

Medium-term syllabus MSD 2017 - spring semester 2023

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This medium-term syllabus serves all students as a tool to plan their studies. The adaptations 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 [detailed course directory](#).

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

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).

Color coding main topics

● = dark blue = food, agriculture & consumption; ● = pink = governance; ● = brown = biodiversity; ● = light blue = energy.

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) 15 CP
- 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

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Complementary Knowledge modules (CK)

Complementary Knowledge in Natural Sciences (CK Nat) 12 KP

No.: class title	Lecturer / subject area	Format	CP	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 22	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; c) a first degree in natural science (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. P. Holm (template available as download).
20721: Ecosystems – Concepts, Principles and Processes ●	G. Erni Cassola J. Wiegleb MSD-MSE	L + PC	3	Fall 22	Every fall	
40076: Technical Basis of Generation, Distribution and Storage of Energy ●	R. Lordan-Perret MSD with TA	L + PC	3	Spring 23	Every spring	
36792: Terrestrial Ecosystem Ecology and Sustainable Landuse ●●	A. Kahmen Botany & Ecology	L	2	NOT offered in spring 23	Every spring	
34499: Current Research in Stream Ecology	St. von Fumetti Geosciences	S	2	Applies only to spring semester 2023!		
50260: Ecology and Evolution ●	J. Beck MSD with TA	L	1	Spring 23	Every spring	

Complementary Knowledge in Social Sciences (CK Soc) 12 CP

No.: class title	Lecturer / subject area	Format	CP	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 22	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;
14253: Environmental Ethics and Intergenerational Justice ●●	B. Schmitz MSD with TA	S	3	Fall 22	Every fall	

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11513: Sustainability: A new Societal Paradigm? ●	B. Bornemann M. Christen MSD-SRG	L + PC	3	Spring 23	Every spring	c) a first degree in social science (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 PD Dr. B. Bornemann. (template available as download).
17403: Governance, Sustainable Development and Democracy ●●	B. Bornemann MSD	S	3	Spring 23	Every spring	

Complementary Knowledge in Economics (CK Econ) 12 CP ●●●●

No.: class title	Lecturer / subject area	Format	CP	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 22	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; 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).
10160: Environmental and Resource Economics ●	R. Lordan-Pe- rret/ et al. EnvEcon-MSD Ch. Nolde/Econ	L	6	Spring 23	Every spring	

Interdisciplinary Research in Sustainability (IRS) 24 CP

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
48953: Sustainable Development: Introduction into Topics and Approaches ●●●	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	CL	3	Fall 22	Every fall	Mandatory. Please consider the special passing requirement for core lectures according to the detailed course directory.

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48954: Tools and Methods for Interdisciplinary Research	M. Christen MSD with TA-SRG	CL	3	Fall 22	Every fall	Mandatory. Please consider the special passing requirement for core lectures according to the detailed course directory.
<p>Choice of courses in disciplinary methods</p> <p>According to the MSD study regulations, students have to take three courses on disciplinary methods (3 x 3 CP). These courses provide insights into the methods of the three main and related MSD disciplines that are particularly relevant to the degree program.</p> <p>In spring semester 2023 the offer will be extended by alternative method courses of a higher level. NOTE: These are only eligible for students with preliminary knowledge and first degrees in this field. I.e., by default, students enroll in the officially published courses (48955, 60867 or 43494) and the credit points are automatically awarded for this module.</p> <p>Since the alternative courses are only listed in the medium-term syllabus but not published in the online course directory for this module, students must complete a learning agreement in advance (template see downloads MSD 2017) for the recognition of credit points. Prior to that, they get in touch with the responsible (see below) by email:</p> <p>Prof. Dr. P. Holm: Methods in natural sciences; Prof. Dr. Paul Burger (until 31.01.2023)/Dr. Basil Bornemann (01.02.23 onwards): Methods in social sciences; Prof. Dr. Frank Krysiak: Methods in economics.</p>						
Methods in natural sciences by default: 48955: Tools and Methods of Natural Sciences Research	G. Erni Casola MSE-MSD	S	3	Spring 23	Every spring	Students have to enroll for the basic lecture 48955. Only students with preliminary knowledge and first degree in this field are allowed to take one of the listed alternatives. For details see information on the top of this page.
Alternative for students with preliminary knowledge and disciplinary degree: <ul style="list-style-type: none"> 57405: Analytical chemistry of the atmosphere – quantifying climate change 	D. Häussinger et al./Chem.	L	3	Spring 23	irregular	Alternative eligible only for students with preliminary knowledge of 48955. It's mandatory to complete a learning agreement in advance.

