その の

	Graduate School of Hiroshima University	Leipzig University (Universität Leipzig)
	3 2	Ritterstraße 26 04109 Leipzig, Germany
	(1) (2) (3) (4) (5)	
	2030 SDGs SDGs NGO Employability	

	[Graduate School of Advanced Science and Engineering]	2	2 <449>		4 <898>	(Master of Science)	2 10 1	5 1	Faculty of Economics and Management Science Grimmaische Straße 12 04109 Leipzig, Germany < >
	[Joint International Master's Programme in Sustainable Development(Hiroshima University and Leipzig University)]		2		4				

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M50 D17
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M64 D32
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P20 M20) M80)
M14 M14 M19
M5 D49

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M24 D5 M28 D8)
M28 D14
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M22 D11 M30 D13
M23 D11 M10 D5

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M25 D12 M15 D7
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M28 D9 M30 D10
M34 D11 M37 D13
M24 D8 M26 D9
M20 D7 M20 D7
M21 D7

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M43 D22 M28 D14
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P20

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M257 D85 M163 D50
P30 (P20

M449 D128

8

M2

52	14	0	66	60	

	3 (3)	5 (5)	0 (0)	0 (0)	8 (8)	0 (0)	43 (43)	
	3 (3)	5 (5)	0 (0)	0 (0)	8 (8)	0 (0)	43 (43)	
	103 (103)	93 (93)	6 (6)	17 (17)	219 (219)	0 (0)	123 (123)	
	95 (95)	89 (89)	4 (4)	1 (1)	189 (189)	0 (0)	34 (34)	
	64 (64)	56 (56)	8 (8)	1 (1)	129 (129)	0 (0)	146 (146)	6
	66 (66)	56 (56)	4 (4)	0 (0)	126 (126)	0 (0)	40 (40)	
	6 (6)	10 (10)	2 (2)	0 (0)	18 (18)	0 (0)	120 (120)	
	14 (15)	1 (1)	1 (1)	0 (0)	16 (17)	0 (0)	85 (85)	
	6 (6)	4 (4)	0 (0)	0 (0)	10 (10)	0 (0)	46 (46)	8

121	109	5	79	314	0	104	
(121)	(109)	(5)	(79)	(314)	(0)	(104)	6
121	107	3	47	278	0	50	
(121)	(107)	(3)	(47)	(278)	(0)	(50)	
48	49	6	36	139	0	134	
(48)	(49)	(6)	(36)	(139)	(0)	(134)	
44	49	6	30	129	0	39	
(44)	(49)	(6)	(30)	(129)	(0)	(39)	
52	40	22	34	148	0	69	
(52)	(40)	(22)	(34)	(148)	(0)	(69)	
84	32	25	25	166	0	151	
(84)	(32)	(25)	(25)	(166)	(0)	(151)	
40	4	5	1	50	0	99	
(40)	(4)	(5)	(1)	(50)	(0)	(99)	
453	371	68	186	1078	0		
(454)	(371)	(68)	(186)	(1079)	(0)	( )	
453	372	68	186	1079	0		
(454)	(372)	(68)	(186)	(1080)	(0)	( )	

523	938	1,461
523	938	1,461
1,119	211	1,330
1,119	211	1,330
26	0	26
26	0	26
4	352	356
4	352	356
1,672	1,501	3,173
1,672	1,501	3,173

951,632	0	0	951,632
244,009	0	0	244,009
1,195,641	0	0	1,195,641
1,134,377	0	0	1,134,377
2,330,018	0	0	2,330,018

514,567	0	0	514,567
514,567	0	0	514,567

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20 18

8

									( )
						1.05			
	4	120		500	( )	1.05	49		30 (10)
	4	40		80	( )	1.07	30		
						1.06			
	4	130	3 10	560	( )	1.06			30 (10)
						1.02			
( )	4	157		634	( )	1.01	12		28 (20)
									30 (3)
( )	4	82		340	( )	1.01	12		30 (6)
( )	4	73		314	( )	1.03	12		30 (11)
( )	4	81		338	( )	1.05	12		30 (7)
( )	4	52		214	( ) ( )	1.03	12		30 (3)
						1.07			
	4	140	3 10	580	( )	1.06			
	4	30	3 10	160	( )	1.10			30 (10)
						1.07			
	4	150	3 5	615	( )	1.07			30 (5)
	4	45	3 5	220	( )	1.06			30 (15)
									30 (5)
						1.06			
	4	47	3 10	192	( )	1.03	24		
	4	66		268	( )	1.07	10		
	4	59		240	( )	1.06	24		
	4	34		140	( )	1.06			
	4	24		100	( )	1.06			
						1.00			6
						1.03			4
	6	120		720	( )	1.00	28		
		120							
	4	60		240	( )	1.03			
	4	30		120	( )	1.02			

