

Modul-Nr./ Module Code	INNOM1300	
Modulbezeichnung / Name of Module	Selected Topics I: Sustainable Innovation	
Semester	1 st	
Dauer des Moduls / Length of module	1 semester	
Art des Moduls (Pflicht, Wahl, etc.) / Module type (Compulsory, Elective etc.)	Compulsory subject	
Ggfs. Lehrveranstaltungen des Moduls / if applicable: Sub-module	INNOM1310 Innovation for Sustainability	
	INNOM1320 Transformation in Mobility	
Häufigkeit des Angebots des Moduls / The module is provided	Annually (winter semester)	
Zugangsvoraussetzungen / Prerequisites for attending	-	
Verwendbarkeit des Moduls für andere Module und Studiengänge / Applicability of the module for other modules and degree courses	This Module will explore the role of innovation in sustainable development. Students will have an understanding of the theory and current policies which surround sustainability growth and competitiveness. These will be illustrated with relevant transformations in manufacturing, agriculture and energy sectors. Our current Understanding of mobility and the alternatives, will also be included in this Module.	
Modulverantwortliche/r / Lecturer in charge	Prof. Dr. Eileen Murphy	
Name der/des Hochschullehrer/s / Name of the lecturer	Prof. Dr. Eileen Murphy	
Lehrsprache / Language of Instruction	English	
Zahl der zugeteilten ECTS-Punkte / Number of ECTS credits	3	6
	3	
Gesamtworkload und ihre Zusammensetzung / Workload and its composition	180 hours (116 h self-study; 64 contact time)	
SWS / Contact hours per week	2	4
	2	
Art der Prüfung (Voraussetzung für die Vergabe von Leistungspunkten) / Type of assessment (Requirements for awarding credit points)	Written examination 2 hours	
Gewichtung der Note in der Gesamtnote / Percentage of overall mark	11,11 %	
Qualifikationsziele des Moduls / Learning outcomes of the Module	<p><u>Knowledge & Understanding</u> To articulate and utilise a working knowledge of issues concerning innovation and sustainability</p> <p><u>Applying knowledge and Understanding</u> Students will understand how to apply concepts from innovation theory and apply them to environmental problems.</p> <p><u>Making judgements</u> Students will learn to assess and analyse contemporary environmental and mobility</p>	

	<p>issues using a combination of both academic and policy literature.</p> <p><u>Communication:</u> Students will be required to justify and provide rationale for their arguments both in written form and through oral presentations</p> <p><u>Learning skills</u> Students will learn how to integrate sustainable thinking and circularity into innovation projects for products and services.</p>
Inhalte des Moduls / Syllabus	<p>INNOM1310 Innovation for Sustainability: Rethinking value and profit – from greed is good to green is good – challenging the current business ethos – the sustainable development goals and circular economy Innovation embedded in sustainability – moving forward and commitment to change – managing science and policy.</p> <p>INNOM1320 Transformation in Mobility Current mega trends in mobility – digitalisation and urbanisation, challenges for society - alternatives to the mobility narrative–networks and connectivity for freight and passenger transport.</p>
Lehr- und Lernmethoden des Moduls / Teaching methods of the module	Lectures, case studies, class discussions
Besonderes (z.B. Online-Anteil, Praxisbesuche, Gastvorträge, etc.) / Special Features	
Literatur / Literature (Pflichtlektüre/zusätzlich empfohlene Literatur)	<p>INNOM1310 Innovation for Sustainability: Business Models in the Circular Economy Concepts, Examples and Theory Roberta De Angelis (2018)</p> <p>Climate Smart Agriculture Concepts, Challenges, and Opportunities Dr. Pratap Bhattacharyya, Dr. Himanshu Patha... in Green Energy and Technology (2020)</p> <p>INNOM1320 Transformation in Mobility Transformation in Mobility Smart Mobility Exploring Foundational Technologies and Wider Impacts Alaa Khamis (2021)</p> <p>Development of an Eco-Routing App to Support Sustainable Mobility Behaviour Rebecca Heckmann, Lutz Gaspers, Jörn Schönberger in Innovations for Metropolitan Areas (2020)</p>