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2023

<p>Methods in social sciences by default:</p> <p>60867: Qualitative Research in Sustainability Science.</p> <p>Alternative for students with preliminary knowledge and disciplinary degree:</p> <ul style="list-style-type: none"> 50901: Qualitative Data Analysis: Analyzing Text and Talk 	<p>A. Sohre/MSD</p> <p>M. Bergman/Soc</p>	<p>C</p> <p>S</p>	<p>3</p> <p>3</p>	<p>Spring 23</p> <p>?</p>	<p>Every spring</p> <p>irregular</p>	<p>Students have to enroll for the basic course 60867. Only students with preliminary knowledge and first degree in this field are allowed to take one of the listed alternatives. For details see information on the top of this page.</p> <p>Alternative eligible only for students with preliminary knowledge of 60867. It's mandatory to complete a learning agreement in advance.</p>
<p>Methods in economics, by default:</p> <p>43494: Methods in Economics: Survey Research Methodology</p> <p>Alternative for students with preliminary knowledge and disciplinary degree:</p> <ul style="list-style-type: none"> 62659: Numerical Methods and Optimization 16036: Microeconometrics and Statistical Learning 	<p>D. Auer/Econ</p> <p>H. Weigt/Econ</p> <p>K. Kleiber/Econ</p>	<p>Coll</p> <p>L</p> <p>L</p>	<p>3</p> <p>3</p> <p>3</p>	<p>Spring 23</p> <p>Spring 23</p> <p>Spring 23</p>	<p>Every spring</p> <p>Every spring</p> <p>Every spring</p>	<p>Students have to enroll for the basic course 43494. Only students with preliminary knowledge and first degree in this field are allowed to take one of the listed alternatives. For details see information on the top of the former page.</p> <p>Alternatives eligible only for students with preliminary knowledge of 43494. It's mandatory to complete a learning agreement in advance.</p>
<p>50729: Training for Sustainability Research ●●●</p>	<p>P. Holm/MSE, I. Schubert/SRG, - all MSD M. Christen, TA MSD-SRG</p>	<p>Pro</p>	<p>6</p>	<p>Spring 23</p>	<p>Every spring</p>	<p>Mandatory.</p>
<p>Master colloquium A: 50399: Introduction to Ongoing MSD Master's Thesis</p>	<p>P. Holm/MSE, B. Bornemann/SRG, F. Krysiak/Env Ec - all MSD</p>	<p>Coll</p>	<p>1</p>	<p>Spring 23</p>	<p>Every semester</p>	<p>Mandatory. Enrollment of the colloquia A, B and C according to this listing. For details regarding participation and assessment see detailed online course directory.</p>
<p>Master colloquium B: 52317: Presentation of Concepts of MSD Master's Thesis</p>		<p>Coll</p>	<p>1</p>	<p>Spring 23</p>	<p>Every semester</p>	
<p>Master colloquium C: 53982: Presentation of Results of MSD Master's Thesis</p>		<p>Coll</p>	<p>1</p>	<p>Spring 23</p>	<p>Every semester</p>	

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Core Competences module (CC)

