

Vorlesungsverzeichnis

Master of Science - Geosciences
Prüfungsversion Wintersemester 2022/23

Sommersemester 2025

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Abkürzungsverzeichnis

Veranstaltungsarten

AG	Arbeitsgruppe
B	Blockveranstaltung
BL	Blockseminar
DF	diverse Formen
EX	Exkursion
FP	Forschungspraktikum
FS	Forschungsseminar
FU	Fortgeschrittenenübung
GK	Grundkurs
HS	Hauptseminar
KL	Kolloquium
KU	Kurs
LK	Lektürekurs
LP	Lehrforschungsprojekt
OS	Oberseminar
P	Projektseminar
PJ	Projekt
PR	Praktikum
PS	Proseminar
PU	Praktische Übung
RE	Repetitorium
RV	Ringvorlesung
S	Seminar
S1	Seminar/Praktikum
S2	Seminar/Projekt
S3	Schulpraktische Studien
S4	Schulpraktische Übungen
SK	Seminar/Kolloquium
SU	Seminar/Übung
TU	Tutorium
U	Übung
UN	Unterricht
UP	Praktikum/Übung
UT	Übung / Tutorium
V	Vorlesung
V5	Vorlesung/Projekt
VP	Vorlesung/Praktikum
VS	Vorlesung/Seminar
VU	Vorlesung/Übung
W	Werkstatt
WS	Workshop

BlockSaSo Block (inkl. Sa,So)

Andere

N.N.	Noch keine Angaben
n.V.	Nach Vereinbarung
LP	Leistungspunkte
SWS	Semesterwochenstunden
	Belegung über PULS
	Prüfungsleistung
	Prüfungsnebenleistung
	Studienleistung
	sonstige Leistungserfassung

Veranstaltungsrhythmen

wöch.	wöchentlich
14t.	14-täglich
Einzel	Einzeltermin
Block	Block
BlockSa	Block (inkl. Sa)

Vorlesungsverzeichnis

Compulsory Modules

GEW-MM01 - Topics in Earth System Science

112564 KL - Topics in Earth System Science (Colloquium)

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	KL	Mo	16:15 - 17:45	wöch.	2.27.0.01	07.04.2025	Professor Edward Sobel, Prof. Dr. Maria Mutti, Prof. Dr. Max Wilke, Prof. Dr. Frank Krüger, Prof. Dr. Bodo Bookhagen, Prof. Dr. Martin Trauth, Prof. Dr. Patrick O'Brien, Prof. Dr. Pieter van der Beek

Leistungen in Bezug auf das Modul

PNL 576221 - Kolloquium und Diskussion (unbenotet)

112566 S - Topics in Earth System Science (Seminar)

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	Fr	12:30 - 14:00	wöch.	2.27.2.07	11.04.2025	Prof. Dr. Patrick O'Brien, Prof. Dr. Max Wilke, Dr. Melanie Jutta Sieber, Dr. rer. nat. Wolfgang Morgenroth
2	S	Di	12:15 - 13:45	wöch.	2.27.2.24	08.04.2025	Dr. Manfred Mudelsee, Prof. Dr. Martin Trauth, Dr. Markus Lothar Fischer
3	S	Do	14:15 - 15:45	wöch.	2.27.2.24	10.04.2025	Prof. Dr. Pieter van der Beek
4	S	Do	12:30 - 14:00	wöch.	2.27.2.24	10.04.2025	Dr. Julien Guillemoteau, Prof. Dr. Jens Tronicke, Sophie Stephan, Dr. Philipp Koyan
5	S	Di	14:15 - 15:45	wöch.	2.27.2.24	08.04.2025	Dr. Matthias Ohrnberger, Alea Joachim, Emilio José Marcelo Criado Sutti
6	S	Fr	10:15 - 11:45	wöch.	2.27.2.24	11.04.2025	Prof. Dr. Maria Mutti
7	S	Di	09:00 - 12:00	wöch.	2.27.0.29/30	08.04.2025	Prof. Dr. Bodo Bookhagen

Leistungen in Bezug auf das Modul

PNL 576222 - Arbeitsgruppenseminar (unbenotet)

GEW-MM02 - Project Practical or Research Internship

112567 S1 - Project Practical or Research Internship

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	Do	16:15 - 17:45	14t.	2.27.2.36	17.04.2025	Prof. Dr. Max Wilke, Prof. Dr. Jens Tronicke, Prof. Dr. Martin Trauth
1	PR	N.N.	N.N.	Block	N.N.	N.N.	N.N.

Kommentar

In dem Seminar zu diesem Modul muss der Vortrag über das geleistete Praktikum gehalten werden. Dieser ist neben dem erfolgreichen Bericht nötig, um das Modul abzuschließen. Er kann nicht durch einen Vortrag in der Praktikumsinstitution ersetzt werden.

Das Seminar startet am 25.4.24 und findet 14tägig statt.

Bitte melden Sie sich per e-mail bei Frau Heidemann, um einen Vortragstermin zu reservieren (sekretariat@geo.uni-potsdam.de).

Der Vortrag ist nach dem Praktikum zu halten. Der Bericht sollte am Tag des Vortrags abgegeben und durch den Betreuer akzeptiert sein (Bestätigung des Betreuers durch e-mail). Der Vortrag sollte eine Länge von ca. 10 min haben, danach können Fragen gestellt werden.

Bitte melden Sie sich nur zum Modul an, wenn Sie den Vortrag in diesem Semester halten wollen.

Weitere Infos zum Projektpraktikum auf der Webseite des Prüfungsausschuss.

In this Seminar of the module a talk has to be given about the internship. This talk and a successful report is needed to finalize the module. The talk cannot be replaced by one given at the institution of internship.

Seminar will start on 25.4.24 and takes place every other week.

Please, register by e-mail with Mrs. Heidemann to reserve a slot for your talk (sekretariat@geo.uni-potsdam.de).

The talk needs to be given after the internship. The report should be submitted by the date of the talk and it should be accepted by the internship's supervisor (confirmation e-mail by supervisor). The talk should be 10 min long, afterwards questions can be posed. Please, only register for the module and seminar if you are determined to give the talk in the current term. Further info on the "project practical research internship" can be found on the webpage of the examination board.