		4	30		120	( )	1.02			
							1.00			6
							1.05			4
		6	53		318	( )	1.00	40		
					160	( )				
		4	20		80	( )	1.05	21		
		4	20		80	( )	1.06	21		
							1.03			6
							1.07			4
		6	38		228	( )	1.03	18		
		4	22		88	( )	1.07	18		
							1.03			
		4				( )		13		30
		4				( )		13		30
	( )	4				( )		13		30
	( )	4	150	3 5	300	( )	1.04	30		
	( )	4	90	3 3	180	( )	1.04	30		
	(	4	115	3 4	465	( )	1.02	13		30 (4)
	( )	4	90	3 3	180	( )	1.06	30		
							1.13			
		4	90	3 10	380	( )	1.13	54		
							1.06			
		4	80	3 5	160	( )	1.06	30		
										2
		2	50		110	( )	0.98	18		31 (10)
		3	17		57	( )	0.81	18		31 (3)
										2
		2	64		128	( )	0.95	13		
		3	32		96	( )	0.67	13		
		3				( )		12		28
						( )				
						( )				
		3				( )		12		28
						( )				
						( )				
		3				( )		12		28
						( )				
		2	20		40	( )	1.00	28		2
		2	20		40	( )	1.72	28		2
						( )				
						( )				

		2	80		160	( )	1.23	28		2
						( )				
						( )				
		2	14		28	( )	1.21	28		2
						( )				
						( )				
		2	14		28	( )	1.21	12		2
						( )				
						( )				
		2	19		38	( )	1.12	12		2
						( )				
						( )				
		2	5		10	( )	0.80	28		2
						( )				
						( )				
		3	49		147	( )	1.36	28		2
						( )				
						( )				
										2
		2	24		48	( )	1.02	16		
						( )				
		3	5		15	( )	0.53	16		
						( )				
		2	28		56	( )	1.28	16		
						( )				
		3	8		24	( )	0.41	16		
						( )				
		2	28		56	( )	0.67	12		
		3	14		42	( )	0.45	12		
		2	22		44	( )	0.67	28		2
		3	11		33	( )	0.48	28		
		2	30		60	( )	1.08	28		2
		3	13		39	( )	0.63	28		
		2	23		46	( )	1.56	28		2
		3	11		33	( )	0.75	28		
		2				( )		28		31
		3				( )		28		
		2	10		20	( )	1.05	28		2
		3	5		15	( )	0.53	28		
		2				( )		11		31
		3				( )		11		
		2	25		50	( )	1.26	10		2
						( )				
						( )				
		3	12		36	( )	0.30	10		
						( )				
						( )				
		2				( )		10		31
						( )				
						( )				
		3				( )		10		
						( )				
						( )				
		2	15		30	( )	1.33	16		2
						( )				
						( )				

		3	7		21	( ) ( ) ( )	0.23	16		
		4				( ) ( ) ( ) ( )		24		31
		2				( )		24		
		3				( )		24		
		2				( )		24		
		3				( )		24		
		2				( )		24		
	( )					( )				
		3				( )		24		
		2				( ) ( ) ( )		24		
		2				( ) ( )		14		24
		3				( ) ( )		14		
		2	28		56	( )	1.23	22		2
		3	9		27	( )	0.70	22		
		2	30		60	( )	1.61	22		
		3	10		30	( )	0.96	22		
		2	34		68	( ) ( )	1.58	22		
		3	11		33	( ) ( )	0.78	22		
		2	37		74	( ) ( )	1.40	22		
		3	13		39	( ) ( )	0.43	22		
		2	24		48	( )	1.47	22		
		3	8		24	( )	0.74	22		
		2	26		52	( )	1.32	22		
		3	9		27	( )	0.29	22		
		2	20		40	( )	1.42	22		
		3	7		21	( )	0.80	22		
		2	20		40	( )	1.32	22		
		3	7		21	( )	0.66	22		
		2	21		42	( )	1.23	22		
		3	7		21	( )	0.61	22		
		2				( ) ( )		18		31
		3				( ) ( )		18		
		2				( ) ( )		18		
		3				( ) ( )		18		
		2				( ) ( )		11		

		3				( ) ( )		11		
		4 4 2 3				( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		14 14 21 23		24
		2 3 2 3	43 22 28 14		86 66 56 42	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	1.18 0.61 1.42 0.87	6 6 7 7		2
		2 3	170 70		170 70	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	0.90 0.32	31 31	1 4 4 1 3 1 1 7 1	
		4 2 3	97 76 25		97 76 25	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	1.02 0.98 0.56	31 31 31		
		3	20		60	( )	0.66	16		2

1 2 3
36 4
(144,700) 7,971

1 2 3
31 4
(144,700) 122,552

1 2 2
24 5
(2,492,191) 29,584

1 2 3
55 4
(144,700) 298

7 4
53 10
2,675 840

1 1 1
41 4
(2,492,191) 44,097

1 1 1
63 4
(2,492,191) 44,097

1 1 1
7 4
(2,492,191) 44,097

1 1 1
14 4
(2,492,191) 44,097

1 1 89
5
(18,470) 3,163

1 3 1

19 4
(2,492,191) 34,461

2965 5 8 1
15 4
(2,492,191 4,268) 1,353

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24 5
21,197 1,590

1156-2
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102,076 578

1 4 3
52 4
(2,492,191) 794

1 2 3
18 6
(144,700) 84,633

1 2 3
21 4
(144,700) 120

1 1 89
17 4
(18,470) 53

1 2 3
42 6
(144,700) 7,971

2 313
8 5
(2,492,191) 3,881

570
47 4
111,469 1,022

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8 5
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(2,492,191) 1,207

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(1)

(2)

(3)

(4)

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44 4
(2,492,191) 1,146

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50 7
(18,470) 386

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17 3
(2,492,191) 2,374

(1)

(2)
(3)

1 1 1
18 4
(2,492,191) 443

83

14 10
(243)

