

Master's Degree in Sustainable Development



# Medium-term syllabus MSD 2017 - spring semester 2022

subject to modifications/13.12.2021 (first online publication)/CCh

This medium-term syllabus serves all students as a tool to plan their studies. The adaptions are published regularly, usually simultaneously with the upload of the course directory of the University of Basel/once a semester.

In addition to the guidelines of the Master's Degree in Sustainable Development, the medium-term syllabus contains information regarding titles, teaching, format, credit points, frequency and in some cases also on admission requirements of specific classes. Please consider also the information whether a class is mandatory or not.

For details regarding learning objectives, content, timetable, allocated rooms, participation criteria, registration modalities of the courses and final assessment, please consult the <u>detailed course directory</u>.

Content-related information to the three focus areas and modules are documented in the guidelines, in the study regulations and on the <u>website</u> <u>MSD</u>. Also consider the "optimal course progression" plans (for full time and part time study available; see <u>downloads MSD 2017</u>).

Shortcuts of the course formats (alphabetical order, translation according to glossary of Unibas):

C: course; CL: core lecture (Kernvorlesung); Coll: colloquium; FT: field trip (Exkursion); I: internship (Praktikum); L: lecture; PC: practical course (Übung); Pro: project; S: seminar; Tut: tutorial.

Further selected shortcuts (translation according to glossary of Unibas): fall: fall semester; spring: spring semester;

LA: learning agreement; LC: learning contract; TA: teaching assignment;

MSE: Man-Society-Environment; head = Prof. Dr. Holm (natural sciences); SRG: Sustainability Research Group; head = Prof. Dr. Burger (social sciences); EnvEcon: Environmental Economics; head = Prof. Dr. Krysiak (economics).

# Curriculum (according to the three focus areas; see study regulations §7)

### **Natural Sciences**

- Complementary Knowledge modules (CK)
  - in Social Sciences (CK Soc) 12 CP
  - in Economics (CK Econ) 12 CP
- Interdisciplinary Research in Sustainability (IRS)24 CP
- Core Competences in Natural Sciences (CC Nat) 15 CP
- Preparation Master's Thesis in Natural Sciences (PM Nat) 15CP
- Master's Thesis Natural Sciences 30 CP
- Focal Areas in Sustainability Research module (FASR) 12 CP

### **Social Sciences**

- Complementary Knowledge modules (CK)
  - in Natural Sciences (CK Nat) 12 CP
  - in Economics (CK Econ) 12 CP
- Interdisciplinary Research in Sustainability (IRS) 24 CP
- Core Competences in Social Sciences (CC Soc) 15 CP
- Preparation Master's Thesis in Social Sciences (PM Soc) 15 CP
- Master's Thesis Social Sciences 30 CP
- Focal Areas in Sustainability Research module (FASR) 12 CP

### **Economics**

- Complementary Knowledge modules (CK)
  - in Natural Sciences (CK Nat) 12 CP
  - in Social Sciences (CK Soc) 12 CP
- Interdisciplinary Research in Sustainability (IRS) 24 CP
- Core Competences in Economics (CC Econ) 15 CP
- Preparation Master's Thesis in Economics (PM Econ) 15 CP
- Master's Thesis Economics 30 CP
- Focal Areas in Sustainability Research module (FASR) 12 CP

# Complementary Knowledge modules (CK) Complementary Knowledge in Natural Sciences (CK Nat) 12 KP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
41828: Perspectives of Natural Sciences on Sustainability	P. Holm MSD-MSE	L + PC	3	Fall 21	Every fall	c) a first degree in natural science (major or minor).
20721: Ecosystems – Concepts, Principles and Processes	<b>G. Erni Cassola</b> J. Wiegleb MSD- MSE	L + PC	3	Fall 21	Every fall	
40076: Technical Basis of Generation, Distribution and Storage of Energy	W. Hoffelner MSD with TA	L + PC	3	Spring 22	Every spring	
36792: Terrestrial Ecosystem Ecology and Sustainable Landuse	A. Kahmen Botany & Ecology	L	2	Spring 22	Every spring	
50260: Ecology and Evolution	J. Beck MSD with TA	L	1	Spring 22	Every spring	

