1 Common Item

Category			Phoenix L	eader Foundatio	on Subjects	Phoenix Leader Common Coursework			Phoenix Leader Special Subjects									Fieldwork/ Internship	
Course			Disaster Medicine	Environmen tal Protection	Social Recovery	Disaster Medicine	Environmental Protection	Social Recovery	Disaster Medicine		Environmental Protection		Social Recovery		al Recovery Degree Screening Committee Education Committee		Fieldwork Im Committee Comr	plementation Career Path nittee	
			year	1		1		16.1			<u>.</u>	1			4	1	1	2 又は 3	
		P	erson in charge	Shinya Matsuura	l oshinori Okuda	Kenji Kamiya	Junko Tanaka	Shizuma	Kiriko Sakata	Nobuyuki Hirohashi	Shinya Matsuura	Endo	Satoru Nakashima	Yoshinori Sugiura	l akeo Nishimura	Shinya Matsuura	-	Shinya Matsuura	Shinya Matsuura
Credits			2	2	2	2	2	2	2	2	2	2	2	2	2	4or6	1	3	
NO		Learning Goals	Learning Objectives	An Introduction to Radiation Biology	Basic Studies for Environmen tal Sciences Biodiversity Science (Biodiversit y Science)	History of Hiroshima Restoration	Initial Radiation Exposure, Internal Exposure, Epidemiolog Y	Exercise of Radiation Measurement	Business Continuity Managemen t (BCM)	Radiological Disaster Medicine	Radiation Genome Science	Radiation Physics	Radiation Chemistry	Theories of Adaptive Behavior	Theory of Community in Risk Society	Radiation Disaster Recovery Studies	Designated Subject by Primary Advisor	Short-term Fieldwork	Long-term Fieldwork/L ong-term Internship
	C1-1	Global skiller	The student can prepare academic papers by using a foreign language.							0						0		0	
1	C1-2	The student will	The student can hold discussions by using a foreign language.		0				0	0						0		0	
'	C1-3	demonstrate leadership in global society.	The student can conduct business by using a foreign language.		0		0												0
	C1-4		The student can use judgment and coordination that are required to achieve objectives in an international group		0				0									0	0
	C2-1	Management skills: The student will grasp a situation from a scientific perspective, and guide consensus formation toward improving the situation.	The student can understand problems confronted by human society and problems encountered by groups.			0										0		0	0
	C2-2		The student can propose measures for relevant problem solving tasks on the basis of correct knowledge and a high ethical sense.													0			0
2	C2-3		The student can control the stresses of individuals and groups, and provide management so that the individuals and groups can advance in the appropriate direction.						0									0	0
	C2-4		On the basis of the experience of Hiroshima University, which achieved restoration from the damage caused by the atomic bomb, the student can clarify the role that they themselves should play in radiation disasters.			0													
	C3-1	Interdiscipliner	The student can utilize both knowledge and technologies that transcend specialized fields, and can propose and deploy original research.		0		0				0		0			0			0
	C3-2	y skills: The student will take a	The student understands the diverse risks accompanying radiation disasters from a comprehensive viewpoint, and can recommend appropriate countermeasures.			0	0		0		0					0			
3	C3-3	e look at the entire body of specialized	The student understands the fundamentals of radiation biology, and can evaluate the effects of radiation on the human body.	0									0					0	
	C3-4	knowledge, and utilize such knowledge as needed.	The student understands the fundamentals of radioactive substances and radioactive rays, and can evaluate the dynamic state of radioactive substances in the environment.				0	0										0	
	C3-5		The student can grasp the stresses on individuals and groups at the time of a radiation disaster, and can present methods of solution.			0								0				0	