1 3 1
16 4
(2,492,191) 478

1 7 1
16 4
(2,492,191) 1,195

1 1 1
16 4
(2,492,191) 783

1 1 1
17 4
(2,492,191) 26

HiSIM

HiSIM(Hiroshima university STARC
IGFET Model) CMC(Compact Modeling Council)
( )
3 CMC

1 3 1
17 7
(2,492,191) 87

1 1 1
22 4
(2,492,191) 60

1 3 2
28 4
(2,492,191)

1 3 1
28 10
(2,492,191) 3,886

1 2 3
30 4
(144,700)

	1 4 1 30 9 (2,492,191) 1 1 1 30 10 (2,492,191) 1,001 “ ” 100 1 2 3 30 10 (144,700) 3 10 23 31 2 (2,492,191) 3 10 32 31 2 (2,492,191) 1 2 2 16 9 (2,492,191) 136 (2 3 4 2) 1 1 1 26 4 (210,983 6,919) 54,375	

31

	120		480
	40		160
	130	10	540
( )	157		628
( )	82		328
( )	73		292
( )	81		324
( )	52		208
	140	10	580
	30	10	140
	150	5	610
	45	5	190
	47		188
	66		264
	59		236
	34		136
	24		96
		10	20
	105		630
	120		480
	53		318
	40		160
	38		228
	22		88
( )	150	5	610
( )	90	3	366
( )	115	4	468
( )	90	3	366
	90	10	380
	80	5	330
	2,323	80	9,844

2

	120		480
	40		160
	130	10	540
( )	157		628
( )	82		328
( )	73		292
( )	81		324
( )	52		208
	140	10	580
	30	10	140
	150	5	610
	45	5	190
	47		188
	66		264
	59		236
	34		136
	24		96
		10	20
	105		630
	120		480
	53		318
	40		160
	38		228
	22		88
( )	150	5	610
( )	90	3	366
( )	115	4	468
( )	90	3	366
	90	10	380
	80	5	330
	2,323	80	9,844

						24
50	100			0	0	
17	51			0	0	
						24
64	128			0	0	
32	96			0	0	
						24
20	40			0	0	
20	40			0	0	
80	160			0	0	
14	28			0	0	
14	28			0	0	
19	38			0	0	
5	10			0	0	
49	147			0	0	
						24
24	48			0	0	
5	15			0	0	
28	56			0	0	
8	24			0	0	
28	56			0	0	
14	42			0	0	
						24
22	44			0	0	
11	33			0	0	
30	60			0	0	
13	39			0	0	
23	46			0	0	
11	33			0	0	
10	20			0	0	
5	15			0	0	
						24
25	50			0	0	
12	36			0	0	
15	30			0	0	
7	21			0	0	
						24
28	56			0	0	
9	27			0	0	
30	60			0	0	
10	30			0	0	
34	68			0	0	
11	33			0	0	
37	74			0	0	
13	39			0	0	
24	48			0	0	
8	24			0	0	
26	52			0	0	
9	27			0	0	
20	40			0	0	
7	21			0	0	
20	40			0	0	
7	21			0	0	
21	42			0	0	
7	21			0	0	

		43	86	0	0	
		22	66	0	0	
		28	56	0	0	
		14	42	0	0	
						( )
				257	514	
				85	255	
				163	326	
				50	150	
				30	60	
				20	60	
				2	4	( )
						( )
				449	898	
				128	384	
				2	4	( )
		170	340	170	340	
		70	210	70	210	
		97	388	97	388	
		76	152	76	152	
		25	75	25	75	
				0	0	
		20	60			
		1,561	3,732	1,624	3,820	

その　の

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・ライプツィヒ　　サステイナビリティ

Hiroshima		1 2			1		○														0	5
Japanese Experience of Social Development-Economy, Infrastructure, and Peace		1 2			1		○			1					1							1	6
Japanese Experience of Human Development-Culture, Education, and Health		1 2			1		○															0	6
		1 2			1		○															0	4
		1 2			1		○															0	2
		1 2			1		○															0	9
		1 2			2		○															0	1
		1 2			2		○															0	1
		1 2			2		○															0	1
MOT		1 2			1		○															0	1
		1 2			1		○															0	1
11				0	14	0				1	0	0	0	0	1	0	0	0	0	0	0	1	35
MOT		1 2			1		○															0	1
		1 2			1		○															0	1
		1 2			1			○														0	1
		1 2			1		○															0	1
		1 2			1		○															0	1
		1 2			1		○															0	1
		1 2			1		○															0	1
7				0	7	0				0	0	0	0	0	0	0	0	0	0	0	0	0	4
		1			2		○															0	1
		1			2		○															0	1
Regional and Urban Engineering		1 2			2		○			1					1							1	
Fundamentals of Survey Methodology		1 2			2		○															0	1
Numerical Environmental Impact Assessment I		1 2			2		○				1				1							1	
Geographic Information System Technology		1 2			2		○															0	1
6				0	12	0				1	1	0	0	0	2	0	0	0	0	0	0	2	4
Basics in Economic Sciences		1			5		○									3					3	3	
Basics in Social Sciences – International Studies		1			5		○									1		1			2	2	
Basics in Sustainable Development		1			5		○									3					3	3	1
3				0	15	0				0	0	0	0	0	0	7	0	1	0	0	8	8	1

