

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)						
First Half, First Semester 2021	1	ESD <i>Advanced Course in Hydrological Cycle[J/E]</i>	SATO C204-2	<i>Introduction to Global Environmental Management[E]</i>	OKINO & others D102	<i>Advanced Course in Hydrological Cycle[J/E]</i>	SATO C204-2	[Inter-Graduate School Classes] Introduction to Environmental Science [J] (April 5-7): YAMANAKA & others(D201) <i>Introduction to Environmental Science[E]</i> (April 5-7): WATANABE & others (D101)					
		ESS				Advanced Course in Chemical Oceanography[J]	NISHIOKA WATANABE YAMASHITA C202		★Advanced Course in Biogeochemical Cycles in Ecosystems[J] (Advanced Course in Biogeoscience [J])	CHIKARAISHI TAKIZAWA D102	Advanced Course in Chemical Oceanography[J]	NISHIOKA WATANABE YAMASHITA C202	
		BS	Fundamental Course in Molecular Biology[J] <i>Fundamental Course in Molecular Biology[E]</i>	MORIKAWA & others MORIKAWA & others D101 D102							Advanced Course in Agro-Ecosystem Science I (Crop Production) [J/E]	HOSHINO HIRATA NAKAMURA FSC 106	<i>Special lecture in Environmental Science Development II [E]</i> (Dates TBD A SATO and YAMASHITAD101
		EMS	Fundamental Course in Materials Science II [J/E]	HIROKAWA D103	<i>Advanced Course in Environmental Catalytic Chemistry II [E]</i>	KOWALSKA D103	Fundamental Course in Materials Science I [J/E]		KAMIYA D103	Advanced Course in Environmental Catalytic Chemistry [J/E]	OHTANI D103	Fundamental Course in Materials Science III[J/E]	KOKADO D103
	2	ESD		Introduction to Environmental Adaptation [J]	NORO & others C204-1	<i>Advanced Course in Environmental Geoinformatics[E]</i>	Avtar C204-1	<i>Advanced Course in Environmental Geoinformatics[E]</i>	Avtar C204-1	Introduction to Environmental Adaptation [J]	NORO & others C204-1	Special lecture in Earth System Science IV(Intensive courses for Course in Biogeochemistry .Dates TBD [J]	
		ESS	Fundamental Course in Atmosphere-Ocean Physics [J] <i>Fundamental Course in Atmosphere-Ocean Physics [E]</i>	OSHIMA FUJIWARA MIZUTA YASUNARI C202	Advanced Course in Geophysical Fluid Dynamics[J]	KUBOKAWA D102	Fundamental Course in Atmosphere-Ocean Physics[J] <i>Fundamental Course in Atmosphere-Ocean Physics[E]</i>	OSHIMA FUJIWARA MIZUTA YASUNARI C202	★Advanced Course in Biogeochemical Cycles in Ecosystems[J] (Advanced Course in Biogeoscience [J])	CHIKARAISHI TAKIZAWA D102	Advanced Course in Atmospheric and Oceanographic Data Analysis[J/E]	FUKAMACHI AOKI D102	Advanced Course in Forest Sphere Science I [J](Ecosystem Function) : SATO and others (June) (URYU-NAKAGAWA-TESHIO) Advanced Course in Forest Sphere Science II [J]: Dates TBD (June) Advanced Course in Forest Sphere Science III [J]:UTSUJIMI and others(Dates TBD)
		BS	Advanced Course in Animal Ecology I [J/E]	NODA KOIZUMI D101	Fundamental Course in Marine Biological Processes [J/E]	KUDO YOSHIMURA SHIMIZU URA D101	Advanced Course in Animal Ecology I [J/E]	NODA KOIZUMI D101	Fundamental Course in Marine Biological Processes [J/E]	KUDO YOSHIMURA SHIMIZU URA D101			
		EMS	Fundamental Course in Materials Science III [J/E]	KOKADO D103	Advanced Course in Biomaterials Chemistry I [J/E]	ONODA D103	Fundamental Course in Materials Science II [J/E]	HIROKAWA D103	Advanced Course in Molecular Environmental Science I [J/E]	OHTANI D103	Fundamental Course in Materials Science I [J/E]	KAMIYA D103	Special Lecture in Environmental Materials Science [J]: II [J]・III [J/E]・IV [J] (Dates TBD)
	3	ESD				<i>Advanced Course in Geocological Resources [E]</i>	HAYAKAWA C204-2	<i>Advanced Course in Academic English Writing for Environmental Sciences [E]</i>	Karuzis D101				
		ESS	Fundamental Course in Paleoclimatology and Paleoceanography [J]	YAMAMOTO・SEKI・IRINO・MATOBA・IIZUKA D103	Fundamental Course in Marine and Atmospheric Chemistry [J]	SUZUKI KAMEYAMA MIYAZAKI D103	Fundamental Course in Marine and Atmospheric Chemistry [J]	SUZUKI KAMEYAMA MIYAZAKI D103	Advanced Course in Polar Oceanography [J]	AOKI TOYODA NAKAYAMA D103	Fundamental Course in Paleoclimatology and Paleoceanography [J]	YAMAMOTO・SEKI・IRINO・MATOBA・IIZUKA D103	
		BS		Advanced Course in Plant Ecology I [J]	ONO LT2F				Advanced Course in Environmental Molecular Biology I [J/E]	FUKUI MORIKAWA YAMAGUCHI OCHIAI KASAHARA D102			
	4	ESD	<i>Introduction to Global Environmental Management [E]</i>	OKINO & others D102									
ESS			Fundamental Course in Cold Region Sciences [J/E]	T WATANABE & others D101	Advanced Course in Environmental Meteorology [J]	T WATANABE KAWASHIMA D102	Fundamental Course in Cold Region Sciences [J/E]	T WATANABE & others D101					
5	ESD	Introduction to Practical Science for Environment I [J]	YAMANAKA & others D103	Introduction to Practical Science for Environment II [J]	YAMANAKA D103						★ <i>Introduction to Renewable Energy [E] (Introduction to Environmental Analysis)</i>	FUJII D101	
	ESS												
	BS												