Leistungen in Bezug auf das Modul

SL 576232 - Seminar (unbenotet)

Core Modules

GEW-MC01 - Sedimentary Earth System Record

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC02 - Tectonics and Geodynamics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC03 - Data Analysis and Statistics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC04 - Advanced Field Practical **112546 U - Advanced Field Practical (Field Exercise)**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	N.N.	Block	N.N.	N.N.	Dr. Gerold Zeilinger
01.08.2025-14.08.2025							

Leistungen in Bezug auf das Modul

PNL 575971 - Geländeübung (unbenotet)

 112547 S - Advanced Field Practical (Seminar)

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	N.N.	N.N.	Block	N.N.	N.N.	Dr. Gerold Zeilinger
will take place in the 3D lab							

Leistungen in Bezug auf das Modul

PNL 575972 - Seminar (unbenotet)

GEW-MC05 - Theoretical Geophysics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC06 - Geophysical Inversion and Data Analysis **112572 VU - Data Analytics and Interpretation**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mi	12:30 - 14:00	wöch.	2.27.2.37/38	09.04.2025	PD Dr. Hendrik Paasche
1	VU	Mi	14:15 - 15:45	wöch.	2.27.2.37/38	09.04.2025	PD Dr. Hendrik Paasche

Leistungen in Bezug auf das Modul

SL 575992 - Vorlesung und Übung (unbenotet)

GEW-MC07 - Geophysical Laboratory

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC08 - Advanced Mineralogy-Petrology **112575 VU - Applied Thermodynamics and Kinetics of geochemical processes**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mi	08:30 - 10:00	wöch.	2.27.2.07	09.04.2025	Prof. Dr. Patrick O'Brien

Leistungen in Bezug auf das Modul

SL 576013 - Vorlesung und Übung III (unbenotet)

 112578 VU - Applications of Crystal Chemistry in Mineralogy and Petrology

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Do	14:15 - 15:45	wöch.	2.27.2.07	10.04.2025	Dr. rer. nat. Wolfgang Morgenroth

Leistungen in Bezug auf das Modul

SL 576014 - Vorlesung und Übung IV (unbenotet)

GEW-MC09 - Methods in Mineralogy and Petrology **112549 VU - Advanced analytical and experimental methods**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Di	14:15 - 15:45	wöch.	2.27.1.10	08.04.2025	Dr. rer. nat. Wolfgang Morgenroth, Dr. rer. nat. Christina Günter, N.N. (Mitarbeiter)
1	VU	Di	16:15 - 17:45	wöch.	2.27.1.10	08.04.2025	N.N. (Mitarbeiter), Dr. rer. nat. Wolfgang Morgenroth, Dr. rer. nat. Christina Günter

Leistungen in Bezug auf das Modul

SL 576022 - Vorlesung und (Gelände-)Übung II (unbenotet)

 112579 VU - Crystalline Field Petrology

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Di	08:30 - 10:00	wöch.	2.27.2.49	08.04.2025	Dr. Martin Jan Timmerman, Prof. Dr. Patrick O'Brien

1	VU	Di	10:15 - 11:45	wöch.	2.27.2.49	08.04.2025	Prof. Dr. Patrick O'Brien, Dr. Martin Jan Timmerman
Leistungen in Bezug auf das Modul							
SL	576022 - Vorlesung und (Gelände-)Übung II (unbenotet)						

Consolidation Modules

GEW-MF01 - Earth Surface Dynamics							
	112585 U - Active Tectonics (Field Exercise)						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Pieter van der Beek
Leistungen in Bezug auf das Modul							
PNL	576113 - Geländeübung (unbenotet)						

	112586 SU - Active Tectonics (Seminar/Exercise)						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VS	Di	08:30 - 10:00	wöch.	2.27.2.36	08.04.2025	Prof. Dr. Pieter van der Beek
1	VS	Di	10:15 - 11:45	wöch.	2.27.2.36	08.04.2025	Prof. Dr. Pieter van der Beek
Leistungen in Bezug auf das Modul							
PNL	576112 - Seminar und Übung (unbenotet)						

GEW-MF02 - Sedimentary Processes							
	112560 SU - Methods and Applications in Basin Analysis						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Fr	08:30 - 10:00	wöch.	2.27.2.07	11.04.2025	Dr. Benjamin Rendall
1	U	Fr	10:15 - 11:45	wöch.	2.27.2.07	11.04.2025	Dr. Benjamin Rendall
Leistungen in Bezug auf das Modul							
PNL	576122 - Seminar und Übung (unbenotet)						

	112580 U - Sedimentary Processes (Field Exercise)						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	PU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Maria Mutti
Raum und Zeit nach Absprache							
Leistungen in Bezug auf das Modul							
PNL	576123 - Geländeübung (unbenotet)						

GEW-MF03 - Numerical Analysis and Modelling							
	112551 VU - Advanced Subsurface Modelling						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Dr. Timothy Tella, Prof. Dr. Maria Mutti
Leistungen in Bezug auf das Modul							
PNL	576132 - Vorlesung und Übung (unbenotet)						

112555 VU - Modelling Tectonic and Surface Processes							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Sascha Brune, Prof. Dr. Jean Braun
Leistungen in Bezug auf das Modul							
PNL	576132 - Vorlesung und Übung (unbenotet)						

GEW-MF04 - Specialization Module-Theory and Applications							
112587 PU - Thematic Field School							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	PU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Pieter van der Beek
Leistungen in Bezug auf das Modul							
PNL	576142 - Blockkurs oder Geländeübung (unbenotet)						

GEW-MF11 - Fundamentals of Digital Seismology							
112272 VU - Array Seismology							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	08:30 - 10:00	wöch.	2.27.2.37/38	09.04.2025	Dr. Matthias Ohrnberger
1	U	Mi	10:15 - 11:45	wöch.	2.27.2.37/38	09.04.2025	Dr. Matthias Ohrnberger
1	U	N.N.	N.N.	Block	N.N.	N.N.	Dr. Matthias Ohrnberger
Field practical from June 10th to 13th							