			Environmental Management		1 2			2		○			1	4				5							5	2	
			Development Technology		1 2			4		○			1	4				5							5	3	
			Transportation Engineering		1 2			2		○															0	1	
			Transportation Planning		1 2			2		○															0	1	
			Tourism Policy		1 2			2		○			1					1							1		
			Risk Management Technology		1 2			2		○															0	1	
			Sustainable Architecture A		1 2			2		○				1				1							1		
			Sustainable Architecture B		1 2			2		○				1				1							1		
			Energy Science and Technology		1 2			2		○				1				1							1		
			Numerical Environmental Impact Assessment II		1 2			2		○				1				1							1		
			Botany Resources for the Future		1 2			2		○				1				1							1		
			Environmental Monitoring		1 2			2		○				1				1							1		
			Biomass Energy Technology		1 2			2		○				1				1							1		
			Ecosystem Conservation and Management Science		1 2			2		○				1				1							1		
			Management and Conservation of Ecosystems		1 2			2		○				1				1							1		
					1			2			○		3	5				8							8	3	
					1			2			○		3	5				8							8	3	
			17				0	36	0				3	5	0	0	0	8	0	0	0	0	0	0	8	4	
					2			2			○		3	5				8							8	3	
					2			2			○		3	5				8							8	3	
			Developing Designing Ability		1 2			2			○			1				1							1	1	
					2			2			○														0	1	
					2			2			○														0	1	
					2			2			○														0	1	
			International Environmental Cooperation Studies		2			2		○			1	4				5							5	6	
					2			2			○		3	5				8							8	3	
			8				0	16	0		-		3	5	0	0	0	8	0	0	0	0	0	0	8	7	
			Energy Engineering and Management		1			5		○									2					2	2		
			Water Resources Management		1			5		○											1			1	1	1	
			Sustainable Energy Economics		1			5		○									1					1	1		
			Land Management		1			5		○											1			1	1	1	
			Environmental and Biodiversity Economics		1			5		○									1					1	1		
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			Sustainability Assessment of the Energiewende		2			2.5			○								1					1	1		
			Modelling in Resources Management		2			5		○									1					1	1	1	
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		Japanese Experience of Social Development-Economy, Infrastructure, and Peace	This course intends to discuss the issues of SDGs under the Guiding principles of Hiroshima University "Pursuit of Peace" and the long-term vision "Splendor Plan 2017". The SDGs sets sustainability as a core of the global issues. Such a broad issue always involve many related issues. Resolution of one issue may produce another issue. It is important to consider cross-disciplinary approach and hisotorical aspect. Also inclusiveness is an important principle of SDGs, and thus all countries, developed and developing countries, should collaborate to tackle these. When considering these cross-disciplinary approach, historiy, and inclusiveness of development, Japanese experience of development provides an important case, becuase Japan, among non-European countries, is the first country which has become a member of OECD. Here, we can learn many points from the developing efforts whether they are success or failure. These efforts, including development assistance, are connected to Japanese society of today. On the other hand, Japan currently faces such new issues as rapid aging and depopulation. Thus this course discusses Japanese experience of social development from the above aspects. lesson1 Guidance of the course lesson2 JICA chugoku center lesson3 Yuichiro Yoshida "Japanese policy experience: Success and Failures" lesson4 Masaru Ichihashi "Industrial Policy and Economic growth" lesson5 Junyi Zhang "History of environmental policies in Japan"1 lesson6 Junyi Zhang "History of environmental policies in Japan"2 lesson7 Osamu Yoshida "Japanese ODA and its Asia Policy" lesson8 Mari Katayanagi "Reconstruction of Hiroshima from Peacebuilding Perspective" Splendor Plan 2017 SDGs SDGs SDGs OECD	

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			Japanese Experience of Human Development-Culture, Education, and Health	This course intends to discuss the issues of SDGs under the Guiding principles of Hiroshima University “Pursuit of Peace” and the long-term vision “Splendor Plan 2017”. The SDGs sets sustainability as a core of the global issues. Such a broad issue always involve many related issues. Resolution of one issue may produce another issue. It is important to consider cross-disciplinary approach and hisotorical aspect. Also inclusiveness is an important principle of SDGs, and thus all countries, developed and developing countries, should collaborate to tackle these. When considering these cross-disciplinary approach, historiy, and inclusiveness of development, Japanese experience of development provides an important case, becuase Japan, among non-European countries, is the first country which has become a member of OECD. Here, we can learn many points from the developing efforts whether they are success or failure. These efforts, including development assistance, are connected to Japanese society of today. On the other hand, Japan currently faces such new issues as rapid aging and depopulation. Thus this course discusses Japanese experience of human development from the above aspects. lesson1 Guidance of the course lesson2 Maharajan Keshav Lall “Japanese experience of development in Agriculture and Remote area” lesson3 Koki Seki “Socio-cultural Aspect of Modernization of Japan: Focusing on the Transformation of Norm, Mentality, and Way ofLiving” lesson4 Kinya Shimizu “A History of Education in Japan” lesson5 Kinya Shimizu “Lesson Study in Japan: As a tool of PDSI in Japanese Education” lesson6 Junko Tanaka “International cooperation and research collaboration in the field of public health” lesson7 Michiko Moriyama "Healthcare system in Japan: its characteristics and history" lesson8 Discussion (┤ ╓ ₨ ┤ ┼ └ ╓ ₨ ┬ ╓ ┬ ˧ Ł ↄ א Splendor Plan 2017 ▪ ˆ ┐ ǂ ┬ ≠ ├ SDGs = └ ├ ≠ ▌ o SDGs ╓ ┼ ╓ ┬ ≠ ├ ▪ ├ ▌ o ⌐ ╓ ■ ┼ ╓ = ╓ ≠ ⌡ ▪ ∓ ▌ ╓ ╓ ╓ ▪ ∑ └ ≠ Δ ≟ ≠ ▌ ┼ o ╓ ∏ ┤ ▌ o ∫ ■ = SDGs ╓ ▪ ┼ ┬ ≠ ├ ∂ ▌ ▪ ╓ ≠ ⊧ ├ ╓ ∏ ≠ ├ ▌ ▫ ┤ Δ ┼ √ ▌ ┐ ┼ ■ ┼ o └ ▌ ■ ╓ ▪ ≠ ├ ∂ ▌ ╓ ל ┐ ש Z ˧ ╓ ┤ ╓ ╓ OECD ┤ ≟ ▌ o = √ ⌡ = ⌡ ┐ ├ ╓ ╓ ⌐ ╓ = ■ ≤ ╓ ▪ └ ┬ ∏ ┤ Σ ╓ ╓ = ≟ ≠ ▌ ≟ ╓ ┤ ▌ o ┤ ╓ ┼ = ≠ ├ ▌ o ╓ ┬ ∂ ▌ ┤ ╓ ╓ = ∂ √ ▌ ╓ = ≠ ├ ≟ ╓ ┤ ▌ o	☺ ! ⊦ ÷ ǂ