2 Radiation Disaster Medicine Course

Category			Phoenix	Leader Foundati	on Subiects	Phoenix Leader Common Coursework			Phoenix Leader Special Subjects								Fieldwork/ Internship					
Course			Disaster Medicine	Environmenta I Protection	Social Recovery	Disaster Medicine	Environmenta I Protection	Social Recovery	Disaster	Medicine	Environmental Protection		Environmental Protection		Social Recov		Social Recovery		Degree Screening Committee Education Committee	each course	Fieldwork In Committee Com	plementation Career Path mittee
year					1	K		1	121.11	N. 1. 1.	01.1	0.1	1	N 11 1	T 1	4	1	1	2			
Person in charge					loshinori	Kenji	Junko	Kiyoshi	Kiriko	Nobuyuki	Shinya	Satoru	Satoru	Yoshinori	l akeo Niekimure	Shinya	-	Shinya	Shinya			
		Number	of Required Credits	2	2	2	2	2 3	2	2	2	LIIGO	2	Sugiula	2	2	4	1	3			
	1	Number		2	Basic Studies	2	2	2	2	2	2		2			2		•	Ū			
NO		Learning Goals	Learning Objectives	An Introducti on to Radiation Biology	for Environmenta I Sciences Biodiversity Science (Biodiversity Science)	History of Hiroshima Restoration	Initial Radiation Exposure, Internal Exposure, Epidemiol ogy	Exercise of Radiation Measurement	Business Continuity Managemen t(BCM)	Radiological Disaster Medicine	Radiation Genome Science	Radiation Physics	Radiation Chemistry	Theories of Adaptive Behavior	Theory of Community in Risk Society	Radiation Disaster Recovery Studies	Designat ed Subject by Primary Advisor	Short-term Fieldwork	Long-term Fieldwork/L ong-term Internship			
	M4-1 The str grasp t	The student will grasp the pathological	The student understands the circumstances that lead to acute radiation injuries, and can grasp the pathological conditions related to acute radiation injuries.			0				0	0											
4	M4-2	conditions related to acute radiation injuries of nuclear power plant	The student can protect themselves against acute radiation injuries, and can understand appropriate methods of treating objects contaminated with radioactive substances.			0				0												
	M4-3	workers etc., and will diagnose and treat them.	The student can appropriately use radiation measurement difference between internal exposure and external exposure (Geiger counters, whole body counters, etc.).				0			0												
	M5-1	The student will evaluate the	The student understands the dynamic state of radioactive substances released into the atmosphere due to accidents and of radioactive substances contained in food.							0												
5	M5-2 M5-3	effects of low dose exposure on	The student understands the health effects caused by low dose radiation.				0			0	0											
		etc.	The student can understand epidemiological surveys of health effects caused by low dose				0			0								0				
			exposure.																			
	M6-1	The student will conduct	between internal exposure and external exposure.	0			0			0												
6	M6-2	appropriate dose evaluation of	The student understands the fundamentals of health surveys and epidemiological surveys.			0	0			0								0				
	M6-3	and external exposure.	The student understands the differences between radiation measurement instruments (Geiger counters, whole body counters, etc.).				0			0								0				
	M7-1	The student will perform effect evaluation of	The student understands the effects of radiation on unborn children and young children.	0		0																
7	M7-2	unborn children and young children, who are highly	The student understands the internal systems of unborn children (in mothers' wombs) and young children.	0																		
	M7-3	sensitive to radiation, and will diagnose and treat such children.	The student understands the methods of protecting unborn children (in mothers' wombs) and young children against radiation.			0																
	M8-1	The student will understand the	The student understands carcinogenesis and genes.	0		0					0											
8	M8-2	mechanisms of carcinogenesis due to radiation and of	The student understands the mechanism of carcinogenesis due to radiation and of genetic effects.								0											
	M8-3	genetic effects, as well as relevant risks.	The student understands the fundamentals of epidemiology regarding carcinogenic risks and genetic effects.				0				0											
	M9-1	The student will carry out	The student understands the nature of radioactive contamination stresses.			0				0								0				
9	M9-2	psychological evaluation under radioactive	The student understands the psychological effects that can occur under radioactive contamination stresses.			0												0				
	M9-3	contamination stresses, as well as mental care.	The student understands the fundamentals of mental care.															0				

3 Radioactivity Environmental Protection Course

Category				Phoenix	Leader Foundat	ion Subjects	Phoenix Leader Common Coursework				Fieldwork/ Internship							
Course				Disaster Medicine	Environment al Protection	Social Recovery	Disaster Medicine	Environmenta Social I Protection Recovery		Disaster Medicine	Environmental Protection		Social F	Recovery	Degree Screening Committee • Education Committee	Degree Screening Committee each Education course Committee		plementation Career Path nittee
year					1			1	121.1	N. 1. 1.	0.1	1		T 1	4	1	1	3
Person in charge					l oshinori Okuda	Kenji Kamiya	Junko Tanaka	Shizuma	Kiriko Sakata	Nobuyuki Hirohashi	Endo	Satoru Nakashima	Yoshinori Sugiura	l akeo Nishimura	Shinya Matsuura	-	Shinya Matsuura	Shinya Matsuura
		Number	of Required Credits	2	2	2	2	2	2	2	2	2		2	2	6	1	3
NO		Learning Goals	Learning Objectives	An Introducti on to Radiation Biology	Basic Studies for Environment al Sciences Biodiversity Science (Biodiversity Science)	History of Hiroshima Restoration	Initial Radiation Exposure, Internal Exposure, Epidemiology	Exercise of Radiation Measurement	Business Continuity Managemen t(BCM)	Radiological Disaster Medicine	Radiation Physics	Radiation Chemistry	Theories of Adaptive Behavior	Theory of Community in Risk Society	Radiation Disaster Recovery Studies	Designated Subject by Primary Advisor	Short-term Fieldwork	Long-term Fieldwork/ Long-term Internship
	E4-1	The student will scientifically analyze the properties of the products of	The student understands the circumstances that can lead to nuclear power plant accidents, nuclear terrorism, and radiation accidents, and understands the key points of safety management.			0				0	0							
4	E4-2	nuclear fission reactions created by nuclear power	The student understands the principles, structure, and nuclear fuel cycles of nuclear reactors.								0							
	E4-3	plant accidents, nuclear terrorism, and radiation accidents.	The student understands the structure and stability of atomic nuclei, the generation of radiation, and the phenomenon of nuclear fission reaction								0	0						
	E5-1	The student will appropriately measure, analyze, and evaluate environmental contamination.	The student understands the theory of diffusion of radioactive substances into the environment.					0			0	0						
5	E5-2		The student understands the measuring principles of nuclide analysis equipment for radiation measurement.					0			0						0	
Ū	E5-3		The student can measure radiation by understanding both the analysis and measurement methods regarding nuclide analysis equipment for radiation measurement, can analyze measurement results, and can analyze and evaluate both internal and external exposure.				0	0			0							
	E6-1	The student will analyze the environmental	The student understands the movements and dynamic state of radioactive substances in the atmosphere, in the soil, and in the ocean.		0			0			0							
6	E6-2	dynamic state of radioactive substances in the atmosphere, in the soil, and in the ocean, as	The student understands the migration of radioactive substances from the atmosphere, the soil, and the ocean, to animals and plants, and understands the behavior of radioactive substances in animals and plants.		0			0				0						
	E6-3	well as contamination in foods.	The student understands contamination by radioactive substances in food, and can evaluate internal exposure from food.					0				0						
	E7-1	The student will appropriately perform	The student understands appropriate treatment of radioactive waste.					0										
7	E7-2	perform decontamination with respect to radioactivity, and	The student understands appropriate storage of radioactive waste.								0							
	E7-3	store radioactive waste.	The student understands decontamination pertaining to radioactive substances.					0				0						