Kommentar							
What is better than recording the seismic wave field with one seismometer? Correct! It is generally much better to observe the seismic wave field with several separately placed seismometers, a so-called seismic array. The parallel recording of the continuously present ground motion in space and time by a set of spatially distributed seismic sensors allows enhanced insight in wave propagation phenomena. It provides a direct measurement of the apparent propagation speed and direction of individual wave arrivals along the recording geometry leading to a better idea on the wave types in the observed wave field. The goal of array seismology is manifold. The purpose of observation reaches from building structural subsurface models of the shallow part of the ground below the array recording site to enhancing and verifying tiny details in the deeper earth structure. In addition, arrays help to understand for example dynamic physical processes inside the earth creating seismic waves like earthquake faulting or volcanic eruption phenomena. Besides learning about the theoretical background of array signal processing techniques in a normal classroom environment, students will study the practical side of array seismology during a 4-to-5-day field course as integral part of the module. Within the field course students will get in touch with modern seismological equipment and conduct their own array experiment starting from experiment design to deployment of seismological equipment and final data recovery. The data acquired during the field course will be analyzed by the students and summarized in an obligatory report.							
Bemerkung							
The course will start in the 2nd week of the semester (17.04.2024). The field course for this year is planned for the dates 21.05 to 24.05. We will most probably go to the Vogtland region - Details will be discussed in class.							
Leistungen in Bezug auf das Modul							
SL	576152 - Vorlesung und Übung II (unbenotet)						
SL	576153 - Geländeübung (unbenotet)						

GEW-MF12 - Seismological Data Science							
112550 VU - Advanced Methods in Observational Seismology							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Do	12:30 - 14:00	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger

1	U	Do	14:15 - 15:45	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger
Leistungen in Bezug auf das Modul							
SL	576162 - Vorlesung und Übung II (unbenotet)						

GEW-MF13 - Applied Geophysical Methods I

	112573 VU - Potential Field Methods						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mo	12:30 - 14:00	wöch.	2.27.2.37/38	07.04.2025	Dr. Julien Guillemoteau
1	U	Mo	14:15 - 15:45	wöch.	2.27.2.37/38	07.04.2025	Dr. Julien Guillemoteau
Leistungen in Bezug auf das Modul							
SL	576173 - Vorlesung und Übung II (unbenotet)						

	112574 VU - Potential Field Methods (block course)						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	B	N.N.	N.N.	Block	N.N.	N.N.	Dr. Julien Guillemoteau
Leistungen in Bezug auf das Modul							
SL	576174 - Blockkurs II (unbenotet)						

GEW-MF14 - Applied Geophysical Methods II

	112576 VU - Applied Geophysics Field Course						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	09:00 - 18:00	Block	N.N. (ext)	01.09.2025	Prof. Dr. Jens Tronicke, Dr. Philipp Koyan
1	U	N.N.	09:00 - 17:00	Block	2.27.2.37/38	08.09.2025	Prof. Dr. Jens Tronicke

Kommentar

This course is part of **GEW-MF14 "Applied Geophysical Methods II"** (specialization module Geophysics, MSc Geosciences). Within this field course a typical problem from hydrology, geology, or archaeology will be addressed. For a given target, different geophysical techniques (e.g., direct-current electrics, electromagnetics, ground-penetrating radar, geomagnetics) will be employed in the field. In the second part of this course, the focus is on computer-based processing and interpretation of all gathered data using standard inversion, modeling, and processing approaches.

Students are expected to have a profound background in applied geophysical methods and, especially, in electrical and electromagnetic methods as, for example, taught in the first half of this module ("Electrical and electromagnetic methods").

Leistungen in Bezug auf das Modul

SL	576182 - Geländearbeiten (unbenotet)
SL	576183 - Datenauswertung (unbenotet)

GEW-MF21 - Advanced Petrology and Age Determination

	112548 VU - Advanced Age Determination						
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mo	08:30 - 10:00	wöch.	2.27.2.49	07.04.2025	Dr. Masafumi Sudo, Dr. Martin Jan Timmerman
1	VU	Mo	10:15 - 11:45	wöch.	2.27.2.49	07.04.2025	Dr. Masafumi Sudo, Dr. Martin Jan Timmerman

Kommentar

The course is held every Monday, 8:30-11:45, in the room 2.49 in Haus 27.

The course comprises the following two parts and periods:

- the first half (April 8th to May 27th): Advanced topics in U-Pb Geochronology, by Dr. Martin Timmerman

- the first half (June 3rd to July 15th): Advanced topics in Ar/Ar Geochronology, by Dr. Masafumi Sudo

The course includes lectures, exercises and discussions with selected papers mainly on the magmatic and metamorphic petrology/geology.

The first meeting of this course will take place on Monday, April 8th.

The details of the latest information are updated in Moodle at necessary times.

Leistungen in Bezug auf das Modul

SL 576192 - Vorlesung und (Gelände-)Übung II (unbenotet)

GEW-MF22 - Physicochemical Mineralogy-Petrology**112582 SU - Experimental Mineralogy-Petrology**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	N.N.	N.N.	wöch.	N.N.	N.N.	Prof. Dr. Max Wilke, Dr. Sergey Lobanov, Dr. Melanie Jutta Sieber, Dr. rer. nat. Wolfgang Morgenroth
Raum und Zeit nach Absprache							
1	U	N.N.	N.N.	wöch.	N.N.	N.N.	Prof. Dr. Max Wilke, Dr. Sergey Lobanov, Dr. Melanie Jutta Sieber, Dr. rer. nat. Wolfgang Morgenroth
Raum und Zeit nach Absprache							

Kommentar

This course 'Experimental Mineralogy-Petrology' is part of the module: GEW-MF22 – 'Physicochemical Mineralogy-Petrology'

learning goals of the module are:

- understanding the physical properties of minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature
- conducting high-pressure/high-temperature laboratory experiments on minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature

components of the module are:

- this course ('Experimental Mineralogy-Petrology', WiSe or SoSe) and
- one course in SoSe ('Mineral Physics and Spectroscopy')

in this course 'Experimental Mineralogy-Petrology' you will be:

- conducting experiments
- examine the resulting material with various analytical methods
- prepare a short presentation and report

WoMo, 19.03.2024

Bemerkung

A pre-meeting with an introduction into available topics for experiments and organization will be held on Wednesday, October 16th at 12:00 h in room ????. The meeting will be in hybrid mode. Students are asked to join in person if possible at all.

Students interested in this course are asked to join our pre-meeting for this course which includes the selection of projects.