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		Numerical Environmental Impact Assessment I		
		Geographic Information System Technology		
		Basics in Economic Sciences	8 Dornberger, Utz 15 Value Chain Management Internationalization of SMEs = 2 Gawel, Eric 15 Sustainable Economics = 6 Schnabl, Gunther 15 International Finance =	45
		Basics in Social Sciences – International Studies	9 Engel, Ulf 30 International Studies = 12 Rietdorf, Ute 15 Development Economics =	45 30 60
		Basics in Sustainable Development	1 Bruckner, Thomas 15 Integrated Assessment of global Climate Protection Strategies = 3 Holländer, Robert 8 Sustainability and Corporate Environmental Management = 17 Klauer, Bernd 7 Theories of Sustainability = 10 Nissen, Sylke 15 Urban Geography, Sociology and Governance =	45 60 30

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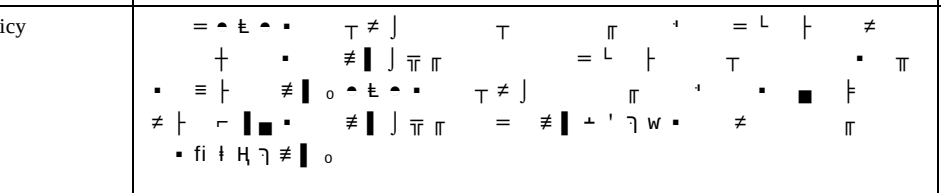
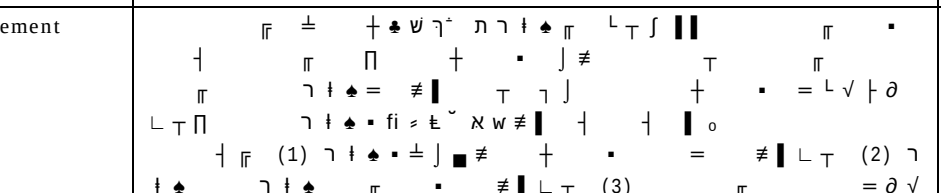
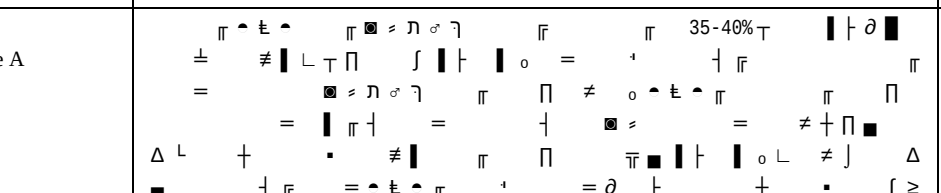
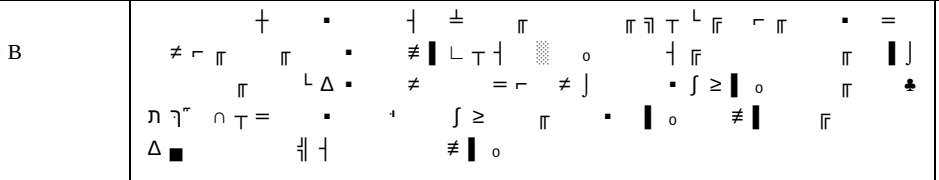
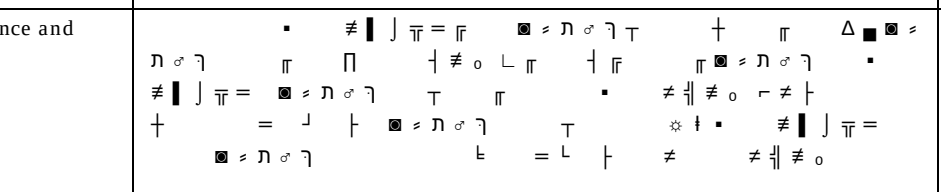
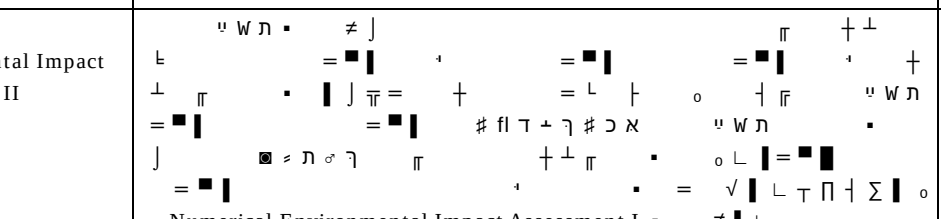
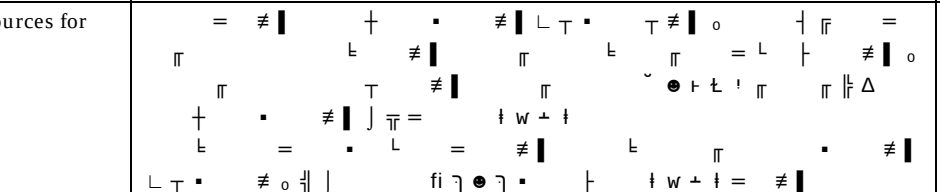
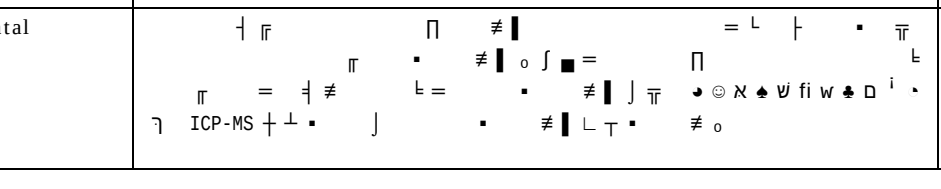
		Transportation Engineering			
		Transportation Planning			