# Complementary Knowledge in Social Sciences (CK Soc) 12 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
41829: Perspectives of Social Sciences on Sustainability	R. Emmenegger MSD-SRG	L + PC	3	Fall 21	Every fall	These classes are mandatory. A different choice is only allowed to students who have
14253: Environmental Ethics and Intergenerational Justice	B. Schmitz MSD with TA	S	3	Fall 21	Every fall	<ul> <li>a) attended and accredited the same class(es) in their bachelor's degree;</li> <li>b) attended and accredited comparable class(es) in their bachelor's degree;</li> </ul>
11513: Sustainability: A new Societal Paradigm?	P. Burger MSD-SRG	L + PC	3	Spring 22	Every spring	c) a first degree in social science (major or minor).
17403: Governance, Sustainable Development and Democracy	R. Emmenegger MSD-SRG	S	3	Spring 22	Every spring	If a), b) or c) applies to you, other class(es) are to be taken. These are to be fixed in a learning agreement signed by Prof. P. Burger (template available as download).

# Complementary Knowledge in Economics (CK Econ) 12 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
48981: Intensive Introduction to Intermediate Economics	D. Illic/Econ	L	6	Fall 21	Every fall	These classes are mandatory. A different choice is only allowed to students who have a) attended and accredited the same class(es) in their bachelor's degree; b) attended and accredited comparable class(es) in their bachelor's degree;
10160: Environmental and Resource Economics	F. Krysiak/ EnvEcon- MSD Ch. Nolde/ Econ N. Fricker/ Econ	L	6	Spring 22	Every spring	c) a first degree in economics (major or minor).  If a), b) or c) applies to you, other class(es) are to be taken. These are to be fixed in a learning agreement signed by Prof. F. Krysiak (template available as download).

# Interdisciplinary Research in Sustainability (IRS) 24 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
48953: Sustainable Develop- ment: Introduction into Topics and Approaches	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	CL	3	Fall 21	Every fall	Mandatory. Please consider the special passing requirement for core lectures according to the detailed course directory.
48954: Tools and Methods for Interdisciplinary Research	M. Christen MSD with TA-SRG	CL	3	Fall 21	Every fall	Mandatory. Please consider the special passing requirement for core lectures according to the detailed course directory.
48955: Tools and Methods of Natural Sciences Research	J. Wiegleb MSE-MSD	S	3	Spring 22	Every spring	Mandatory. Methods in natural sciences.
60867: Qualitative Research in Sustainability Science.	A. Sohre/MSD	С	3	Spring 22	Every spring	Mandatory. Methods in social sciences. Those who have attended 50901 or 55161 in a former semester are not accepted anymore.

43494: Methods in Economics: Survey Research Methodology (new number and title)	D. Auer/Econ	Coll	3	Spring 22	Every spring	Mandatory. Methods in economics.  NOTE: If you have attended the coll. "50768: Survey Data Collection and Analytics" with Prof. Dr. A. Kachi in a former semester you are not allowed to attend this colloquium 43494 and earn CP anymore.
50729: Training for Sustainability Research	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD M. Christen, TA MSD-SRG	Pro	6	Spring 22	Every spring	Mandatory.
Master colloquium A: 50399: Intro- duction to Ongoing MSD Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	Coll	1	Spring 22	Every semester	Mandatory. Enrollment of the colloquia A, B and C according to this listing. For details regarding participation and assessment see detailed
Master colloquium B: 52317: Presentation of Concepts of MSD Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	Coll	1	Spring 22	Every semester	course directory.
Master colloquium C: 53982: Presentation of Results of MSD Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	Coll	1	Spring 22	Every semester	

# Core Competences module (CC) Core Competences in Natural Sciences (CC Nat) 15 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
49077: Global Change Resources	M. Andres MSD with TA	L + PC	3	Fall 21	Every fall	Mandatory.
50264: Global Change Ecology	Ph. Hirsch MSE-MSD	L + PC	3	Spring 22	Every spring	Mandatory.
41821: Ecological Sustainability Aspects of Climate Change	D. Schindler MSD with TA	L + PC	3	Fall 21	Irregular	For choice.