In case you are interested in taking this course, please contact Melanie Sieber, melanie.sieber@uni-potsdam.de, or Wolfgang Morgenroth, wolfgang.morgenroth@uni-potsdam.de, by email.

Leistungen in Bezug auf das Modul

SL 576202 - Seminar und Übung (unbenotet)

112583 VS - Mineral Physics and Spectroscopy							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Do	08:30 - 10:00	wöch.	2.27.2.07	10.04.2025	Prof. Dr. Max Wilke, Dr. Sergey Lobanov
1	S	Do	10:15 - 11:45	wöch.	2.27.2.07	10.04.2025	Prof. Dr. Max Wilke, Dr. Sergey Lobanov

Kommentar

First Lecture on April, 18 at 9:15 where also organisational Details will be handled.

This course 'Mineral Physics and Spectroscopy' is part of the module: GEW-MF22 – 'Physicochemical Mineralogy-Petrology'

learning goals of the module are:

- understanding the physical properties of minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature
- conducting high-pressure/high-temperature laboratory experiments or analytical work on minerals, glasses and rocks to better understand processes in nature

components of the module are:

- 'Experimental Mineralogy-Petrology', WiSe or SoSe) and
- 'Mineral Physics and Spectroscopy', SoSe)

in this course 'Mineral Physics and Spectroscopy' you will be:

- learning about physical properties especially of crystalline materials
- learn about how to determine them and how they influence geological processes
- learn about various spectroscopic methods and how they are used to characterize and analyse minerals, glasses and liquids

Leistungen in Bezug auf das Modul

SL 576201 - Vorlesung und Seminar (unbenotet)

GEW-MF23 - Special Topics in Mineralogy-Petrology

112584 VS - Ore Forming Processes and Dating of Volcanic Processes							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	14:15 - 15:00	wöch.	2.27.1.10	09.04.2025	PD Dr. Philipp Weis
1	V	Mi	15:15 - 16:00	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo
1	S	Mi	16:15 - 17:45	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo, PD Dr. Philipp Weis

Kommentar

The course consists of two separate lectures and one joint seminar:

- Ore-forming processes (by PD Dr. Philipp Weis): Understanding natural enrichment mechanisms forming metal deposits in the context of plate tectonics.

- Dating of volcanic processes (by Dr. Masafumi Sudo): From the views on the volcanoes and geochronology, volcanological/magmatic scientific questions along the time scales are lectured and discussed.

The introduction for the course (Vorbereitung) will be held on April 10th at 14:15 in the room 1.10 of Haus 27.

Leistungen in Bezug auf das Modul

SL 576216 - Vorlesung und Seminar (unbenotet)

Elective Modules

GEW-MC01 - Sedimentary Earth System Record

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC02 - Tectonics and Geodynamics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC03 - Data Analysis and Statistics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC04 - Advanced Field Practical

112546 U - Advanced Field Practical (Field Exercise)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	N.N.	Block	N.N.	N.N.	Dr. Gerold Zeilinger
01.08.2025-14.08.2025							

Leistungen in Bezug auf das Modul

PNL 575971 - Geländeübung (unbenotet)

112547 S - Advanced Field Practical (Seminar)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	N.N.	N.N.	Block	N.N.	N.N.	Dr. Gerold Zeilinger
will take place in the 3D lab							

Leistungen in Bezug auf das Modul

PNL 575972 - Seminar (unbenotet)

GEW-MC05 - Theoretical Geophysics

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC06 - Geophysical Inversion and Data Analysis

112572 VU - Data Analytics and Interpretation							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mi	12:30 - 14:00	wöch.	2.27.2.37/38	09.04.2025	PD Dr. Hendrik Paasche
1	VU	Mi	14:15 - 15:45	wöch.	2.27.2.37/38	09.04.2025	PD Dr. Hendrik Paasche

Leistungen in Bezug auf das Modul

SL 575992 - Vorlesung und Übung (unbenotet)

GEW-MC07 - Geophysical Laboratory

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MC08 - Advanced Mineralogy-Petrology

112575 VU - Applied Thermodynamics and Kinetics of geochemical processes							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mi	08:30 - 10:00	wöch.	2.27.2.07	09.04.2025	Prof. Dr. Patrick O'Brien
Leistungen in Bezug auf das Modul							
SL	576013 - Vorlesung und Übung III (unbenotet)						

112578 VU - Applications of Crystal Chemistry in Mineralogy and Petrology							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Do	14:15 - 15:45	wöch.	2.27.2.07	10.04.2025	Dr. rer. nat. Wolfgang Morgenroth
Leistungen in Bezug auf das Modul							
SL	576014 - Vorlesung und Übung IV (unbenotet)						

GEW-MC09 - Methods in Mineralogy and Petrology

112549 VU - Advanced analytical and experimental methods							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Di	14:15 - 15:45	wöch.	2.27.1.10	08.04.2025	Dr. rer. nat. Wolfgang Morgenroth, Dr. rer. nat. Christina Günter, N.N. (Mitarbeiter)
1	VU	Di	16:15 - 17:45	wöch.	2.27.1.10	08.04.2025	N.N. (Mitarbeiter), Dr. rer. nat. Wolfgang Morgenroth, Dr. rer. nat. Christina Günter
Leistungen in Bezug auf das Modul							
SL	576022 - Vorlesung und (Gelände-)Übung II (unbenotet)						

112579 VU - Crystalline Field Petrology							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Di	08:30 - 10:00	wöch.	2.27.2.49	08.04.2025	Dr. Martin Jan Timmerman, Prof. Dr. Patrick O'Brien
1	VU	Di	10:15 - 11:45	wöch.	2.27.2.49	08.04.2025	Prof. Dr. Patrick O'Brien, Dr. Martin Jan Timmerman
Leistungen in Bezug auf das Modul							
SL	576022 - Vorlesung und (Gelände-)Übung II (unbenotet)						

GEW-ME01 - Modelling and Exploring the Earth System

112544 VU - Terrestrial and Airborne Lidar and Photogrammetry Systems							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VS	N.N.	N.N.	wöch.	N.N.	N.N.	Max Hess, Prof. Dr. Bodo Bookhagen
Kommentar							
We will start on Apr-15 at 1 pm in the pc pool (room 0.29) in building 27. Because of scheduling conflicts, we had to shift the timing. You will need to participate in that meeting if you intend to take this class for credit points.							
-Bodo Bookhagen							