		Tourism Policy		
		Risk Management Technology		
		Sustainable Architecture A		
		Sustainable Architecture B		
		Energy Science and Technology		
		Numerical Environmental Impact Assessment II		
		Botany Resources for the Future		
		Environmental Monitoring		

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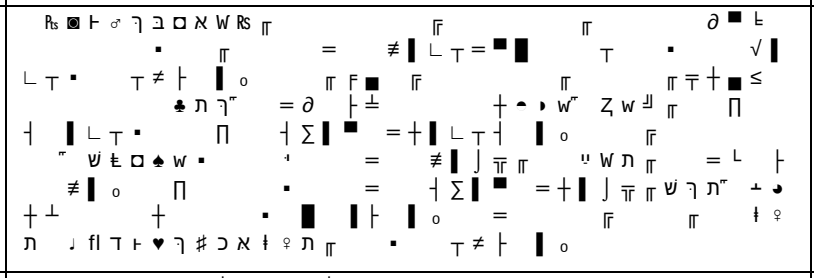
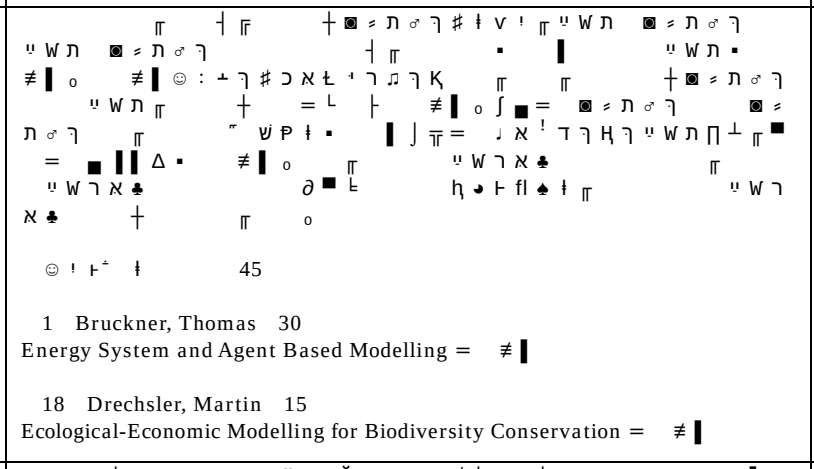
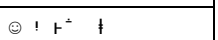
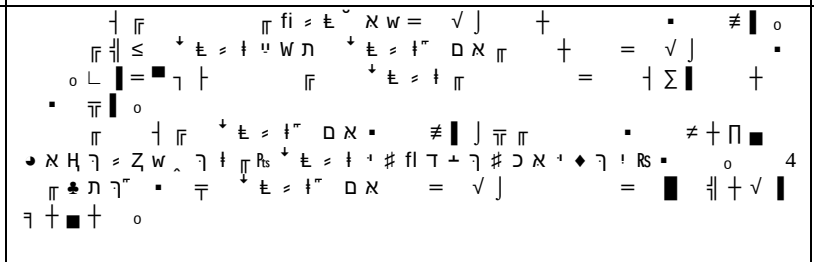
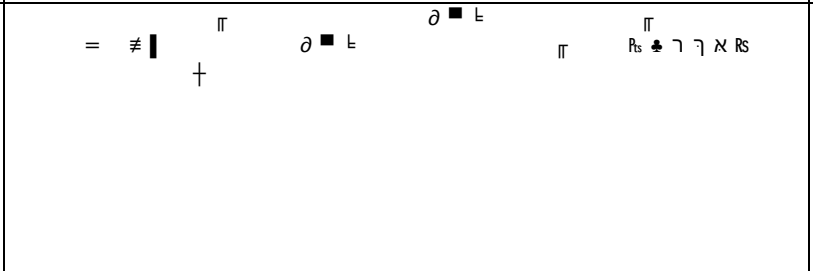
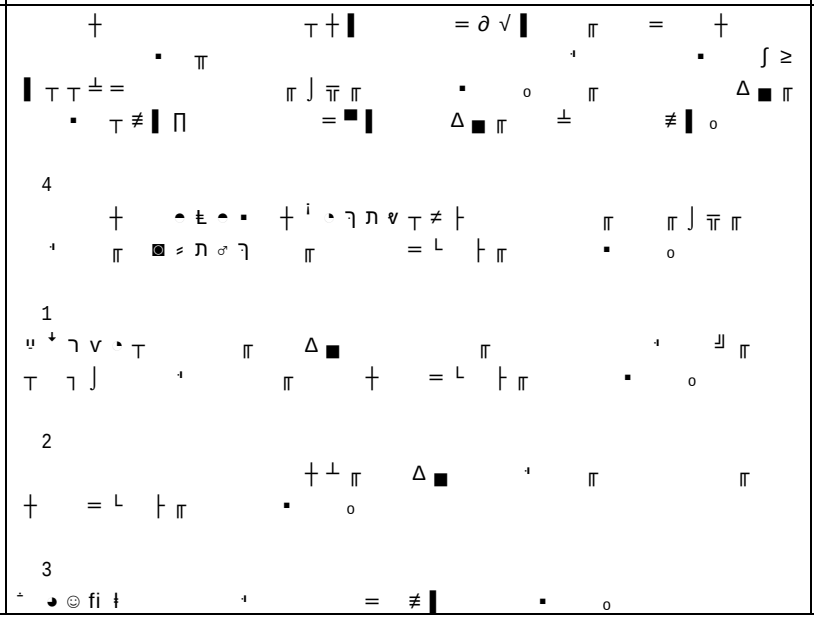
		Energy Engineering and Management	1 Bruckner, Thomas 30 Energy Management = 7 Thrän, Daniela 15 Energy Engineering =	☺ ! 60 30
		Water Resources Management	17 Klauer, Bernd 15 Economic Aspects of Water Resources Management = 15 Geyler, Stefan 30 Water Resources Management =	☺ ! 60 30
		Sustainable Energy Economics		60 30