Core Competences in Natural Sciences (CC Nat) 15 CP

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
65774: Digitalization and Sustainability: Friends or Foes?	Frank Krysiak et al.	L	2	Fall 22	Once only	The TC MSD strongly recommends to accredit this course for the FASR module.
62246: Sustainability in Practice ●●●●	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	Irregular	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.
49077: Global Change Resources ●	M. Andres MSD with TA	L + PC	3	Fall 22	Every fall	Mandatory.
50264: Global Change Ecology ●●	S. Abel MSE-MSD	L + PC	3	Spring 23	Every spring	Mandatory.
41821: Ecological Sustainability Aspects of Climate Change ●●	D. Schindler MSD with TA	L + PC	3	Fall 22	Irregular	For choice.
25635: Environmental Systems: Transformation of Energy Systems...●	R. Rechsteiner Geosciences	L + PC	2	Fall 21	Every 2nd fall	For choice.
23839: Introduction to Research Projects of Environmental Geosciences and Biogeochemistry (new title!)	Ch. Alewell, M. Lehmann Geosciences	L + PC	3	Spring 23	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, S. Abel, MSD-MSE	FT	3	Spring 23	Every spring	For choice. Those who have attended the field trip in a former semester and have earned CP cannot register again.
24129: From Anthropogenic Landscapes to Wilderness Management (field trip; new title) ●	Ch. Alewell, A. Lang Geosciences	FT	2	Fall 22	Irregular	For choice. Field trip takes place as a bloc course according to announcement in the detailed course directory.
12127: From Anthropogenic Landscapes to Wilderness Management (project; new title) ●		P	3	Fall 22	Irregular	For choice. Only in combination with 24129.

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60310: Introduction to organic farming systems ●●	P. Mäder et al. Botany with TA	L + PC	3	Spring 23	Irregular	For choice.
23832: Oceanography: Regional Oceanography & Marine Ecosystems ●	M. Lehmann Geosciences	L	2	Spring 23	Every spring	For choice.
27336: Pflanzenschutz und nachhaltiger Pflanzenbau ●●	D. Klauser , P. Flury Integr. Biology	L	1	Spring 23	Every spring	For choice.

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

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
65774: Digitalization and Sustainability: Friends or Foes?	F. Krysiak et al. MSD-Econ	L	2	Fall 22	Once only	The TC MSD strongly recommends to accredit this course for the FASR module.
62246: Sustainability in Practice ●●●●	P. Holm/MSE , P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	Irregular	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.
14253: Environmental Ethics and Intergenerational Justice ●●	B. Schmitz MSD with TA	S	3	Fall 22	Every fall	Mandatory.
11513: Sustainability: A New Societal Paradigm? ●	B. Bornemann M. Christen MSD-SRG	L + PC	3	Spring 23	Every spring	Mandatory.
41822: Governance of Energy Transition ●●	A. Sohre MSD- SRG	S	3	Fall 22	Irregular	For choice
55408: Future Mobilities ●●	P. Burger MSD-SRG	S	3	Fall 22	Irregular	
62624: The Climate Movement: Actors and Strategies in Governance Contexts (new title) ●●	B. Bornemann, Sociology	S	3	Fall 22	Irregular	For choice.
17403: Governance, Sustainable Development and Democracy ●●	B. Bornemann MSD	S	3	Spring 23	Every spring	

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43667: Changing Individual Energy Behaviour - Approaches & Strategies ●●	I. Schubert MSD-SRG	S	3	Spring 23	Every spring	
67882: Positive Energy Districts: A New Way to Realize a just Energy Transition? ●●	A. Hearn, D. Mihailva, both SRG with TA MSD	S	3	Spring 23	Once	
67896: Conflicts and Controversies in the Water-Energy-Food Nexus ●●	O. Ejderyan Sociology	S	3	Spring 23	Once	

Core Competences in Economics (CC Econ) 15 CP

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
65774: Digitalization and Sustainability: Friends or Foes?	Frank Krysiak et al.	L	2	Fall 22	Once	The TC MSD strongly recommends to accredit this course for the FASR module.
62246: Sustainability in Practice ●●●●	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	Irregular	The TC MSD strongly recommends to accredit this course for the FASR module. Special entry requirements & course application.
14255: Environmental Economics ●●	F. Krysiak MSD-EnvEcon	L	3	Fall 22	Every fall	No mandatory courses for this module. The choice of classes for this module is to be done out of this list. Please consider the detailed course directory for more information regarding participation requirements etc.
12036: Econometrics	K. Schmidheiny Econ	L	6	Fall 22	Every fall	
48409: Corporate Responsibility ●	G. von Schnurbein/ Econ	Coll	3	Fall 22	Every fall	
41904: Industrial Organization	C. Roux/ Econ	L	3	Fall 22	Every fall	
62651: Theory of the Firm	C. Roux/ Econ	L	3	Fall 22	Every fall	
41957: Advanced Econometrics	K. Schmidheiny Econ	L	3	Fall 22	Every fall	
10639: Consumer Behaviour: Theoretical Foundations	M. Brendl Econ	Coll	3	Fall 22	Every fall	