Leistungen in Bezug auf das Modul

SL 576031 - Vorlesung und Übung (unbenotet)

 112550 VU - Advanced Methods in Observational Seismology

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Do	12:30 - 14:00	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger
1	U	Do	14:15 - 15:45	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger

Leistungen in Bezug auf das Modul

SL 576031 - Vorlesung und Übung (unbenotet)

 112551 VU - Advanced Subsurface Modelling

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Dr. Timothy Tella, Prof. Dr. Maria Mutti

Leistungen in Bezug auf das Modul

SL 576031 - Vorlesung und Übung (unbenotet)

 112555 VU - Modelling Tectonic and Surface Processes

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Sascha Brune, Prof. Dr. Jean Braun

Leistungen in Bezug auf das Modul

SL 576031 - Vorlesung und Übung (unbenotet)

 112565 VU - Special Topics in Applied Geophysics

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Di	12:30 - 15:45	wöch.	2.27.2.36	08.04.2025	Sophie Stephan

Voraussetzung

Requirement: A basic knowledge, understanding of the fundamental principles in Geophysics. **Recommended:** Successful participation in any module introducing basic principles of Applied Geophysics (e.g., Geophysical Laboratory). Parallel participation in Applied Geophysical Methods I/II (Advanced Modules – Geophysics).

Leistungsnachweis

Oral or written exam at the end of the semester depending on the number of participants.

Bemerkung

In this course we will discuss geophysical methods based on the different fields of application, including archaeogeophysics, hydrogeophysics, environmental and agricultural geophysics, airborne geophysics and borehole geophysics. As an introduction, we will shortly be reviewing common methods used in exploration geophysics, including gravimetry, magnetism, electrical and electromagnetic methods, and seismics. Furthermore, more advanced and specialized methods will be introduced and discussed. However, a basic knowledge, understanding of the fundamental principles in Geophysics is a requirement to successfully finish this course. During the exercise/seminar we will apply the knowledge from the lectures to study, analyse and discuss selected literature examples of geophysical field studies related to the different fields of applied geophysics. Finally, the course will finish with an oral or written exam at the end of the semester depending on the number of students.

Leistungen in Bezug auf das Modul

SL 576031 - Vorlesung und Übung (unbenotet)

GEW-ME02 - Geosciences Across Scales

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-ME03 - Past and Present of the Earth System

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-ME04 - Modern Trends in Geosciences **112568 SU - Biogeochemistry**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	SU	N.N.	N.N.	Block	N.N.	N.N.	Dr. Jens Kallmeyer

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

 112569 VU - Paleoclimate Dynamics

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mo	12:15 - 13:45	wöch.	2.27.2.24	07.04.2025	Prof. Dr. Martin Trauth
1	U	Mo	14:15 - 15:45	wöch.	2.27.2.24	07.04.2025	Prof. Dr. Martin Trauth

Kommentar

This course runs as part of elective module GEW-ME04 - Modern Trends in Geosciences (2022) and as GEW-MGEW13 Paleoclimate Dynamics in the Master in Geowissenschaften (2010). We have booked the small meeting room 2.27.2.24, where we sit together at one table instead of in a classroom arrangement of tables and a lectern. However, we will also be streaming the course with Zoom, as the room offers modern audio-visual technology with a large screen. The course was offered in a new form for the first time in WiSe 2022/23. Each topic from the field of paleoclimate dynamics will first be introduced by me with an overview lecture, before I cover current topics in special lectures together with colleagues worldwide. In an accompanying seminar, special topics will be explored in more depth, with participants seeking to present and discuss recent developments, hypotheses, controversies in the form of press releases, short presentations and tweets. Facultative exercises/homework will include short (partly computational) assignments on paleoclimate dynamics. The Moodle site provides extensive teaching material, for example (pre)recorded lectures, guest contributions, reading material, exercises and recommendations for further information. The final exam includes individual work on a controversial topic of paleoclimate dynamics, i.e. not the retelling of papers, but the task is actually to recognize and present the current controversy (and its proponents), either as a (recorded) lecture or as an essay.

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

 112570 VU - Introduction to Geomicrobiology

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Fr	09:15 - 10:45	wöch.	2.27.1.10	11.04.2025	Prof. Dr. Dirk Wagner
1	U	Fr	11:00 - 11:45	wöch.	2.27.1.10	11.04.2025	Prof. Dr. Dirk Wagner

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

 112571 UP - Introduction to Geomicrobiology (Practicals)

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	UP	N.N.	09:00 - 17:00	Block	N.N. (ext)	08.09.2025	Prof. Dr. Dirk Wagner

08.09.2025-12.09.2025

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

 112584 VS - Ore Forming Processes and Dating of Volcanic Processes

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	14:15 - 15:00	wöch.	2.27.1.10	09.04.2025	PD Dr. Philipp Weis
1	V	Mi	15:15 - 16:00	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo
1	S	Mi	16:15 - 17:45	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo, PD Dr. Philipp Weis

Kommentar

The course consists of two separate lectures and one joint seminar:

- Ore-forming processes (by PD Dr. Philipp Weis): Understanding natural enrichment mechanisms forming metal deposits in the context of plate tectonics.

- Dating of volcanic processes (by Dr. Masafumi Sudo): From the views on the volcanoes and geochronology, volcanological/magmatic scientific questions along the time scales are lectured and discussed.

The introduction for the course (Vorbereitung) will be held on April 10th at 14:15 in the room 1.10 of Haus 27.

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

112587 PU - Thematic Field School

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	PU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Pieter van der Beek

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

114226 V5 - Applied Causal Inference

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	N.N.	N.N.	wöch.	N.N.	N.N.	N.N.
1	PJ	N.N.	N.N.	wöch.	N.N.	N.N.	N.N.

