

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)	
First Half, First Semester 2024	1	ESD	Advanced Course in Hydrological Cycle[J/E] SATO C204-2	Introduction to Global Environmental Management[E] OKINO & others D102	Advanced Course in Hydrological Cycle[J/E] SATO C204-2			[Inter-Graduate School Classes] Introduction to Environmental Science [J] (April3-5): YAMANAKA & others(D201)
		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	Introduction to Environmental Science[E] (April3-5): WATANABE & others (D101)
		BS	Advanced Course in Environmental Molecular Biology II [J/E] TANAKA ITO TAKABAYASHI WASHIO HORI MIWA ONO D101, LT2F		Fundamental Course in Molecular Biology[J] Fundamental Course in Molecular Biology[E] MORIKAWA & others MORIKAWA & others D101 D102		Advanced Course in Agro-Ecosystem Science I (Crop Production) [J/E] HOSHINO GOTOH NAKAMURA HIRATA FSC 106	Special lecture in Earth System III (Intensive courses for Course in Atmosphere-ocean and climate Dynamics :: September
		EMS	Fundamental Course in Materials Science II [J/E] NAKAJIMA D103	Advanced Course in Environmental Catalytic Chemistry [J/E] NAKAJIMA D103	Fundamental Course in Materials Science I [J/E] SUGANUMA D103		Fundamental Course in Materials Science III[J/E] KONISHI D103	Special lecture in Earth System Science IV (Intensive courses for Course in Cryosphere Science) :September
	2	ESD		Introduction to Environmental Adaptation [J] NORO & others C204-1	Advanced Course in Environmental Geoinformatics[E] Avtar C204-1	Advanced Course in Environmental Geoinformatics[E] Avtar C204-1	Introduction to Environmental Adaptation [J] NORO & others C204-1	Advanced Course in Forest Sphere Science I (J)(Ecosystem Function) :TAKAGI and others (URYU·NAKAGAWA·TESHIO) .Dates TBD
		ESS	Fundamental Course in Atmosphere-Ocean Physics [J] OSHIMA FUJWARA D201	Advanced Course in Geophysical Fluid Dynamics[J] KAWATANI D102	Fundamental Course in Atmosphere-Ocean Physics [J] OSHIMA FUJWARA D201	☆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 II (J)·NAKAMURA and others(WAKAYAMA) Dates TBD
		BS	Advanced Course in Animal Ecology I [J/E] NODA KOIZUMI D101	Fundamental Course in Marine Biological Processes [J/E] KUDO YOSHIMURA TAKAGI D101	Advanced Course in Animal Ecology I [J/E] NODA KOIZUMI D101	Fundamental Course in Marine Biological Processes [J/E] KUDO YOSHIMURA TAKAGI D101		Special Lecture in Environmental Materials Science [J]· II [J]· III[J]·IV[J] (Dates TBD)
		EMS	Fundamental Course in Materials Science III[J/E] KONISHI D103	Advanced Course in Biomaterials Chemistry I [J/E] ONODA D103	Fundamental Course in Materials Science II [J/E] NAKAJIMA D103		Fundamental Course in Materials Science I [J/E] SUGANUMA D103	
	3	ESD			Advanced Course in Geocological Resources [E] HAYAKAWA C204-2	Advanced Course in Academic English Writing for Environmental Sciences [E] Ranner D101		
		ESS	Fundamental Course in Paleoenvironmental Science [J] YAMAMOTO · SEKI · IRINO · MATOBA · IZUKA 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 Paleoenvironmental Science [J] YAMAMOTO · SEKI · IRINO · MATOBA · IZUKA D103	
		BS				Advanced Course in Environmental Molecular Biology I [J/E] FUKUI MORIKAWA YAMAGUCHI OCHIAI KASAHARA WATANABE SONE YAMAUCHI D102		
		EMS						
4	ESD	Introduction to Global Environmental Management [E] 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 D103	Fundamental Course in Cold Region Sciences [J/E] T WATANABE & others D101			
	BS							
	EMS							
5	ESD		Introduction to Practical Science for Environment II [J] YAMANAKA D103					
	ESS							
	BS							
	EMS							

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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(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]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 2024

