be done to check on relevant aspects of the preparatory reading for the respective session.</p>
<b>Learning outcomes and competences</b>	<p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> <li>• Work with the core principles of sustainable NRM</li> <li>• carry out a stakeholder analysis, an institutional analysis and apply techniques of behaviour change</li> <li>• Differentiate between approaches to NRM and relate them to policy interventions/governance measures</li> <li>• Assess conflict potential over natural resources and devise ways of conflict mediation and dispute settlement (link between NRM and conflict management)</li> <li>• Express their own opinion, debate with others and moderate discussions</li> </ul>
<b>Module contents</b>	<p>The key focus and overarching topic of the module is sustainable natural resources management, understood as a complex and dynamic process of human-environment interaction. Conflicts will be a central issue, as natural resource management is often conflict management. Rio+20 serves as a starting point for the module: where do we stand regarding natural resources and their management, what are the challenges and where do we go? How are natural resources utilized, shared, by whom and how, and what norms and values regulate access to natural resources, their use and distribution?</p> <p>This paves the road for an Extended Case Study (Mongolia) where a number of the pertinent practical challenges of sustainable NRM become apparent. To go deeper</p>

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	requires having a closer look at theoretical and methodological aspects of NRM which go together with very concrete and real-life examples involving invited guest speakers from a variety of backgrounds. Topics include: human behaviour, stakeholders, institutions, governance, policy and conflict mediation. In addition, a series of case studies will shed light on the diversity of approaches for the management of different natural resources (forest, land, water). The case studies will be selected to reflect different geographical regions, different scales of assessment, different methods of analysis and different sources of conflict and potential solutions.																								
<b>Teaching / learning methods</b>	<ul style="list-style-type: none"> <li>• thematic/methods inputs (lectures)</li> <li>• Guest lectures</li> <li>• Debates, and debate moderation</li> <li>• Case study exercises, group work (“family tables”)</li> <li>• Self-test</li> </ul>																								
<b>Assessment of learning outcome</b>	<ol style="list-style-type: none"> <li>1. Final written exam, open book, (80%)</li> <li>2. Assessment of group moderation &amp; discussion summary (20%)</li> </ol>																								
<b>Format</b>	Winter School																								
<b>Timing of the module</b>	Autumn semester, CW 4 <table border="1"> <thead> <tr> <th>Day of the block week</th> <th>&lt;1</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>&gt;5</th> </tr> </thead> <tbody> <tr> <td>Contact teaching (lessons)</td> <td></td> <td>8.5</td> <td>8.5</td> <td>8.5</td> <td>8.5</td> <td>8</td> <td></td> </tr> <tr> <td>Self-study (hours)</td> <td>40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>18</td> </tr> </tbody> </table>	Day of the block week	<1	1	2	3	4	5	>5	Contact teaching (lessons)		8.5	8.5	8.5	8.5	8		Self-study (hours)	40						18
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<b>Venue</b>	Zollikofen																								
<b>Bibliography</b>	<p>Core reading for the Module:</p> <p>Chapin FS, Kofinas GP, Folke C, 2009. Principles of Ecosystem Stewardship: Resilience-based Natural Resource Management in a Changing World. New York: Springer.</p> <p>SDC PED, 2011. Stakeholder Analysis. Bern: SDC.</p> <p>SDC, 2016. Analysing informal local governance institutions. Bern: SDC.</p> <p>Gardner GT, Stern PC, 2002. Environmental problems and human behavior. 2nd ed. Boston, MA: Pearson Custom Publishing.</p>																								
<b>Language</b>	English																								
<b>Links to other modules</b>	There is a link to several specialisation modules dealing with sustainability (e.g. “Holistic assessment of production systems” of BFH or “Policies and institutions as drivers for development and innovation” of BFH).																								
<b>Comments</b>																									
<b>Last Update</b>	23.02.2018																								