Leistungen in Bezug auf das Modul

SL 576061 - Vorlesung und Übung (unbenotet)

GEW-ME05 - Geoscientific Data Science

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-ME06 - Special Remote Methods in Geosciences**112553 VE - Planetary Physics**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	12:15 - 13:45	wöch.	2.27.1.10	09.04.2025	Prof. Dr. Gabriele Arnold
1	VE	N.N.	N.N.	Einzel	N.N.	N.N.	Prof. Dr. Gabriele Arnold

Leistungen in Bezug auf das Modul

SL 576081 - Vorlesung und Übung (unbenotet)

112561 VU - Analysis of Digital Elevation Models

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	08:30 - 09:15	wöch.	2.27.0.29/30	09.04.2025	Prof. Dr. Bodo Bookhagen, Florian Leder
1	S	Mi	09:15 - 10:00	wöch.	2.27.0.29/30	09.04.2025	Prof. Dr. Bodo Bookhagen, Florian Leder
1	U	Mi	10:15 - 11:45	wöch.	2.27.0.29/30	09.04.2025	Prof. Dr. Bodo Bookhagen, Florian Leder

Kommentar

The lecture and seminar will start on Wednesday, Apr-17 at 8:30 am in the pc pool (room 0.29) in building 27 on campus Golm. You will need to participate if you want to take this module for credit points.

-Bodo Bookhagen

Leistungen in Bezug auf das Modul

SL 576081 - Vorlesung und Übung (unbenotet)

112577 VU - Deep Electromagnetics and Magnetotellurics

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Fr	08:30 - 10:00	wöch.	2.27.2.37/38	11.04.2025	PD Dr. Ute Weckmann
1	U	Fr	10:15 - 11:45	wöch.	2.27.2.37/38	11.04.2025	PD Dr. Ute Weckmann

Kommentar

This course introduces the diffusive electromagnetic techniques (magnetotellurics in all its varieties) that can be used to study the physical parameters of the Earth at great depths - in this case electrical conductivity.

The method is unique in that it has virtually no environmental impact and can therefore be used, for example, in the Antarctic or in nature reserves. The physical parameter imaged by this method is sensitive to water content and properties, melts, etc., much better than e.g. densities or seismic properties. We illustrate the method and its results with recent research examples.

This lecture's aim is to

- understand the electromagnetic processes in the subsurface,
- know the challenges of data acquisition in the field and subsequent data processing,
- assess the possibilities and limitations of the method,
- be able to interpret the data and inversion models obtained and
- apply them to the wide range of applications from industry to research, off- and on-shore measurements, sustainability research, resources, groundwater and tectonics ...

Ultimately, we also want to answer questions such as:

- when and why is a fault electrically conductive?
- which deposits show up as good or poor conductive anomalies?
- how does EM help in groundwater monitoring?

... [Your questions]

And very important: Hands on codes and instruments (practical).

Voraussetzung

Grundlagen in Mathe, Physik und allgemeine Neugierde.

Literatur

Die Literatur wird in der Vorlesung besprochen.

Lerninhalte

This course introduces the diffusive electromagnetic techniques (magnetotellurics in all its varieties) that can be used to study the physical parameters of the Earth at great depths - in this case electrical conductivity.

The method is unique in that it has virtually no environmental impact and can therefore be used, for example, in the Antarctic or in nature reserves. The physical parameter imaged by this method is sensitive to water content and properties, melts, etc., much better than e.g. densities or seismic properties. We illustrate the method and its results with recent research examples.

This lecture's aim is to

- understand the electromagnetic processes in the subsurface,
- know the challenges of data acquisition in the field and subsequent data processing,
- assess the possibilities and limitations of the method,
- be able to interpret the data and inversion models obtained and
- apply them to the wide range of applications from industry to research, off- and on-shore measurements, sustainability research, resources, groundwater and tectonics ...

Ultimately, we also want to answer questions such as:

- when and why is a fault electrically conductive?
- which deposits show up as good or poor conductive anomalies?
- how does EM help in groundwater monitoring?

... [Your questions]

And very important: Hands on codes and instruments (practical).

Leistungen in Bezug auf das Modul

SL 576081 - Vorlesung und Übung (unbenotet)

GEW-ME07 - Special Topics in Geosciences**112568 SU - Biogeochemistry**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	SU	N.N.	N.N.	Block	N.N.	N.N.	Dr. Jens Kallmeyer

Leistungen in Bezug auf das Modul

SL 576091 - Vorlesung und Übung (unbenotet)

GEW-ME08 - Monitoring Techniques and Data Analysis in Geosciences

Für dieses Modul werden aktuell keine Lehrveranstaltungen angeboten

GEW-MF01 - Earth Surface Dynamics

112585 U - Active Tectonics (Field Exercise)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Pieter van der Beek

Leistungen in Bezug auf das Modul

PNL 576113 - Geländeübung (unbenotet)

112586 SU - Active Tectonics (Seminar/Exercise)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VS	Di	08:30 - 10:00	wöch.	2.27.2.36	08.04.2025	Prof. Dr. Pieter van der Beek
1	VS	Di	10:15 - 11:45	wöch.	2.27.2.36	08.04.2025	Prof. Dr. Pieter van der Beek

Leistungen in Bezug auf das Modul

PNL 576112 - Seminar und Übung (unbenotet)

GEW-MF02 - Sedimentary Processes

112560 SU - Methods and Applications in Basin Analysis							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Fr	08:30 - 10:00	wöch.	2.27.2.07	11.04.2025	Dr. Benjamin Rendall
1	U	Fr	10:15 - 11:45	wöch.	2.27.2.07	11.04.2025	Dr. Benjamin Rendall

Leistungen in Bezug auf das Modul

PNL 576122 - Seminar und Übung (unbenotet)

112580 U - Sedimentary Processes (Field Exercise)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	PU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Maria Mutti

Raum und Zeit nach Absprache

Leistungen in Bezug auf das Modul

PNL 576123 - Geländeübung (unbenotet)

GEW-MF03 - Numerical Analysis and Modelling

112551 VU - Advanced Subsurface Modelling							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Dr. Timothy Tella, Prof. Dr. Maria Mutti

Leistungen in Bezug auf das Modul

PNL 576132 - Vorlesung und Übung (unbenotet)

112555 VU - Modelling Tectonic and Surface Processes							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Sascha Brune, Prof. Dr. Jean Braun

Leistungen in Bezug auf das Modul

PNL 576132 - Vorlesung und Übung (unbenotet)

GEW-MF04 - Specialization Module-Theory and Applications **112587 PU - Thematic Field School**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	PU	N.N.	N.N.	Block	N.N.	N.N.	Prof. Dr. Pieter van der Beek