25635: Environmental Systems: Transformation of Energy Systems	R. Rechsteiner Geosciences	L + PC	2	Fall 21	Every 2nd fall	For choice.
62246: Sustainability in Practice	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ EnvEco all MSD	С	2	Fall 21	First time	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.
23839: Introduction to Research Projects of Environmental Geosciences and Biogeochemistry (new title!)	Ch. Alewell, M. Lehmann Geosciences	L+PC	3	Spring 22	Every spring	For choice. Takes place as a bloc course. Former title: Pedosphere and Hydrosphere - Biogeochemistry and Modelling of Element and Sediment Cycling
24172: Marine Biological Considerations at the Strait of Gibraltar	P. Holm, K. Bussmann, MSD-MSE	FT	3	Spring 22	Every spring	For choice. Those who have attended the field trip in a former semester and have earned CP cannot register again.
24129: Sustainability in Ecosystem Research (field trip)	Ch. Alewell, A. Lang Geosciences	FT	2	Fall 20	Irregular	For choice. Field trip takes place as a bloc course according to announcement in the detailed course directory.
12127: Sustainability in Ecosystem (project)		Р	3	Fall 20	Irregular	For choice. Only in combination with 24129.
60310: Introduction to organic farming systems	P. Mäder et al. Botany with TA	L + PC	3	Spring 22	Irregular	For choice.
23832: Oceanography: Regional Oceanography and Marine Ecosystems	M. Lehmann Geosciences	L	2	Spring 22	Every spring	For choice.
27336: Pflanzenschutz und nachhaltiger Pflanzenbau	<b>D. Klauser</b> , P. Flury Integr. Biology	L	1	Spring 22	Every spring	For choice.

# Core Competences in Social Sciences (CC Soc) 15 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
14253: Environmental Ethics and Intergenerational Justice	B. Schmitz MSD with TA	S	3	Fall 21	Every fall	Mandatory.
11513: Sustainability: A New Societal Paradigm?	P. Burger MSD-SRG	L + PC	3	Spring 22	Every spring	Mandatory.
15995: Political Ecology and Societal Transformations from Anthropological Perspective	P. van Eeuwijk MSD with TA- Ethno	S	3	Fall 21	Every fall	For choice.
41822: Governance of Energy Transition	A. Sohre MSD- SRG	S	3	Fall 21	Irregular	
55407: Risk Society, Science and Nature	R. Emmeneg- ger/MSD-SRG	S	3	Fall 21	Irregular	
55408: Future Mobilities	P. Burger MSD-SRG	S	3	Fall 21	Irregular	
62246: Sustainability in Practice	P. Holm/MSE, P. Burger/SRG, F. Krysiak/EnvEco all MSD	С	2	Fall 21	First time	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.
62624: The Climate Movement: Actors and Strategies in the Context of Global Governance	B. Bornemann, SozSRG	S	3	Fall 21	Once only	For choice.
17403: Governance, Sustainable Development and Democracy	R. Emmeneg- ger MSD-SRG	S	3	Spring 22	Every spring	
43667: Changing Individual Energy Behaviour - Approaches and Strategies	I. Schubert MSD-SRG	S	3	Spring 22	Every spring	
23620: Capabilities and Sustainability	M. Christen MSD-SRG	S	3	Spring 19	Irregular	
14254: Integrative Methods	P. Burger MSD-SRG	S	3	Spring 22	Irregular	
57243: Quality of Life and Sustainability: Theoretical and Empirical Approaches	P. Burger MSD-SRG	S	3	Spring 20	First time	

Core Competences in Economics (CC Econ) 15 CP
Revised master's degree programs in economics implemented by fall 21. Course offer is modified, more changes in the upcoming semesters. For details see medium-term syllabus of the faculty.

