MODULE: Special Aspects of Urban Water Management

Last Update: 1.2.2011

1	Modulname Module name	Special Aspects of Urban Water Management
2	Modulkürzel Identification code	021210006
3	Leistungspunkte (LP) Credit points (CP)	6
4	Semesterwochenstunden (SWS)/Semester load	4
5	Moduldauer (Anzahl der Semester) Module duration (Number of semesters)	1
6	Turnus Cycle	Every 2nd Semester; WS
7	Sprache Language	English
8	Modulverantwortliche(r) Person in charge of module	Dipl.-Ing. Ralf Minke, Akad. Oberrat, Institute for Sanitary Engineering, Water Quality and Solid Waste Management (ISWA) Tel.: 0711 685-65423 Email: ralf.minke@iswa.uni-stuttgart.de
9	Dozenten Lecturers	Prof. Dr.-Ing. Heidrun Steinmetz, Dipl.-Ing. Klaus W. König, Dipl.-Ing. Ralf Minke, Dr.-Ing. Ulrich Dittmer
10	Verwendbarkeit/Zuordnung zum Curriculum /Applicability/Assignment to curriculum	UMW (M.Sc.), 3. Sem., Ergänzungsmodul BAU (M.Sc.), 3. Sem., Ergänzungsmodul WAREM (MSc), 3. Sem., elective WASTE (MSc), 3. Sem., elective MIP (MSc), 3. Sem., elective
11	Voraussetzungen Prerequisites	**Understanding:** Basic knowledge about the general interactions between sanitary enginnering and water economics. In depth knowledge about wastewater management, water quality management, and water supply or the general management of water resources. Topics: Water Treatment Technology or Urban Drainage and Wastewater Treatment Technology or Waste Water Technology or Water Quality and Treatment

12	Lernziele Intended learning outcome	**Technical:** The student develops an understanding about the whole and the interactions between individual topics. The student will be able to balance reasons when making decisions and in the planning process that involving different topics like wastewater management, water management, and others. **Methodical:** The student will be able to use in a proper way international scientific literature that deals with the different topics in order to evaluate results and come to an understanding of the state of the art. Further, the student will be able to present it to fellow students and scientists.
13	Inhalt Content	- interactions between sub-topics of water and wastewater management on the example of rainwater management - annually updated special topics to account for scientific and technical progress
14	Literatur/ material	Gujer, W. Siedlungswasserwirtschaft, Springer Verlag GmbH Mutschmann, J; Stimmelmayr, F.: Taschenbuch der Wasserversorgung, Vieweg-Verlag Jeweils die aktuellen Auflagen Nationale und internationale Fachzeitschriften, z.B. GWF-Wasser/Abwasser, KA Abwasser, Abfall, Hrsg. und Verlag GFA, W.Sci.Tech., Wat. Res., Wasser und Abfall Diverse Merk- und Arbeitsblätter des DVGW und der DWA
15	Lehrveranstaltungen und Lehrformen Course units and teaching methods	Scientific Seminar, Seminar, 2 SWS Rainwater Harvesting and Management, Lecture 1 SWS Excursions, 1 SWS
16	Abschätzung des Arbeitsaufwands Estimation of workload	In class hours: 60 h Self-study: 120 h
17a	Studienleistungen (unbenotet) Course achievements (without mark)	
	Studienleistungen (benotet) Course achievements (with mark)	
17b	Prüfungsleistungen (benotet) Examination achievements (with mark)	Exam (LBP): Seminar presentation (30 min) with discussion and written report (15 – 20 pages)
	Additional information (optional)	In case of only German students enrolled the course will be taught in German.
18	Grundlage für… Basis for…	
19	Medienform Media	Presentation of the content of teaching using Power Point presentations, development of the basics using black board, students will give presentations with subsequent discussion, several excursions