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 Time [1st] 8:45-10:15 [2nd] 10:30-12:00 [3rd] 13:00-14:30 [4th] 14:45-16:15 [5th] 16:30-18:00
 Venue [A, B, C, D]Faculty of Environmental Earth Science Bldg. A, B, C, D [LT2F]Institution of Low Temperature Science 2F(N311) [FSC]Field Science Center of Northern Biosphere Bldg. [RB]FSC Research Bldg. 2F [TM] Tomakomai FSC [H]School of Fisheries Sciences [NF]FSC North Administration Section [U]FSC Uryu (Moshiro) [T]FSC Teshio [N]FSC Nakagawa [M]Muroran Marine Station [INFO]Information Incentive Center
 Language [E]Conducted in English [J/E]Whether it is conducted in English or Japanese will be decided after finishing students registration [J]Conducted in Japanese [*italics in blue*]Classes for English program, open for all students

First Half,
First Semester 2021

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)	
Second Half, First Semester 2021	1	ESD					Special lecture in Environmental Science Development I [J];Dates TBD;YAMAGATA (D201) Special lecture in Environmental Science Development II [E];Dates TBD A SATO and YAMASHITAD101	
		ESS		Advanced Course in Remote Sensing Applications [J] EBUCHI & others D102		Advanced Course in Hydrologic Cycle in Cryosphere [J] SHIRAIWA SONE MATSUZAWA LT3F	Special lecture in Environmental Science Development III[E] (June 14-17):HIROSE (D201)	
		BS	Fundamental Course in Molecular Biology[J] MORIKAWA & others D101 Fundamental Course in Molecular Biology[E] MORIKAWA & others D102				Advanced Course in Agro-Ecosystem Science I (Crop Production) [J/E] HOSHINO HIRATA NAKAMURA FSC 106	Special Lecture in Biosphere Science I [J] : TBD Fundamental Course in Biomass Production [J]: YAMAHA and others (September)
	EMS		Advanced Course in Environmental Catalytic Chemistry II [E] KOWALSKA D103	Advanced Course in Molecular Photonics and Electronics Science II [J/E] NAKAMURA D103	Advanced Course in Environmental Catalytic Chemistry [J/E] OHTANI D103	Advanced Course in Environmental Nano-Materials Chemistry II [J/E] KONISHI D103		
	2	ESD						
		ESS	Advanced Course in Ocean Dynamics [J] MITSUDERA D101	Advanced Course in Geophysical Fluid Dynamics [J] KUBOKAWA D102	Advanced Course in Atmospheric Dynamics [J] HORINOUCHI D101	Advanced Course in Hydrologic Cycle in Cryosphere [J] SHIRAIWA SONE MATSUZAWA LT3F	Advanced Course in Atmospheric and Oceanographic Data Analysis[J/E] FUKAMACHI AOKI D102	
		EMS		Advanced Course in Biomaterials Chemistry I [J/E] ONODA D103	Advanced Course in Molecular Photonics and Electronics Science II [J/E] NAKAMURA D103	Advanced Course in Environmental Science I [J/E] OHTANI D103	Advanced Course in Environmental Nano-Materials Chemistry II [J/E] KONISHI D103	
	3	ESD	Advanced Course in Environmental Pollution Comparison [E] TOYODA & others D101		Advanced Course in Geoecological Resources [E] HAYAKAWA C204-2	Advanced Course in Academic English Writing for Environmental Sciences [E] Karuzis D101		
		ESS			Advanced Course in Remote Sensing Applications [J] EBUCHI & others D103	Advanced Course in Polar Oceanography [J] AOKI TOYODA NAKAYAMA D103		
		BS	Advanced Course in Biodiversity Science I [J/E] AIBA KUBO NAGASATO A809	Advanced Course in Plant Ecology I [J] ONO LT2F		Advanced Course in Environmental Molecular Biology I [J/E] FUKUI MORIKAWA YAMAGUCHI OCHIAI D102		
	4	ESD	Advanced Course in Environmental Pollution Comparison [E] TOYODA & others D101					
		ESS			Advanced Course in Environmental Meteorology [J] T WATANABE KAWASHIMA D102			
BS		Advanced Course in Biodiversity Science I [J/E] AIBA KUBO NAGASATO A809						
5	EMS							
	ESD		Introduction to Practical Science for Environment II [J] YAMANAKA D103			*Introduction to Renewable Energy [E] (Introduction to Environmental Analysis) FUJII D101		
	ESS							