Leistungen in Bezug auf das Modul

PNL 576142 - Blockkurs oder Geländeübung (unbenotet)

GEW-MF11 - Fundamentals of Digital Seismology **112272 VU - Array Seismology**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	08:30 - 10:00	wöch.	2.27.2.37/38	09.04.2025	Dr. Matthias Ohrnberger
1	U	Mi	10:15 - 11:45	wöch.	2.27.2.37/38	09.04.2025	Dr. Matthias Ohrnberger
1	U	N.N.	N.N.	Block	N.N.	N.N.	Dr. Matthias Ohrnberger

Field practical from June 10th to 13th

Kommentar

What is better than recording the seismic wave field with one seismometer? Correct! It is generally much better to observe the seismic wave field with several separately placed seismometers, a so-called seismic array. The parallel recording of the continuously present ground motion in space and time by a set of spatially distributed seismic sensors allows enhanced insight in wave propagation phenomena. It provides a direct measurement of the apparent propagation speed and direction of individual wave arrivals along the recording geometry leading to a better idea on the wave types in the observed wave field.

The goal of array seismology is manifold. The purpose of observation reaches from building structural subsurface models of the shallow part of the ground below the array recording site to enhancing and verifying tiny details in the deeper earth structure. In addition, arrays help to understand for example dynamic physical processes inside the earth creating seismic waves like earthquake faulting or volcanic eruption phenomena.

Besides learning about the theoretical background of array signal processing techniques in a normal classroom environment, students will study the practical side of array seismology during a 4-to-5-day field course as integral part of the module. Within the field course students will get in touch with modern seismological equipment and conduct their own array experiment starting from experiment design to deployment of seismological equipment and final data recovery. The data acquired during the field course will be analyzed by the students and summarized in an obligatory report.

Bemerkung

The course will start in the 2nd week of the semester (17.04.2024). The field course for this year is planned for the dates 21.05 to 24.05.

We will most probably go to the Vogtland region - Details will be discussed in class.

Leistungen in Bezug auf das Modul

SL 576152 - Vorlesung und Übung II (unbenotet)

SL 576153 - Geländeübung (unbenotet)

GEW-MF12 - Seismological Data Science **112550 VU - Advanced Methods in Observational Seismology**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Do	12:30 - 14:00	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger
1	U	Do	14:15 - 15:45	wöch.	2.27.2.37/38	10.04.2025	Prof. Dr. Frank Krüger

Leistungen in Bezug auf das Modul

SL 576162 - Vorlesung und Übung II (unbenotet)

GEW-MF13 - Applied Geophysical Methods I

112573 VU - Potential Field Methods							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mo	12:30 - 14:00	wöch.	2.27.2.37/38	07.04.2025	Dr. Julien Guillemeau
1	U	Mo	14:15 - 15:45	wöch.	2.27.2.37/38	07.04.2025	Dr. Julien Guillemeau
Leistungen in Bezug auf das Modul							
SL	576173 - Vorlesung und Übung II (unbenotet)						

112574 VU - Potential Field Methods (block course)							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	B	N.N.	N.N.	Block	N.N.	N.N.	Dr. Julien Guillemeau
Leistungen in Bezug auf das Modul							
SL	576174 - Blockkurs II (unbenotet)						

GEW-MF14 - Applied Geophysical Methods II

112576 VU - Applied Geophysics Field Course							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	U	N.N.	09:00 - 18:00	Block	N.N. (ext)	01.09.2025	Prof. Dr. Jens Tronicke, Dr. Philipp Koyan
1	U	N.N.	09:00 - 17:00	Block	2.27.2.37/38	08.09.2025	Prof. Dr. Jens Tronicke
Kommentar							
This course is part of GEW-MF14 "Applied Geophysical Methods II" (specialization module Geophysics, MSc Geosciences). Within this field course a typical problem from hydrology, geology, or archaeology will be addressed. For a given target, different geophysical techniques (e.g., direct-current electrics, electromagnetics, ground-penetrating radar, geomagnetics) will be employed in the field. In the second part of this course, the focus is on computer-based processing and interpretation of all gathered data using standard inversion, modeling, and processing approaches. Students are expected to have a profound background in applied geophysical methods and, especially, in electrical and electromagnetic methods as, for example, taught in the first half of this module ("Electrical and electromagnetic methods").							
Leistungen in Bezug auf das Modul							
SL	576182 - Geländearbeiten (unbenotet)						
SL	576183 - Datenauswertung (unbenotet)						

GEW-MF21 - Advanced Petrology and Age Determination

112548 VU - Advanced Age Determination							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	VU	Mo	08:30 - 10:00	wöch.	2.27.2.49	07.04.2025	Dr. Masafumi Sudo, Dr. Martin Jan Timmerman
1	VU	Mo	10:15 - 11:45	wöch.	2.27.2.49	07.04.2025	Dr. Masafumi Sudo, Dr. Martin Jan Timmerman
Kommentar							
The course is held every Monday, 8:30-11:45, in the room 2.49 in Haus 27. The course comprises the following two parts and periods: - the first half (April 8th to May 27th): Advanced topics in U-Pb Geochronology, by Dr. Martin Timmerman - the first half (June 3rd to July 15th): Advanced topics in Ar/Ar Geochronology, by Dr. Masafumi Sudo The course includes lectures, exercises and discussions with selected papers mainly on the magmatic and metamorphic petrology/geology. The first meeting of this course will take place on Monday, April 8th. The details of the latest information are updated in Moodle at necessary times.							