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
14255: Environmental Economics (new title)	F. Krysiak MSD-EnvEcon	L	3	Fall 21	Every fall	No mandatory courses for this module.  The choice of classes for this module is to
12036: Econometrics	K. Schmidheiny Econ	L	6	Fall 21	Every fall	be done out of this list.  Please consider the detailed course direc-
48409: Corporate Responsibility (new title)	G. von Schnur- bein/Econ	Coll	3	Fall 21	Every fall	tory for more information regarding participation requirements etc.
62651: Theory of the Firm (new)	C. Roux/Econ	L	3	Fall 21	Every fall	
41957: Advanced Econometrics (new title)	K. Schmidheiny Econ	L	3	Fall 21	Every fall	
10639: Consumer Behaviour: Theoretical Foundations (new title)	M. Brendl Econ	Coll	3	Fall 21	Every fall	
34505: Environmental Law and Public Policy. Risk and Regulation: Sustainability in the Food Sector (new title)	J. Wargo Econ	L	3	Summer School: 16-26.08.21	Irregular	
43030: Public Opinion and Science Communication (new title)	A. Kachi Econ	L	3	Fall 21	Every fall	
62643: Consumer Behavior: Market- place Applications (new)	J. Laran Econ	С	3	Fall 21	First time	
62650: Behavioral Science (new)	M. Brendl Econ	L	3	Fall 21	First time	
62705: Microeconomics of Decision Making (new)	G. Nöldeke Econ	L	3	Fall 21	First time	
56949: The Economics of Climate Change	R. Lordan-Per- ret/Econ	Coll	3	Fall 21	Every Fall	
62246: Sustainability in Practice	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ EnvEco all MSD	С	2	Fall 21	First time	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.

48407: Experimental Dev. Economics	W. G. Jack Econ	L	3	Fall 20	irregular	No mandatory courses for this module.  The choice of classes for this module is to be done out of this list.
10625: Advanced International Trade and Business	R. Weder Econ	L	6	Spring 22	Every spring	Please consider the detailed course directory for more information regarding partici-
17691: International Trade, Resources and the Environment	M. S. Taylor Econ	L	3	Spring 22	Every spring	pation requirements etc.
43498: Psychological Theory in Consumer Behavior	C. M. Brendl Econ	Coll	6	Spring 22	Every spring	
10616: Machine Learning	D. Maringer Econ	L	3	Spring 21	Every spring	
16036: Microeconometrics and Statistical Learning (new title)	Ch. Kleiber Econ	L	3	Spring 22	Every spring	
56945: Dynamic Optimization in Envi- ronmental Economics	P. Dato Econ	L	3	Spring 21	Last time	
53713: Environmental and Energy Economics	F. Krysiak EnvEcon-MSD	S	6	Spring 21	every fall (from fall 22 on)	
50877: Economics of Global Health	G. Fink Econ	L	3	Spring 22	Every spring	
62655: Energy Economics	H. Weigt Econ	L	3	Spring 22	Every spring	
60335: Introduction to Corporate Responsibility	G. von Schnur- bein/Econ	L	3	Spring 22	Every spring	
40105: Macroeconomics and Finance	H. Zimmermann et al. Econ	L	6	Spring 22	Every spring	
60336: Population and Economic Growth	R. Stelter Econ	L	6	Spring 22	Every spring	
63593: Methods in Policy Impact Assessment	R. Delzeit A. Schmidt Geosciences	L + PC	3	Spring 22	Every spring	

# **Preparation Master's Thesis module (PM)**

Preparation Master's Thesis in Natural Sciences (PM Nat) 15 CP *The classes of this module are not published in the course directory but must be fixed and confirmed with a learning agreement (use MSD-form for this purpose, available on our website).* 