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34505: The Rise of International Environmental Risks: Corporate and Government Strategies (new title) ●●●●	J. Wargo Econ	L	3	Fall 22 (Summer School)	Irregular
43030: Public Opinion and Science Communication ●●	A. Kachi/Econ	L	3	Fall 22	Every fall
62643: Consumer Behavior: Marketplace Applications	J. Laran/Econ	C	3	Fall 22	First time
62650: Behavioral Science	M. Brendl/Econ	L	3	Fall 22	First time
62705: Microeconomics of Decision Making	G. Nöldeke Econ	L	3	Fall 22	First time
56949: The Economics of Climate Change ●●	R. Lordan-Perret/Econ	Coll	3	Fall 22	Every fall
53713: Environmental and Energy Economics ●●	F. Krysiak EnvEcon-MSD	S	6	Fall 22	Every fall
48407: Experimental Dev. Economics	W. G. Jack Econ	L	3	Fall 20	irregular
10625: Advanced International Trade and Business	R. Weder Econ	L	6	Spring 23	Every spring
17691: International Trade, Resources and the Environment ●	M. S. Taylor Econ	L	3	Spring 23	Every spring
43498: Psychological Theory in Consumer Behavior	M. Brendl/Econ	Coll	6	Spring 23	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 23	Every spring
50877: Economics of Global Health	G. Fink/Econ	L	3	Spring 23	Every spring
62655: Energy Economics ●	H. Weigt/Econ	L	3	Spring 23	Every spring
60335: Introduction to Corporate Responsibility ●	G. von Schnurbein/Econ	L	3	Spring 23	Every spring
65943: Advanced Macroeconomics	S. Lein/Econ	L	6	Spring 23	First time
60336: Population & Economic Growth	R. Stelter/Econ	L	3	Spring 23	Every spring

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63593: Methods in Policy Impact Assessment ●●	R. Delzeit R. Argueyrolles Geosciences	L + PC	3	Spring 23	Every spring	
67432 Seminar: Banking and Finance - Nachhaltigkeit (6 KP)	J. Henn/econ	S	6	Spring 23	First time	Seminar for preparation MT. Mandatory course application (apart to registration on MOnA) until 09.01.23.

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 / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, I. Schubert/SRG, F. Krysiak / Env Econ - all MSD	C	3	Spring 23	Every semester	Mandatory.
67652: MSD Life Science	P. Holm MSE-MSD	Coll	1	Spring 23	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	I	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.

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Seminar Paper	P. Holm et al. MSE- MSD		5	On agreement	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.
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Preparation Master's Thesis in Social Sciences (PM Soc) 15 CP

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, I. Schubert/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Spring 23	Every semester	Mandatory.
57245: Sustainability Science Research (social dimension)	P. Burger SRG-MSD	Coll	1	Spring 23	Every semester	Mandatory.
50267: Current Topics in Social Science Based on Sustainability Research	A. Sohre SRG-MSD	S	3	Spring 23	Every spring	Mandatory.
Methods: 46737: Experimental research methods in social sciences	I. Schubert SRG-MSD	S	3	Fall 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 22	Every fall	
Methods: 33426: Quantitative Data Analysis in African Studies	E. Macamo Afr. Studies	S	3	Spring 23	Every spring	
Methods: 48555: Research Methods in Social and Political Science (new title)	D. Höhmann Politic. Sciences	S	3	Fall 22	Every fall	
Methods: 49855: Research Methods in Social and Political Science (new title)	D. Höhmann Politic. Sciences	Tut	2	Fall 22	Every fall	
Methods: 63537: Living Labs and Participative Research for Sustainability Transitions ●	A. Sohre I. Schubert SRG-MSD	S	3	Fall 22	Irregular	
Seminar Paper			5	On agreement		

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Preparation Master's Thesis in Economics (PM Econ) 15 CP

