

Master in Life Sciences

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

Module title	Journal Club Environmental and Natural Resource Sciences
Code	E1
Degree Programme	Master of Science in Life Sciences
Group	Environment
Workload	3 ECTS (90 student working hours: 42 lessons contact = 32 h; 58 h self-study)
Module Coordinator	<p>Name: Dr. Lindsey Norgrove Phone: +41 (0)31 910 21 94 Email: lindsey.norgrove@bfh.ch Address: Berner Fachhochschule, HAFL, Länggasse 85, 3052 Zollikofen</p>
Lecturers	<ul style="list-style-type: none"> • Dr. Lindsey Norgrove, BFH • Dr. François Lefort, HES-SO • Dr. Philippe Corvini, FHNW • Possibly guest lecturers
Entry requirements	<p>Students will be asked to read the selected articles before the start of the module and select their preferred papers Preferences (1-6) should be listed in the provided excel file and emailed to the module coordinator at least two weeks before the start of the module. A self-test will be made available on Moodle similar to the morning tests, so that students can get used to the format.</p>
Learning outcomes and competences	<p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> • Grasp main ideas of a scientific publication • Identify novelties in approach, methods and results • Describe to peers the conclusions and their relevance to the scientific community • Critically reflect on the above • Understand meta-analyses
Module contents	<p>Lecturers from the three schools identify recent peer-reviewed papers from their specialization that are meaningful to a wider public (e.g. from Nature, Science). They provide a general matrix for analysis and questions specific to each paper. Papers are grouped into several themes (one per day) and participating lecturers take responsibility for entire themes. Students choose a paper of their interest for in-depth study and prepare a presentation, either individually or in pairs, to their classmates. Yet, all students read all the 25-30 papers as preparation for the scientific debate in class and further students act as discussants, preparing critical questions.</p> <p>The module is structured as follows into the seven sessions:</p> <ol style="list-style-type: none"> 1. Introduction: The process of scientific publishing (incl. peer review); the idea of the journal club; tasks and responsibilities of students; allocation of papers; etiquette in scientific debates; team work contract, if applicable; presentation skills, systematic reviews and meta-analyses. 2. Reading and online coaching (students stay in their home school; the lecturers for each theme are available remotely for questions; the module coordinator is available remotely) 3.-7. Journal club in the narrow sense with the following structure (moderation by the lecturer responsible for the theme of the day)

	<p>a) Introduction by the lecturer responsible for the theme</p> <p>b) Presentations and debate for each paper, discussants give their individual arguments in the debate The lecturer responsible for the theme corrects for each paper any wrong concepts presented by students</p> <p>c) Wrap-up by the lecturer: What are the links and cross-cutting issues between the papers, what can we learn from the debates?</p> <p>d) Overall evaluation (week 7 only) test (20', multiple choice, on Moodle) on all papers can be set at any time of the day</p>
Teaching / learning methods	<p>Inputs on general principles illustrated by examples from NRM and followed by exercises</p> <p>Seminar style for sessions 3-7</p>
Assessment of learning outcome	<ol style="list-style-type: none"> 5 tests (written, individual, open-book). The results of the best 4 tests count (30%) Presentation (50%) Performance as discussant (20%)
Format	7-weeks
Timing of the module	Autumn semester, CW 38-44
Venue	Bern and/or online
Bibliography	<p><u>Pre-course material:</u></p> <p>30 publications will be uploaded on Moodle four weeks before the start of the module.</p> <p>Luederitz C, Meyer M, Abson DJ, Gralla F, Lang DJ, Rau AL, von Wehrden H, 2016. Systematic student-driven literature reviews in sustainability science—an effective way to merge research and teaching. <i>Journal of Cleaner Production</i>, 119, 229-235.</p>
Language	English
Links to other modules	The framework for analysis could be useful also in other modules where papers play an important role.
Comments	<p>The module will be given by lecturers from the three schools; the lecturers from HES-SO and FHNW contribute one theme each linked to their specialisations (including identifying suitable papers and guiding through the respective day).</p> <p>The present proposal includes systematic reviews / meta-analyses only as a topic, which will be illustrated by examples.</p>
Last Update	06.03.2026