4 Radioactivity Social Recovery Course

			Category	Phoenix I	_eader Foundation	Subjects	Phoenix L	eader Common C		Fieldwork/ Internship								
			Course	Disaster Environmental Social Medicine Protection Recovery		Disaster Medicine	Environmenta Social I Protection Recovery		Disaster Medicine	Environmental Protection		Social Recovery		Degree Screening Committee •Education Committee	each course	Fiel Implen Committee Corr	dwork nentation •Career Path mittee	
			year	Chimun	1 Taabinani	Kanii	hundra	1 Kiurahi	Kinika	Mahunuki	Catam.	1 Setem:	Veekineri	Talvas	4 Chimun	1	1 Shimur	3 Shimun
		F	Person in charge	Matsuura	Okuda	Kamiya	Tanaka	Shizuma	Sakata	Hirohashi	Endo	Nakashima	Sugiura	Nishimura	Matsuura	-	Matsuura	Matsuura
		Numbe	er of Required Credits	2	2	2	2	2	2	2		2	2	2	2	6	1	3
NO		Learning Goals	Learning Objectives	An Introduction to Radiation Biology	for Environmental Sciences Biodiversity Science (Biodiversity Science)	History of Hiroshima Restoration	Initial Radiation Exposure, Internal Exposure, Epidemiology	Exercise of Radiation Measurement	Business Continuity Management (BCM)	Radiological Disaster Medicine	Radiation Physics	Radiation Chemistry	Theories of Adaptive Behavior	Theory of Community in Risk Society	Radiation Disaster Recovery Studies	Designated Subject by Primary Advisor	Short-ter m Fieldwork	Long-term Fieldwork/ Long-term Internship
	S4-1	The student will restrain not only the direct effects	The student can infer and grasp the mental effects caused to people at the time of radiation disasters.										0				0	0
4	S4-2	of radiation disasters on the human body but also the adverse effects of mental	With regard to the effects of stresses on human beings, the student understands the method of treating mental illness.										0					
	S4-3	stresses on human beings and communities.	The student understands generation processes for recognition distortions and human error.															0
	S5-1	-1 The student will give assistance in a wholesome childcare environment	The student understands wholesome childcare environment for mothers and children.														0	
5	S5-2		The student understands hygienic fundamentals for unborn children (in mothers' wombs) and young children.														0	
	S5-3	under radioactive contamination stresses.	The student understands young children's process of mental development.														0	
	S6-1	The student will carry out	The student understands the roles of various social organizations and the processes involved in social decision-making.						0									0
6	S6-2	appropriate risk communication	The student understands the ideal method of risk communication at the time of a disaster						0	0							0	0
	S6-3	with regard to social anxiety about radiation.	The student understands the mechanisms for the generation of social rejection, prejudice, and discrimination, and can devise measures to prevent diffusion of such practices.															0
	S7-1	The student will	The student understands the relationship between people's lives and their communities.											0				
_	S7-2	assist disaster-stricken	The student can understand community structures and administration method.											0				
/	S7-3	residents in rebuilding their communities.	The student understands the community reconstruction processes associated with the elapse of time after disasters, and can recommend appropriate methods for taking measures.						0					0				
	S8-1	The student will	The student understands the techniques for increasing social capital.						0					0				
8	S8-2	increase social capital for solving social problems, and promote	The student can conduct project analysis from diverse points of view.						0									
	S8-3	relevant projects.	The student understands systematic project management methods.						0									
	S9-1	The shull start	The student understands the relationship between individuals and groups.						0									
9	S9-2	form an appropriate social consensus	I he student understands social rejection generating mechanisms and the resulting effects, and can devise measures to prevent and curb social rejection.						0									
	S9-3	under radiation stresses.	The student understands the qualities required of leaders, and the ideal nature of followers and groups that allow such qualities to be displayed.						0									