No.: class title	Lecturer / subject area	Format	CP	Semester	Frequency	Notes concerning the registration of the class for the specific module
49078: Research Design Master's Thesis	P. Holm/MSE, I. Schubert/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Spring 23	Every semester	Mandatory.
14255: Environmental Economics ●●	F. Krysiak Econ-MSD	L	3	Fall 22	Every fall	No other mandatory courses for this module. The choice of classes for this module is to be done out of this list. Please consider the detailed course directory for more information regarding participation requirements etc.
12036: Econometrics	K. Schmidheiny Econ	L	6	Fall 22	Every fall	
29002: Electricity Markets ●	H. Weigt/Econ	L	3	Fall 22	Every fall	
10637: Internationale Politische Ökonomie ●	B. Hefeker Econ	L	3	Fall 22	Every fall	
31950: Corporate Governance	A. Kind/Econ	L	3	Fall 22	Every fall	
17691: International Trade, Resources and the Environment ●	M. S. Taylor Econ	L	3	Spring 23	Every Spring	
47275: Empirical Research in Public Economics	B. Hintermann Econ	S	6	Spring 23	Every Spring	
16036: Microeconometrics and Statistical Learning (new title)	Ch. Kleiber Econ	L	3	Spring 23	Every spring	
62659: Numerical Methods and Optimization	H. Weigt Econ	L	3	Spring 23	Every spring	
63593: Methods in Policy Impact Assessment ●●	R. Delzeit R. Argueyrolles Geosciences	L + PC	3	Spring 23	Every spring	

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Focal Areas in Sustainability Research module (FASR) 12 CP

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 coordination-msd@unibas.ch. 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: <https://www.msd.unibas.ch/en/services/downloads/msd-2017/>

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	CP	Frequency	Notes concerning the registration of the class for the specific module
50264: Global Change Ecology ●●	S. Abel	L + PC	3	Every spring	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 mandatory classes for them (lectures 50265 & 49077).
49077: Global Change Resources ●	M. Andres	L + PC	3	Every fall	

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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.
65774. Digitalization and Sustainability: Friends or Foes?	Frank Krysiak et al.	L	2	Fall 22	Once.
62246: Sustainability in Practice ●●●●	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	Irregular.
41280: Tree and Forest Ecology ●	G. Hoch M. Arend	L	2	Every fall	
23138: Sustainable Plant Systems ●●	S. Martinez	L	2	Every fall	
22696: Measurements and Policy Interactions in Climate Change and Air Pollution ●●	S. Reimann	L	3	Every fall	
11718: Current Ecological and Health Issues in Africa	G. Fink, J. Utzinger	S	2	Every fall	
34578: Invasionsbiologie ●	H.-P. Rusterholz	L	2	Every fall	
41280: Tree and Forest Ecology ●	G. Hoch et al.	L	2	Every fall	
24129: From Anthropogenic Landscapes to Wilderness Management (field trip; new title) ●	Ch. Alewell, A. Lang Geosciences	FT	2	Every 2nd fall sem.	Only in combination with 24129.
12127: From Anthropogenic Landscapes to Wilderness Management ●	C. Alewell, A. Lang	P	3	Every 2nd fall sem.	
23837: Soil System Sciences: Carbon Dynamics and Global Change ●	J. Leifeld	L + PC	3	Every 3. semester	
39717: Environmental Management: Flood Management in Switzerland	V. Röthlisberger	PC	2	Irregular	

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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. Students with focus area in social sciences and economics can't transfer the credits to the FASR module as the three courses are mandatory for the "Complementary Knowledge in Natural Sciences" module.
40076: Technical Basis of Generation, Distribution and Storage of Energy ●	R. Lordan-Perret	L + PC	3	Every spring	
36792: Terrestrial Ecosystem Ecology and Sustainable Landuse ●●	A. Kahmen	L	2	NOT in spring 23	
24172: Marine Biological Considerations at the Strait of Gibraltar ●	P. Holm , S. Abel	FT	3	Every spring	Offered by the MSD.
23827: Soil System Sciences: Carbon Dynamics and Global Change ●	J. Leifeld	L + PC	3	Every 3. semester	
33587: Praktische Aspekte der Bodenbiologie 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 semester	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 & Marine Ecosystem ●	M. Lehmann	L + PC	2	Every spring	
27336: Pflanzenschutz und nachhaltiger Pflanzenbau ●●	D. Klausner , 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 fall	Formerly during spring semester
14630: Biological and Integrated Pest Management ●●	R. Peveling	L + PC	2	Every spring	
48662: Climate Change and Health	G. Cissé	L + PC	1	Every spring	