		Land Management	45 16 Fischer, Jens-Uwe 15 Integrated Brownfield Re-Use Strategies, Policies and Tools 13 Meyer, Burghard 30 Land Management in the European Context Landscape Management	75 15
		Environmental and Biodiversity Economics		30 30 30
		Integration Module		
		Project Management and Communication Skills	15 4 Pahl, Burkhard 8 Project Management 19 Saupe, Gerit 7 Conflict Management	
		Material Flow Management	LCA ISO LCA	

		Sustainability Assessment of the Energiewende		
		Modelling in Resources Management		
		Entrepreneurship Management		45 45
		Economics and Natural Resource Use and Conservation		30 30 30
= ≠ ▌				

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	Master's Thesis		1 Bruckner, Thomas 8 Dornberger, Utz 9 Engel, Ulf 16 Fischer, Jens-Uwe 2 Gawel, Eric 17 Klauer, Bernd 11 Lehmann, Paul 10 Nissen, Sylke 4 Pahl, Burkhard	

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		Japanese Experience of Social Development-Economy, Infrastructure, and Peace	This course intends to discuss the issues of SDGs under the Guiding principles of Hiroshima University “Pursuit of Peace” and the long-term vision “Splendor Plan 2017”. The SDGs sets sustainability as a core of the global issues. Such a broad issue always involve many related issues. Resolution of one issue may produce another issue. It is important to consider cross-disciplinary approach and hisotorical aspect. Also inclusiveness is an important principle of SDGs, and thus all countries, developed and developing countries, should collaborate to tackle these. When considering these cross-disciplinary approach, historiy, and inclusiveness of development, Japanese experience of development provides an important case, becuase Japan, among non-European countries, is the first country which has become a member of OECD. Here, we can learn many points from the developing efforts whether they are success or failure. These efforts, including development assistance, are connected to Japanese society of today. On the other hand, Japan currently faces such new issues as rapid aging and depopulation. Thus this course discusses Japanese experience of social development from the above aspects. lesson1 Guidance of the course lesson2 JICA chugoku center lesson3 Yuichiro Yoshida “Japanese policy experience: Success and Failures” lesson4 Masaru Ichihashi “Industrial Policy and Economic growth” lesson5 Junyi Zhang “History of environmental policies in Japan”1 lesson6 Junyi Zhang “History of environmental policies in Japan”2 lesson7 Osamu Yoshida “Japanese ODA and its Asia Policy” lesson8 Mari Katayanagi “Reconstruction of Hiroshima from Peacebuilding Perspective” Splendor Plan 2017 SDGs SDGs SDGs OECD	

