Title	Procedural World Construction			
Cluster Title PO 2014 To be filed by focus managers s.u.				
Date of first course event / first organizational meeting with students***/ Room**	2.5.2024 tbc (might change to 21.3.)	F17.23		NN
kind of room if not indicated above	**Online**		**Seminarraum**	**Labor**	**X**

Belegung über OBS - 28.3.-8.4.24 14:00   Achtung nur aus dem h-da Netz oder über vpn

Course Data						
	credit points				5 credit points	
	workload/semester				125-150 h	
	presence/week on average**				4 SWS	
	Group size according to cnw					
	Min. size				8 students	
	18.10.21-18.2.22					
			weekday of course		Thu	
	frequency of course-events	weekly **X**	bi-weekly		blocked	
	prospective timeframe**** (Block = 90 min)	Block 1 **8:30**	Block 2 10:15		Block 3 12:00	
		Block 4 **14:15** **X**	Block 5 16:00 X		Block 6 **17:45**	
	course language		English X		German	
	suitable for students of course/focus	**ER**		**AG**		X
		IMD		**MP**		
		SMP		**IW (BA)**		
		OJ/WJ/OK		**KMI**		
Content(s): (check one or more)	Design	Informatics / Technology X	Economy / Business	Culture	
Time frame in case of blocked event					

Course Portrait	
Lecturer(s) Name(s)	Prof Stephan jacob
Lecturer(s) email	Stephan.jacob@h-da.de
Contact Prof. @ fbmd	1366
Teaching Method	lecture	lecture + seminar X	seminar	project
Course Contents	The elective is targeting Tech Artists and Programmers. A lot of games featuring large areas and worlds or have a level generator to create mass of content in no time. Also, for some animations, we need a lot of assets to fill the background. This is often assembly line work and would be a waste of creative work time for Artists. In this elective, we will cover how to develop such worlds and content generators. After a short introduction to general Procedural Content Generation (PCG), we will learn how terrain systems work and also try to program our own landscape generator and dungeon generator in Unity. We will learn how Plants, Trees and other vegetation is automatically created and what techniques, methods and applications exists. (e.g. In Houdini) We will also learn how Citys, Buildings, Textures and even NPS, Quests or Names can be completely generated. Disclaimer: Although about 50% of the course will be dry theory - we will write actual code and create stuff! Both Programmers and Artists are welcome, but a basic understanding in coding will be very useful, also PCG code and methods

	needs more of a mathematical understanding than gameplay code. The elective is therefore targeted towards Tech Artists and programmers. We will be using Unity.						
Type of Exam	homework	X	work+presentation		paper	X	
Milestones if known							
		Examination					
		Examination / Presentation					
End of Elective							
Suitability	intermediate course to advanced course						
Preconditions	Game Dev 1 & 2						
Info about lecturer (especially if guest)							
Other information							

* According to our examination law, the course titles have to be matched to a given catalogue with common course titles. This title will appear in the Transcript of Record and the Bachelor Certificate. Field has to be filed by Focus Managers, all clusters can be found below
** The official presence-time is 3 SWS for the whole semester. As the elective period is condensed to 12 weeks instead of 16 weeks, the presence time for the electives is 4 SWS.
*** Courses and focal points: er = Expanded Realities , oj = Online Journalismus; wj = Wissenschaftsjournalismus, blank field = please insert appropriate course. *(check as many as apply)*
**** Block 1 = 8.30 - 10.00 Uhr, Block 2 = 10.15 - 11:45 Uhr, Block 3 = 12.00 - 13.30 Uhr, Block 4 = 14.15 - 15.45 Uhr, Block 5 = 16.00 - 17.30 Uhr, Block 6 = 17.45 - 19.15 Uhr
***** In case that the course does not start in the first week 15.10.2018 there has to be a first organisational meeting to finalize the application process

Elective Start: 15,4,24
Holy days 1.5., 9.5.,20.5.30.5
Electives End 19.7..2024 (Examinations could be scheduled after this date if necessary)

Please upload in Moodle Course!

to be filed by lecturer
to be filed by focus manager

An die Schwerpunktleiter: Bitte auch die Folgeseite beachten.