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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	CP	Frequency	Remarks (for details see online course directory)
41829: Perspectives of Social Sciences on Sustainability ●●	R. Emmenegger	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 offered by the MSD. Special course inscriptions and entry requirements.
65774. Digitalization and Sustainability: Friends or Foes?	Frank Krysiak et al.	L	2	Fall 22	Once.
62246: Sustainability in Practice ●●●●	P. Holm/MSE , P. Burger/SRG , F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	Irregular.
41822: Governance of Energy Transitions ●●	A. Sohre	S	3	Irregular	
23620: Capabilities and Sustainability	M. Christen	S	3	Irregular	
57243: Quality of Life and Sustainability: Theoretical and Empirical Approaches	P. Burger M. Christen	S	3	Irregular	
43667: Changing Individual Energy Behaviour – Approaches & Strategies ●●	I. Schubert	S	3	Every spring	
17403: Governance, Sustainable Development and Democracy ●●	R. Emmenegger 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.

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65920: Basel Sustainability Forum: Transforming Food Production and Consumption	M. Bergman et al.	L	2	FS 22	Once. M. Bergman offers similar classes almost every semester.
58578: The Political Consequences of Economic Inequality ●	D. Traber	S	3	Irregular	
53524: Climate Change and Religion	J. Köhrsen	V	3	Irregular	
62624: The Climate Movement: Actors and Strategies in Governance Contexts (new title) ●●	B. Bornemann	S	3	Fall 22	Once.
66225: Transforming Societies: the Potential of Current Sustainability Concepts to Address Relevant Leverage Points ●	A. di Giulio	S	3	Fall 22	Once.
68725: Climate Urbanism	V. Castan Broto	S	3	Spring	Once
67896: Conflicts and Controversies in the Water-Energy-Food Nexus ●●	O. Ejderyan	S	3	Spring 23	Once
67882: Positive Energy Districts: A New Way to Realize a just Energy Transition? ●●	A. Hearn, D. Mihailva, both SRG with TA MSD	S	3	Spring 23	Once

Economics:

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	CP	Frequency	Remarks (for details see online course directory)
14255: Environmental Economics ●●	F. Krysiak	L	3	Every fall	
43030: Public Opinion and Science ●●	A. Kachi	L	3	Every fall	
29002: Electricity Markets ●	H. Weigt	L	3	Every fall	
31954: International Economics	T. Erhardt, C. Hefeker	S	6	Every fall	

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34505: The Rise of International Environmental Risks: Corporate and Government Strategies (new title) ●●●●	J. Wargo/Econ	L	3	August 21	Summer school: 02.-11. August 22: Special course application. For details see online course directory.
10639: Consumer Behaviour: Theoretical Foundations	M. Brendl/Econ	Coll	3	Every fall	
56949: The Economics of Climate Change ●●	R. Lordan-Perret/Econ	Coll	3	Every fall	
65774. Digitalization and Sustainability: Friends or Foes?	Frank Krysiak et al.	L	2s	Fall 22	Once.
62246: Sustainability in Practice ●●●●	P. Holm/MSE, P. Burger/SRG, F. Krysiak/ Env Econ - all MSD	C	3	Fall 22	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/program "Pathways to Sustainability" (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	NOTE: Special participation requirements and application process according to information in the detailed course directory.
60335: Introduction to Corporate Responsibility ●	G. von Schnurbein	L	3	Every spring	

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Other Faculties/interdisciplinary courses

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

No.: class title	Lecturer	Format	CP	Frequency	Remarks (for details see online course directory)
43701: Interdisciplinary Approach to Sustainability ●	J. Godemann	S	3	Every spring	Offered by the MSD/program "Pathways to Sustainability" (TQNE): Special course application.
20580: Umweltrecht	D. Turnherr Keller	L	6	Every spring	
67292: Sustainability and Spirituality in Ecovillages	R. Roysen, et al.	S	3	Spring 23	Once.
68700: Zukunft nachhaltig sichern. Wirtschaft und Verantwortung in einer nachhaltigen Welt	M. Hoenen	S	3	Spring 23	Spring school (bloc course)

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: <https://www.msd.unibas.ch/en/services/downloads/msd-2017/>

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MSD2017_spring23_medium-term_syllabus subject to modifications/update 30.01.23 online publication/CCh