			8 1 2 10 1 13 1 14 1 15 1 17 1 ODA 60 1 JICA	
		Japanese Experience of Human Development-Culture, Education, and Health	This course intends to discuss the issues of SDGs under the Guiding principles of Hiroshima University “Pursuit of Peace” and the long-term vision “Splendor Plan 2017”. The SDGs sets sustainability as a core of the global issues. Such a broad issue always involve many related issues. Resolution of one issue may produce another issue. It is important to consider cross-disciplinary approach and hisotorical aspect. Also inclusiveness is an important principle of SDGs, and thus all countries, developed and developing countries, should collaborate to tackle these. When considering these cross-disciplinary approach, historiy, and inclusiveness of development, Japanese experience of development provides an important case, becuase Japan, among non-European countries, is the first country which has become a member of OECD. Here, we can learn many points from the developing efforts whether they are success or failure. These efforts, including development assistance, are connected to Japanese society of today. On the other hand, Japan currently faces such new issues as rapid aging and depopulation. Thus this course discusses Japanese experience of human development from the above aspects. lesson1 Guidance of the course lesson2 Maharajan Keshav Lall “Japanese experience of development in Agriculture and Remote area” lesson3 Koki Seki “Socio-cultural Aspect of Modernization of Japan: Focusing on the Transformation of Norm, Mentality, and Way ofLiving” lesson4 Kinya Shimizu “A History of Education in Japan” lesson5 Kinya Shimizu “Lesson Study in Japan: As a tool of PDSI in Japanese Education” lesson6 Junko Tanaka “International cooperation and research collaboration in the field of public health” lesson7 Michiko Moriyama "Healthcare system in Japan: its characteristics and history" lesson8 Discussion (Splendor Plan 2017 SDGs SDGs SDGs OECD	

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			SDGs 8 18 47 2)(53 5 19 53 1)	
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		Numerical Environmental Impact Assessment I		
		Geographic Information System Technology	GIS GIS GIS GIS GIS GIS	
		Environmental Management	4 15 4 1 1 1 6 TRAN DANG XUAN 1 7 1 8 5 , 9 3 9 8 1 40 1 6 TRAN DANG XUAN 9 1 4 8 7 40 1	

		Development Technology		

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		Transportation Engineering	ITS	
		Transportation Planning		
		Tourism Policy		
		Risk Management Technology	(1) (2) (3)	
		Sustainable Architecture A	35-40%	
		Sustainable Architecture B		
		Energy Science and Technology		
		Numerical Environmental Impact Assessment II	Numerical Environmental Impact Assessment I	

		Botany Resources for the Future		
		Environmental Monitoring	ICP-MS	
		Biomass Energy Technology		
		Ecosystem Conservation and Management Science		
		Management and Conservation of Ecosystems		
		A	4 1 2 3 5 6 TRAN DANG XUAN ( )	

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		B	4 1 2 3 5 6 TRAN DANG XUAN ( ) 7 8	

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	Developing Designing Ability		(1) (2) (3) 15 9 2 8 1 9 8 12	6 24
		A	ODA Official Development Assistance DAC 5	

			PCM Project cycle management) 1 PCM PDM(Project Design Matrix) 2 DAC 5 3	
	B		NGO	
	International Environmental Cooperation Studies		(i) (ii) (i) (ii) (iii) 15 9 3 ITS 40 1 4 1 1 1 12 MAHARJAN KESHAV LALL 1 14 1 15 1 8 2 22 1 7 2 6 TRAN DANG XUAN 1	

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		Basics in Economic Sciences	45 8 Dornberger, Utz 15 Value Chain Management Internationalization of SMEs 2 Gawel, Eric 15 Sustainable Economics 6 Schnabl, Gunther 15 International Finance	
		Basics in Social Sciences – International Studies	3 BRICS – – – – 45 9 Engel, Ulf 30 International Studies 12 Rietdorf, Ute 15 Development Economics	30 60
		Basics in Sustainable Development	45 1 Bruckner, Thomas 15 Integrated Assessment of global Climate Protection Strategies 3 Holländer, Robert 8 Sustainability and Corporate Environmental Management 17 Klauer, Bernd 7 Theories of Sustainability 10 Nissen, Sylke 15 Urban Geography, Sociology and Governance	60 30

			Energy Engineering and Management	45 1 Bruckner, Thomas 30 Energy Management 7 Thrän, Daniela 15 Energy Engineering	60 30
			Water Resources Management	45 17 Klauer, Bernd 15 Economic Aspects of Water Resources Management 15 Geyler, Stefan 30 Water Resources Management	60 30
			Sustainable Energy Economics	2 GAMS Python	60 30
			Land Management	45 16 Fischer, Jens-Uwe 15 Integrated Brownfield Re-Use Strategies, Policies and Tools 13 Meyer, Burghard 30 Land Management in the European Context Landscape Management	75 15
			Environmental and Biodiversity Economics		30 30 30

			Integration Module		
			Project Management and Communication Skills	15 4 Pahl, Burkhard 8 Project Management 19 Saupe, Gerit 7 Conflict Management	
			Material Flow Management	LCA ISO LCA	
			Sustainability Assessment of the Energiewende		
			Modelling in Resources Management	45 1 Bruckner, Thomas 30 Energy System and Agent Based Modelling 18 Drechsler, Martin 15 Ecological-Economic Modelling for Biodiversity Conservation	

		Entrepreneurship Management	4	45 45
		Economics and Natural Resource Use and Conservation		30 30 30

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m11 Le hmann,nPauln
m17 Klauer,Berndv

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			14 Berribes-Flemmig, Claudia Nelly 15 Geyler, Stefan 13 Meyer, Burghard 12 Rietdorf, Ute	