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	С	3	Spring 22	Every semester	Mandatory.
64278: MSD Life Science	P. Holm J. Wiegleb MSE-MSD	Coll	1	Spring 22	Every semester	Mandatory for all students who write the master's thesis within the focus area of natural science – to be transferred to this module (published in the Core Competences in Natural Science module).  Students who register for this colloquium more than once, may transfer the additional credits to the Focal Areas in Sustainability Research module.
Independent Research Work (IRW)	P. Holm et al. MSE- MSD	ı	6 or 11	On agreement		Mandatory for all students who write the master's thesis within the focus area of natural science. The performance has to be fixed and confirmed in a learning contract in advance. It either contains 6 CP (if you write an additional seminar paper of 5 CP) or 11 CP (without seminar paper). Use template of LC from MOnA.
Seminar Paper	P. Holm et al. MSE- MSD		5	On agreem	nent	Only if students opt for the IRW of 6 CP. The performance has to be fixed and confirmed in a learning contract in advance. Use template of LC from MOnA.

# Preparation Master's Thesis in Social Sciences (PM Soc) 15 CP

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Ec all MSD	С	3	Spring 22	Every semester	Mandatory.
57245: Sustainability Science Research (social dimension)	P.Burger R. Emmenegger SRG-MSD	Coll	1	Spring 22	Every semester	Mandatory.
50267: Current Topics in Social Science Based on Sustainabil- ity Research	A. Sohre SRG-MSD	S	3	Spring 22	Every spring	Mandatory.
Methods: 46737: Experimental research methods in social sciences	I. Schubert SRG-MSD	S	3	Spring 22	Irregular	For this module students have to attend a method course of min. 3 CP. The choice is to be done out of this list.
Methods: 31938: Qualitative Data Analysis in African Studies	E. Macamo Afr. Studies	S	3	Fall 21	Every fall	
Methods: 33426: Quantitative Data Analysis in African Studies	E. Macamo Afr. Studies	S	3	Spring 22	Every spring	
Methods: 48555: Research Methods in Social and Political Science (new title)	D. Höhmann Politic. Sciences	S	3	Fall 21	Every fall	
Methods: 49855: Research Methods in Social and Political Science (new title)	D. Höhmann Politic. Sciences	Tut	2	Fall 21	Every fall	
Seminar Paper			5	On agreem	ent	Mandatory. Details regarding modalities see fact sheet master's graduation.

Preparation Master's Thesis in Economics (PM Econ) 15 CP
Revised master's degree programs in economics implemented by fall 21. Course offer is modified, more changes in the upcoming semesters. For details see <a href="mailto:medium-term syllabus">medium-term syllabus</a> of the faculty.

No.: class title	Lecturer / sub- ject area	Format	СР	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, P. Burger/SRG, F. Krysiak/EnvEco all MSD	С	3	Spring 22	Every semester	Mandatory.
14255: Environmental Economics (new title)	F. Krysiak EnvEcon-MSD	L	3	Fall 21	Every fall	No other mandatory courses for this module.
12036: Econometrics	K. Schmidheiny Econ	L	6	Fall 21	Every fall	The choice of classes for this module is to be done out of this list.
29002: Electricity Markets	H. Weigt Econ	L	3	Fall 21	Every fall	Please consider the detailed course directory for more information regarding participation requirements etc.
10637: Internationale Politische Ökonomie (new)	B. Hefeker Econ	L	3	Fall 21	Every fall	
31950: Corporate Governance	A. Kind & M. Poltera/Econ	L	3	Fall 21	Every fall	
17691: International Trade, Resources and the Environment	M. S. Taylor Econ	L	3	Spring 22	Every Spring	
47275: Public Economics	B. Hintermann Econ	S	6	Spring 22	Every Spring	
16036: Microeconometrics and Statistical Learning (new title)	Ch. Kleiber Econ	L	3	Spring 22	Every spring	
62659: Numerical Methods and Optimization	H. Weigt Econ	L	3	Spring 22	Every spring	
63593: Methods in Policy Impact Assessment	R. Delzeit A. Schmidt Geosciences	L + PC	3	Spring 22	Every spring	

## Focal Areas in Sustainability Research module (FASR) 12

### List of recommended courses: subject to modifications. For more offers see online detailed course directory

There is no notification of courses for this module in the detailed course directory (published each semester). The students make their choice by themselves. The list below serves as a suggestion for the "FASR" module and covers one part of possible classes. We also recommend to review the course directories of other master's programs for lectures related to sustainable development (e.g. Changing Societies, Biology, Sociology, Economics, etc).