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Venue [A, B, C, D]Faculty of Environmental Earth Science Bldg. A, B, C, D [LT2F]Institution of Low Temperature Science 2F(215) [LT3F]Institution of Low Temperature Science 3F(N311) [FSC]Field Science Center of Northern Biosphere Bldg.
 [RB]FSC Research Bldg. 2F [TM] Tomakomai FSC [H]School of Fisheries Sciences [NF]FSC North Administration Section [U]FSC Uryu (Moshiiri) [T]FSC Teshio [N]FSC Nakagawa [M]Muroran Marine Station
 [INFO]Information Incentive Center

Language [E]Conducted in English [J/E]Whether it is conducted in English or Japanese will be decided after finishing students registration [J]Conducted in Japanese [*italics in blue*]Classes for English program, open for all students

First Half,
Second Semester 2021

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)	
First Half, Second Semester 2021	1	ALL ESD	Fundamental Course in Environmental Science Research[E]★ OKINO D102				Fundamental Course in Environmental Science Research[E]★ OKINO D102	Fundamental Course in Environmental Science [E] HIRATA (October 1.4.5)(D201)
		ESS		Advanced Course in Ocean Biogeochemistry[E] NISHIOKA WATANABE YAMASHITA C202	★Fundamental Course in Biogeochemistry [E] [Advanced Course in Tropospheric Chemistry] SUZUKI KAMEYAMA MIYAZAKI C202	★Fundamental Course in Biogeochemistry [E] [Advanced Course in Tropospheric Chemistry] SUZUKI KAMEYAMA MIYAZAKI C202	Advanced Course in Ocean Biogeochemistry[E] NISHIOKA WATANABE YAMASHITA C202	★Introduction to Circumpolar North[Advanced Course in Terrestrial Geochemical Cycle][E] : FUKAMACHI and Others (Dates :TBD)
		EMS			Fundamental Course in Materials Science II [E] BIJU D103	Fundamental Course in Materials Science III [E] ONODA D103	Fundamental Course in Materials Science I [E] SHICHIBU D103	Advanced Course in Forest Sphere Science IV (Regional Resources Management)[J/E]:T YOSHIDA & others (Early October)
	2	ESD	Advanced Course in Environmental Metrology [J] TOYODA & others C204-2	Introduction to Natural Environmental Studies [J/E] TSUYUZAKI NEGISHI SATO D102	Advanced Course in Environmental Metrology [J] TOYODA & others C204-2		Introduction to Natural Environmental Studies [J/E] TSUYUZAKI NEGISHI SATO D102	
		ESS	Advanced Course in Ocean Dynamics [J] MITSUDERA D102	Advanced Course in Climate Dynamics [J] TANIMOTO C202	Advanced Course in Atmospheric Dynamics [J] HORINOUCHE D201			
		BS	Advanced Course in Animal Ecology II [J/E] NODA AGETSUMA KOIZUMI KISHIDA MORITA OHDACHI D101	Advanced Course in Marine Biosphere Science I (Marine Environmental Biogeochemistry) [J/E] KUDO YOSHIMURA D101	Advanced Course in Animal Ecology II [J/E] NODA AGETSUMA KOIZUMI KISHIDA MORITA OHDACHI D101	Advanced Course in Marine Biosphere Science I (Marine Environmental Biogeochemistry) [J/E] KUDO YOSHIMURA D101	Advanced Course in Agro-Ecosystem Science II (Livestock Production) [J/E] KAWAI MITANI FSC 106	
