

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.

Master in Life Sciences

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

	<p>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)</p> <p>3.-7. Journal club in the narrow sense with the following structure (moderation by the lecturer responsible for the theme of the day)</p> <ol style="list-style-type: none"> Morning test (20', multiple choice, on Moodle) on all papers Introduction by the lecturer responsible for the theme 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 Wrap-up by the lecturer: What are the links and cross-cutting issues between the papers, what can we learn from the debates? Overall evaluation (week 7 only)
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 morning tests (written, individual, open-book). The results of the best 4 tests count (30%) Presentation (50%) - form depends on the number of participants: <ul style="list-style-type: none"> teams of two or more (group mark) individual presentation Performance as discussant (individual) (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. 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	04.04.2024