When choosing other classes, two criteria have to be considered:

- 1. The class has to be offered on master level module by the program in charge (see details in the course directory).
- 2. The class has to have a clear connection to sustainable development.

If you come across a course which is not listed and you would like to know whether it will be recognized or not you can send an email to <u>coordination-msd@unibas.ch</u>. Please list the course with the entire title and add the link to relevant entry of the detailed course directory, otherwise we cannot verify the potential recognition.

The courses have to be fixed in a learning agreement. Fact sheet and template are available on the website MSD/see downloads MSD 2017: <a href="https://www.msd.unibas.ch/en/services/downloads/msd-2017/">https://www.msd.unibas.ch/en/services/downloads/msd-2017/</a>

**MAKE SURE** you fulfill the **participation requirements** for the courses of your choice. Also, consider the details in the online course directory regarding **course application** and **enrollment**.

### **Natural Sciences**

NOTE: make sure, you fulfill any participation criteria. Especially, if you like to take a class in natural sciences and you have chosen the focus area in social sciences or in economics, you must have completed the "Complementary Knowledge in Natural Sciences" module (at least 8 out of 12 CP).

No.: class title	Lecturer	Format	СР	Frequency	Notes concerning the registration of the class for the specific module
50264: Global Change Ecology	P. Hirsch	L + PC	3		Offered by the MSD.  Special course inscriptions and entry requirements.  Students with focus area in natural sciences can't transfer the credits to the FASR module as these are two a
49077: Global Change Resources	M. Andres	L + PC	3	Every fall	mandatory classes for them (lectures 50265 & 49077).

41828: Perspectives of Natural Sciences on Sustainability	P. Holm	L + PC	3	Every fall	Offered by the MSD/TQNE: only for students without academic background in natural sciences and if they don't have to attend it for the "Complementary Knowledge in Natural Science" module.
41821: Ecological Sustainability Aspects of Climate Change	D. Schindler	L + PC	3	Every fall	Offered by the MSD. Special course inscription and entry requirements.
41280: Tree and Forest Ecology	G. Hoch M. Arend	L	2	Every fall	
23138: Sustainable Plant Systems	S. Martinez	L	2	Every fall	
22696: Environmental Systems: Atmosphere	S. Reimann	L	3	Every fall	
11718: Current Ecological and Health Issues in Africa	G. Fink, <b>J. Utzinger</b>	S	2	Every fall	
34578: Invasionsbiologie	HP. Rusterholz	L	2	Every fall	
41280: Tree and Forest Ecology	G. Hoch et al.	L	2	Every fall	
12127: Sustainability in Ecosystem Research	C. Alewell, A. Lang	Р	3	Irregular	Only in combination with 24129.
24129: Field trip: Sustainability in Ecosystem Research	C. Alewell, A. Lang	FT	2	Irregular	
15999: Globalization of Water Resources	H. Yang	L + PC	3	Last time fall 20.	Offered by the MSD. Last time fall 20.
23837: Soil System Sciences: Carbon Dynamics and Global Change	J. Leifeld	L + PC	3	Every 3. se- mester	
39717: Environmental Management: Flood Management in Switzerland	V. Röthlis- berger	PC	2	Irregular	
46957: Global Governance to Local Policy: The Climate Change and Biodiversity Perspectives	H. Rueff	L + PC	3	Irregular	
50260: Ecology and Evolution	J. Beck	L	1	Every spring	Offered by the MSD.
40076: Technical Basis of Generation, Distribution and Storage of Energy	W. Hoffelner	L + PC	3	Every spring	Students with focus area in social sciences and economics can't transfer the credits to the FASR module as the three