		EMS	Advanced Course in Environmental Nano-Materials Chemistry I [J/E] KAMIYA D103	Advanced Course in Biomaterials Chemistry II [J/E] UMEZAWA D103	Advanced Course in Molecular Photonics and Electronics Science I [E] BIJU D103	Advanced Course in Environmental Science III [J/E] TBD D103	Advanced Course in Environmental Nano-Materials Chemistry III [J/E] YAGI D103	
	3	ESD	Advanced Course in Climate Change Impacts [E] SATO & others C202	Advanced Course in Environmental Conservation [J/E] TSUYUZAKI C204-2	Advanced Course in Watershed Environmental Science [J/E] NEGISHI & others D102	Advanced Course in Watershed Environmental Science [J/E] NEGISHI & others D102	Advanced Course in Environmental Conservation [J/E] TSUYUZAKI C204-2	
		ESS		★Advanced Course in Ecosystems and Environments [E] [Advanced Course in Environmental Analytical Chemistry] CHIKARAISHI TAKIZAWA D103	Advanced Course in Meteorology and Climate in Cold Regions [J] T WATANABE LT2F	Advanced Course in Climate Modeling [J] NAKAMURA KAWASHIMA D103	★Advanced Course in Paleoclimatology[Advanced Course in Paleogeography and Biomarker Geochemistry] [E] YAMAMOTO SEKI IRINO D103	
		BS	Advanced Course in Plant Ecology II [J/E] G KUDO A809		Advanced Course in Environmental Molecular Biology II [J/E] YAMAZAKI WASHIO MIWA C202	Advanced Course in Biodiversity Science II [J/E] UTSUMI NAKAOKA RB	Advanced Course in Environmental Molecular Biology II [J/E] YAMAZAKI WASHIO MIWA C202	
		EMS						
	4	ESD	Advanced Course in Climate Change Impacts [E] SATO & others C202	Advanced Course of International Science Communication Methods [E] TOYODA Greve Avtar D101		Advanced Course in Applied Ecology [J/E] SENZAKI A809	Advanced Course in Applied Ecology [J/E] SENZAKI A809	
ESS		Advanced Course in Glacier/Ice Sheet Science [J/E] SUGIYAMA SONE MATOBA IIZUKA LT2F	★Advanced Course in Ecosystems and Environments [E] [Advanced Course in Environmental Analytical Chemistry] CHIKARAISHI TAKIZAWA D103	Advanced Course in Meteorology and Climate in Cold Regions [J] T WATANABE LT2F	Advanced Course in Theoretical Glaciology [E] Greve LT313	★Advanced Course in Paleoclimatology[Advanced Course in Paleogeography and Biomarker Geochemistry] [E] YAMAMOTO SEKI IRINO D103		
BS		Advanced Course in Plant Ecology II [J/E] G KUDO A809		★Fundamental Course in Biodiversity of Northern Ecosystems [E] G KUDO & others D101	Advanced Course in Biodiversity Science II [J/E] UTSUMI NAKAOKA RB	★Fundamental Course in Biodiversity of Northern Ecosystems [E] G KUDO & others D101		
5	ESD	Advanced Course in Practical Science for Environment [J] YAMANAKA D103						
	BS	Fundamental Course in Biological Diversity [J/E] SUZUKI & others D101	Advanced Course in Ecological Genetics I [J/E] OHARA KOSHIKAWA C202	Fundamental Course in Biological Diversity [J/E] SUZUKI & others D101	Advanced Course in Ecological Genetics I [J/E] OHARA KOSHIKAWA C202	Fundamental Course in Field Sciences [J/E] YOTSUKURA & others D102		