Leistungen in Bezug auf das Modul

SL 576192 - Vorlesung und (Gelände-)Übung II (unbenotet)

GEW-MF22 - Physicochemical Mineralogy-Petrology **112582 SU - Experimental Mineralogy-Petrology**

Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	S	N.N.	N.N.	wöch.	N.N.	N.N.	Prof. Dr. Max Wilke, Dr. Sergey Lobanov, Dr. Melanie Jutta Sieber, Dr. rer. nat. Wolfgang Morgenroth
Raum und Zeit nach Absprache							
1	U	N.N.	N.N.	wöch.	N.N.	N.N.	Prof. Dr. Max Wilke, Dr. Sergey Lobanov, Dr. Melanie Jutta Sieber, Dr. rer. nat. Wolfgang Morgenroth
Raum und Zeit nach Absprache							

Kommentar

This course 'Experimental Mineralogy-Petrology' is part of the module: GEW-MF22 – 'Physicochemical Mineralogy-Petrology'

learning goals of the module are:

- understanding the physical properties of minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature
- conducting high-pressure/high-temperature laboratory experiments on minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature

components of the module are:

- this course ('Experimental Mineralogy-Petrology', WiSe or SoSe) and
- one course in SoSe ('Mineral Physics and Spectroscopy')

in this course 'Experimental Mineralogy-Petrology' you will be:

- conducting experiments
- examine the resulting material with various analytical methods
- prepare a short presentation and report

WoMo, 19.03.2024

Bemerkung

A pre-meeting with an introduction into available topics for experiments and organization will be held on Wednesday, October 16th at 12:00 h in room ????. The meeting will be in hybrid mode. Students are asked to join in person if possible at all.

Students interested in this course are asked to join our pre-meeting for this course which includes the selection of projects.

In case you are interested in taking this course, please contact Melanie Sieber, melanie.sieber@uni-potsdam.de, or Wolfgang Morgenroth, wolfgang.morgenroth@uni-potsdam.de, by email.

Leistungen in Bezug auf das Modul

SL 576202 - Seminar und Übung (unbenotet)

112583 VS - Mineral Physics and Spectroscopy							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Do	08:30 - 10:00	wöch.	2.27.2.07	10.04.2025	Prof. Dr. Max Wilke, Dr. Sergey Lobanov
1	S	Do	10:15 - 11:45	wöch.	2.27.2.07	10.04.2025	Prof. Dr. Max Wilke, Dr. Sergey Lobanov
Kommentar							
First Lecture on April, 18 at 9:15 where also organisational Details will be handled. This course 'Mineral Physics and Spectroscopy' is part of the module: GEW-MF22 – 'Physicochemical Mineralogy-Petrology' learning goals of the module are: • understanding the physical properties of minerals, glasses and rocks to better understand magmatic and metamorphic processes in nature • conducting high-pressure/high-temperature laboratory experiments or analytical work on minerals, glasses and rocks to better understand processes in nature components of the module are: • 'Experimental Mineralogy-Petrology', WiSe or SoSe) and • 'Mineral Physics and Spectroscopy', SoSe) in this course 'Mineral Physics and Spectroscopy' you will be: • learning about physical properties especially of crystalline materials • learn about how to determine them and how they influence geological processes • learn about various spectroscopic methods and how they are used to characterize and analyse minerals, glasses and liquids							
Leistungen in Bezug auf das Modul							
SL	576201 - Vorlesung und Seminar (unbenotet)						

GEW-MF23 - Special Topics in Mineralogy-Petrology							
112584 VS - Ore Forming Processes and Dating of Volcanic Processes							
Gruppe	Art	Tag	Zeit	Rhythmus	Veranstaltungsort	1.Termin	Lehrkraft
1	V	Mi	14:15 - 15:00	wöch.	2.27.1.10	09.04.2025	PD Dr. Philipp Weis
1	V	Mi	15:15 - 16:00	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo
1	S	Mi	16:15 - 17:45	wöch.	2.27.1.10	09.04.2025	Dr. Masafumi Sudo, PD Dr. Philipp Weis
Kommentar							
The course consists of two separate lectures and one joint seminar: - Ore-forming processes (by PD Dr. Philipp Weis): Understanding natural enrichment mechanics forming metal deposits in the context of plate tectonics. - Dating of volcanic processes (by Dr. Masafumi Sudo): From the views on the volcanoes and geochronology, volcanological/ magmatic scientific questions along the time scales are lectured and discussed. The introduction for the course (Vorbesprechung) will be held on April 10th at 14:15 in the room 1.10 of Haus 27.							
Leistungen in Bezug auf das Modul							
SL	576216 - Vorlesung und Seminar (unbenotet)						

Glossar

Die folgenden Begriffserklärungen zu Prüfungsleistung, Prüfungsnebenleistung und Studienleistung gelten im Bezug auf Lehrveranstaltungen für alle Ordnungen, die seit dem WiSe 2013/14 in Kraft getreten sind.

Prüfungsleistung	Prüfungsleistungen sind benotete Leistungen innerhalb eines Moduls. Aus der Benotung der Prüfungsleistung(en) bildet sich die Modulnote, die in die Gesamtnote des Studiengangs eingeht. Handelt es sich um eine unbenotete Prüfungsleistung, so muss dieses ausdrücklich („unbenotet“) in der Modulbeschreibung der fachspezifischen Ordnung geregelt sein. Weitere Informationen, auch zu den Anmeldeöglichkeiten von Prüfungsleistungen, finden Sie unter anderem in der Kommentierung der BaMa-O
Prüfungsnebenleistung	Prüfungsnebenleistungen sind für den Abschluss eines Moduls relevante Leistungen, die – soweit sie vorgesehen sind – in der Modulbeschreibung der fachspezifischen Ordnung beschrieben sind. Prüfungsnebenleistungen sind immer unbenotet und werden lediglich mit "bestanden" bzw. "nicht bestanden" bewertet. Die Modulbeschreibung regelt, ob die Prüfungsnebenleistung eine Teilnahmevoraussetzung für eine Modulprüfung oder eine Abschlussvoraussetzung für ein ganzes Modul ist. Als Teilnahmevoraussetzung für eine Modulprüfung muss die Prüfungsnebenleistung erfolgreich vor der Anmeldung bzw. Teilnahme an der Modulprüfung erbracht worden sein. Auch für Erbringung einer Prüfungsnebenleistungen wird eine Anmeldung vorausgesetzt. Diese fällt immer mit der Belegung der Lehrveranstaltung zusammen, da Prüfungsnebenleistung im Rahmen einer Lehrveranstaltungen absolviert werden. Sieht also Ihre fachspezifische Ordnung Prüfungsnebenleistungen bei Lehrveranstaltungen vor, sind diese Lehrveranstaltungen zwingend zu belegen, um die Prüfungsnebenleistung absolvieren zu können.
Studienleistung	Als Studienleistung werden Leistungen bezeichnet, die weder Prüfungsleistungen noch Prüfungsnebenleistungen sind.



Quelle: Karla Pirze

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