36792: Terrestrial Ecosystem Ecology	A. Kahmen	L	2	Every spring	courses are mandatory for the "Complementary Knowledge
and Sustainable Landuse					in Natural Sciences" module.
24172: Aquatic Ecosystems in Practice (Marine or Freshwater) – Functional Basics and Interaction with the Anthroposphere (new title).	P. Holm, K. Bussmann, Ph. Hirsch	FT	3	Irregular	Offered by the MSD. (Former title: Marine Biological Considerations at the Strait of Gibraltar). Those who have participated on the field trip during a former semester cannot attend it a second time.
23827: Soil System Sciences: Carbon Dynamics and Global Change	J. Leifeld	L + PC	3	Every 3. se- mester	
33587: Praktische Aspekte der Boden- biologie in der Landwirtschaft	P. Mäder	L + PC	3	Every spring	
33155: Marine Biogeochemistry and Biology in Elba, Italy	M. Lehmann et al.	FT	4	Every 2nd spring semes- ter	Special registration procedure; see online course directory
60310: Introduction to organic farming systems	P. Mäder et. al Botany with TA	L + PC	3	First time in spring 21	Co-offered by the MSD.
23832: Oceanography: Regional Oceanography and Marine Ecosystems	M. Lehmann Geosciences	L + PC	2	Every spring	
27336: Pflanzenschutz und nachhaltiger Pflanzenbau	<b>D. Klauser</b> , P. Flury/Integr. Biology	L	1	Every spring	
20045: Alpine Plant Ecology	E. Hiltbrunner et al.	FT	3	Every spring	
63591: The Interplay of Agriculture, Environmental and Energy Policy	R. Delzeit R. Argueyrolles	L	3	Every spring	
14630: Biological and Integrated Pest Management	R. Peveling	L + PC	2	Every spring	

## **Social Sciences**

NOTE: make sure, you fulfill any participation criteria. Especially, if you like to take a class in social sciences and you have chosen the focus area in natural sciences or in economics, you must have completed the "Complementary Knowledge in Social Sciences" module (at least 8 out of 12 CP)

No.: class title	Lecturer	Format	СР	Frequency	Remarks (for details see online course directory)
41829: Perspectives of Social Sciences on Sustainability	R. Emmeneg- ger	L + PC	3	Every fall	Offered by the MSD/TQNE: only for students without academic background in social sciences and if they don't have to attend it for the "Complementary Knowledge in Natural Science" module.
15995: Political Ecology and Societal Transformations from Anthropological Perspective	P. Van Eeuwijk	S	3	Every fall	The below listed courses are ffered by the MSD. Special course inscriptions and entry requirements.
33457: Water Supply & Sanitation in Subsaharian Africa: The Example of Sambia	P. Burger	S	3	Irregular	
41822: Governance of Energy Transitions	A. Sohre	S	3	Irregular	
55407: Risk Society, Science and Nature	R. Emmeneg- ger	S	3	Irregular	
55408: Future Mobilities	P. Burger	S	3	Irregular	
23620: Capabilities and Sustainability	M. Christen	S	3	Irregular	
14254: Integrative Methods	P. Burger	S	3	Irregular	
57243: Quality of Life and Sustainability: Theoretical and Empirical Approaches	P. Burger	S	3	Irregular	
43667: Changing Individual Energy Behaviour – Approaches and Strategies	I. Schubert	S	3	Every spring	
17403: Governance, Sustainable Development and Democracy	R. Emmeneg- ger MSD-SRG	S	3	Every spring	Offered by the MSD. Special course inscription. Students with focus area in natural sciences and economics can't transfer the credits to the FASR module.

50267: Current Topics in Social Science Based Sustainability Research	A. Sohre	S	3	Every spring	Offered by the MSD. Special course inscription. Students with focus area in social sciences can't transfer the credits to the FASR module.
62602: Basel Sustainability Forum - Beyond the SDGs (Sustainable Development Goals)	M. Bergman et al.	L	2	Fall 21	M. Bergman offers similar classes almost every semester.
58578: The Political Consequences of Economic Inequality (new title)	D. Traber	S	3	Irregular	
53524 Vorlesung: Climate Change and Religion	J. Köhrsen	S	3	Irregular	
55009: A Critical Reflection of Corruption and Sustainable Development	L. Koechlin	S	3	Once only	Fall 19
62624: The Climate Movement: Actors and Strategies in the Context of Global Governance	B. Bornemann SozSRG	S	3	Once only	Fall 21

**Economics:** Revised master's degree programs in economics implemented by fall 21. Course offer is modified, more changes in the upcoming semesters. For details see <u>medium-term syllabus</u> of the faculty.