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 [A, B, C, D]Faculty of Environmental Earth Science Bldg. A, B, C, D [LT2F]Institution of Low Temperature Science 2F(215) [LT3F]Institution of Low Temperature Science 3F(N311) [FSC]Field Science Center of Northern Biosphere Bldg.
 [RB]FSC Research Bldg. 2F [TM] Tomakomai FSC [H]School of Fisheries Sciences [NF]FSC North Administration Section [U]FSC Uryu (Moshiri) [T]FSC Teshio [N]FSC Nakagawa [M]Murooran Marine Station
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 [Language] [E]Conducted in English [J/E]Whether it is conducted in English or Japanese will be decided after finishing students registration [J]Conducted in Japanese [italics in blue]Classes for English program, open for all students

First Half,
 Second Semester 2021

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)				
Second Half, Second Semester 2021	1	ESD					Advanced Course in Aquatic Biology I[J]: NAKAOKA & others (Dates :TBD) Advanced Course in Aquatic Biology III[J]: YAMAHA and others (December+A1) Special Lecture in Biosphere Science II (Fundamental Lecture in Aquatic Biology)[E]: KUDO (Dated:TBD)				
		ESS									
		BS									
	EMS				Fundamental Course in Materials Science II [E]	BIJU D103	Fundamental Course in Materials Science III [E]	ONODA D103	Fundamental Course in Materials Science I [E]	SHICHIBU D103	
	2	ESD	Advanced Course in Environmental Adaptation [E]	NORO & others D102		Advanced Course in Environmental Adaptation [E]	NORO & others D102				
		ESS			Advanced Course in Climate Dynamics [J]	TANIMOTO C202					
		BS			Advanced Course in Marine Biosphere Science II [J]	URA HAKODATE		Advanced Course in Marine Biosphere Science II [J]	URA HAKODATE	Advanced Course in Agro-Ecosystem Science II (Livestock Production) [J/E]	KAWAI MITANI FSC 106
	EMS	Advanced Course in Environmental Nano-Materials Chemistry I [J/E]	KAMIYA D103	Advanced Course in Biomaterials Chemistry II [J/E]	UMEZAWA D103	Advanced Course in Molecular Photonics and Electronics Science I [E]	BIJU D103	Advanced Course in Molecular Environmental Science III [J/E]	TBD D103	Advanced Course in Environmental Nano-Materials Chemistry III [J/E]	YAGI D103
	3	ESD			Advanced Course in Frozen Ground Environments [J]	ISHIKAWA D102				Advanced Course in Frozen Ground Environments [J]	ISHIKAWA D102
		ESS						Advanced Course in Climate Modeling [J]	NAKAMURA KAWASHIMA D103		
		BS									
	4	EMS									
		ESD			Advanced Course of International Science Communication Methods [E]	TOYODA Greve Avtar D101				Advanced Course in Water Resources [E]	WATANABE D101
		ESS	Advanced Course in Glacier/Ice Sheet Science [J/E]	SUGIYAMA SONE MATOBA IIZUKA LT2F				Advanced Course in Theoretical Glaciology [E]	Greve LT313		
	5	BS									
ESD		Advanced Course in Practical Science for Environment [J]	YAMANAKA D103						Advanced Course in Water Resources [E]	WATANABE D101	
ESS											
BS	Fundamental Course in Ecology [J/E]	KOSHIKAWA & others D102	Advanced Course in Ecological Genetics II [J]	SUZUKI & others C202	Fundamental Course in Ecology [J/E]	KOSHIKAWA & others D102	Advanced Course in Ecological Genetics II [J]	SUZUKI & others C202	Fundamental Course in Field Sciences [J/E]	YOTSUKURA & others D102	
EMS											

【Important】	
Time	【1st】 8:45-10:15 【2nd】 10:30-12:00 【3rd】 13:00-14:30 【4th】 14:45-16:15 【5th】 16:30-18:00
Venue	【A, B, C, D】Faculty of Environmental Earth Science Bldg. A, B, C, D 【LT2F】Institution of Low Temperature Science 2F(215) 【LT3F】Institution of Low Temperature Science 3F(N311) 【FSC】Field Science Center of Northern Biosphere Bldg. 【RB】FSC Research Bldg. 2F 【TM】Tomakomai FSC 【H】School of Fisheries Sciences 【NF】FSC North Administration Section 【U】FSC Uryu (Moshiiri) 【T】FSC Teshio 【N】FSC Nakagawa 【M】Muroran Marine Station 【INFO】Information Incentive Center
Language	【E】Conducted in English 【J/E】Whether it is conducted in English or Japanese will be decided after finishing students registration 【J】Conducted in Japanese <i>【italics in blue】</i> Classes for English program, open for all students

Second Half,
Second Semester 2021