

<b>Modulbezeichnung</b>	<b>Soil remediation</b>	
<b>Semester (Häufigkeit)</b>	WPM (nach Bedarf)	
<b>ECTS-Punkte (Dauer)</b>	6 (1 Semester)	
<b>Art</b>	Wahlpflichtmodul	
<b>Sprache(n)</b>	English	
<b>Studentische Arbeitsbelastung</b>	60 h Kontaktzeit + 120 h Selbststudium	
<b>Voraussetzungen (laut MPO)</b>	none	
<b>Empf. Voraussetzungen</b>		
<b>Verwendbarkeit</b>	MTCE	
<b>Prüfungsart und -dauer</b>	theoretical part: written exam 1,5 h or oral exam (Prüfungsleistung) practical part: practical course (Studienleistung)	
<b>Lehr- und Lernmethoden</b>	lecture, practical course	
<b>Modulverantwortliche(r)</b>	G. Walker	
<p><b>Qualifikationsziele</b>  Qualification goals:  At the end of the semester, students will be able to ...  take samples from contaminated sites (e.g. contaminated soils), determine heavy metals by ICP-OES and AAS as well as PAHs by HPLC and fluorescence spectroscopy  by ...</p> <ul style="list-style-type: none"> <li>• understand the appropriate sampling techniques, digestion and extraction procedures as well as ICP-OES and AAS equipment and chromatographic and spectroscopic techniques and apply them under guidance</li> <li>• write scientific reports</li> </ul> <p>to .... select and apply appropriate techniques for soil analysis and remediation issues</p> <ul style="list-style-type: none"> <li>• classify analytical results in the context of the method used and in the context of other characteristics of soil and contaminated site</li> </ul>		
<p><b>Lehrinhalte</b>  Chromatography (HPLC, GC), fluorescence spectroscopy, metal analysis by AAS and ICP-AES</p>		
<p><b>Literatur</b>  Georg Schwedt: 'The Essential Guide to Environmental Chemistry' (2001), Wiley  Scheffer/Schachtschabel: 'Soil Science' (English Edition) 1st ed. (2016), Springer</p>		
<b>Lehrveranstaltungen</b>		
<b>Dozenten/-innen</b>	<b>Titel der Lehrveranstaltung</b>	<b>SWS</b>
G. Walker	Soil remediation, lecture	1
G. Walker	Soil remediation, practical course	3