NOTE: make sure, you fulfill any participation criteria. Especially, if you like to take a class in economics and you have chosen the focus area in natural sciences or in social sciences, then you must have completed the "Complementary Knowledge in Economics" module (at least 8 out of 12 CP).

No.: class title	Lecturer	Format	СР	Frequency	Remarks (for details see online course directory)
14255: Environmental Economics (new title)	F. Krysiak	L	3	Every fall	
43030: Public Opinion and Science (new title)	A. Kachi	L	3	Every fall	
29002: Electricity Markets (new title)	H. Weigt	L	3	Every fall	
31954: International Economics	T. Erhardt, C. Hefeker	S	6	Every fall	
34505: Environmental Law and Public Policy. Risk and Regulation: Sustainability in the Food Sector (new title)	J. Wargo/Econ	L	3	August 21	Summer school: 1626.08.21: Special course application. For details see course directory.
10639: Consumer Behaviour: Theoretical Foundations (new title)	M. Brendl/Econ	Coll	3	Every fall	

56949: The Economics of Climate Change	R. Lordan-Per- ret/Econ	Coll	3	Every fall	
48407: Experimental Dev. Economics	W. G. Jack	L	3	Irregular	
17691: International Trade, Resources and the Environment	M. Scott Taylor	L	3	Every spring	
43700: Perspectives of Economics on Sustainability	V. Calenbuhr	L + PC	3	Every spring	Offered by the MSD/TQNE: only for students without academic background in economics.
50877: Economics of Global Health	G. Fink	L	3	Every spring	
53713: Environmental and Energy Economics	F. Krysiak	S	6	Every fall (from fall 22 on)	NOTE: Special participation requirements and application process according to information in the detailed course directory.
33095: Ökonomie von Wassermärkten	H. Weigt	С	3	Every spring	Last time in spring 21.
60335: Einführung Corporate Responsability	G. von Schnur- bein	L	3	Every spring	

# Other Faculties/interdisciplinary courses

NOTE: make sure, you fulfill any participation criteria. For details see detailed course directory.

No.: class title	Lecturer	Format	СР	Frequency	Remarks (for details see online course directory)
43701: Interdisciplinary Approach to Sustainability	J. Godemann	S	3	Every spring	Offered by TQNE/MSD. Special course application.
48607: Public Health in light of the Sustainable Development Goals	N. Künzi	L + PC		Every fall	
36844: Sustainability and Health Governance	C. Baez-Ca- margo, K. Nadakavuka- ren Schefer	L	6	Every spring	
62246: Sustainability in Practice	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	С	2	First time in fall 21	Offered by TQNE/MSD. Special participation requirements and course application.

58609: Gesellschaftliche Herausforderungen des Klimawandels	B. S. Elger et al.	L	2	Once	Fall 21
62181: Nachhaltigkeitsethik	St. Feldhaus	L	3	Once	Fall 21
64057: Ethik und politische Philosophie der Klimakrise. Ausgewählte Texte	Ch. Rehmann- Sutter	S	2	Once	Spring 22
20580: Umweltrecht	D. Turnherr Keller	L	6	Every spring	
60518: Wachstumsfreie Wirtschaft	A. Brenner	S	4	Once	Spring 22

### **Master's Thesis**

For modalities, the choice of the topic and the choice of the reviewer(s) please check the fact sheet regarding the Master's Thesis MSD 2017, see our website/downloads MSD 2017: <a href="https://www.msd.unibas.ch/en/services/downloads/msd-2017/">https://www.msd.unibas.ch/en/services/downloads/msd-2017/</a>