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)										
Second Half, First Semester 2024	1	ESD					Special lecture in Environmental Science Development II [E] Dates (June 10-12) A SATO C202										
		ESS		Advanced Course in Remote Sensing Applications [J]	EBUCHI & others	D102		Advanced Course in Hydrologic Cycle in Cryosphere [J]	SHIRAWA MATOBA MATSUSITA	LT2F		Special lecture in Environmental Science Development I [J] Dates TBD Saturdays from June to July YAMANAKA SATAKE SUGAWARA					
		BS	Advanced Course in Environmental Molecular Biology II [J/E]	TANAKA ITO TAKABAYASHI WASHIO HORI MIWA ONO	D101, LT2F			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 GOTOH NAKAMURA HIRATA	FSC 106	Fundamental Course in Biomass Production [J]: KAWAI (August-September) Special Lecture in Biosphere Science I [J]: TBD Special Lecture in Biosphere Science II [J]: TBD		
		EMS		Advanced Course in Environmental Catalytic Chemistry [J/E]	NAKAJIMA	D103	Advanced Course in Molecular Photonics and Electronics Science II [J/E]	NAKAMURA	D103		Advanced Course in Environmental Nano-Materials Chemistry II [J/E]	KONISHI	D103				
	2	ESD		Advanced Course in Environmental Metrology [J]	TOYODA & others	C204-1					Advanced Course in Environmental Metrology [J]	TOYODA & others	C204-1				
		ESS	Advanced Course in Ocean Dynamics [J]	MITSUDERA	D101	Advanced Course in Geophysical Fluid Dynamics [J]	KAWATANI	D102	Advanced Course in Atmospheric Dynamics [J]	HORINOUCI	D102	Advanced Course in Hydrologic Cycle in Cryosphere [J]	SHIRAWA MATOBA MATSUSITA	LT2F	Advanced Course in Atmospheric and Oceanographic Data Analysis [J/E]	FUKAMACHI AOKI	D102
		BS															
		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 Nano-Materials Chemistry II [J/E]	KONISHI	D103
	3	ESD					<i>Advanced Course in Geoeological Resources [E]</i>	HAYAKAWA	C204-2	<i>Advanced Course in Academic English Writing for Environmental Sciences [E]</i>	Renner	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 Plant Ecology/Biodiversity Science I [J/E]	AIBA	A809						Advanced Course in Environmental Molecular Biology I [J/E]	FUKUI MORIKAWA YAMAGUCHI OCHIAI KASAHARA WATANABE SONE YAMAUCHI	D102				
		EMS															
4	ESD													Advanced Course in Water Resources [E]	WATANABE	D101	
	ESS					Advanced Course in Environmental Meteorology [J]	T WATANABE KAWASHIMA	D103									
	BS	Advanced Course in Plant Ecology/Biodiversity Science I [J/E]	AIBA	A809													
5	ESD			Introduction to Practical Science for Environment II [J]	YAMANAKA	D103								Advanced Course in Water Resources [E]	WATANABE	D101	
	ESS																
	EMS																

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 [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]Muroran Marine Station
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Second Half,
 First Semester 2024

		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)										
First Half, Second Semester 2024	1	ALL	Fundamental Course in Environmental Science Research[E]★	OKINO	D102								Fundamental Course in Environmental Science Research[E]★	OKINO	D102	Fundamental Course in Environmental Science [E]: Garcia Molinos (October 1,2,3) (D201)	
		ESD															
		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] : (Dates :TBD)
		BS															Advanced Course in Forest Sphere Science IV (Regional Resources Management)[J/E]:T YOSHIDA & others (October)
		EMS	Advanced Course in Environmental Nano-Materials Chemistry I [J/E]	KAMIYA	D103	Fundamental Course in Materials Science III[E]	ONODA	D103	Fundamental Course in Materials Science II [E]	TAKANO	D103			Fundamental Course in Materials Science I [E]	SHICHIBU	D103	
	2	ESD			Introduction to Natural Environmental Studies [J/E]	TSUYUZAKI NEGISHI SATO	D102						Introduction to Natural Environmental Studies [J/E]	TSUYUZAKI NEGISHI SATO	D102		
		ESS	Advanced Course in Ocean Dynamics [J]	MITSUDEIRA	D102	Advanced Course in Climate Dynamics [J]	TANIMOTO	C202	Advanced Course in Atmospheric Dynamics [J]	HORINOUCHI	D102						
		BS	Advanced Course in Animal Ecology II [J/E]	NODA AGETSUMA KOIZUMI KISHIDA OHDACHI	D101	Advanced Course in Marine Biosphere Science I (Marine Environmental Biogeochemistry) [J/E]	KUDO YOSHIMURA TAKAGI	D101	Advanced Course in Animal Ecology II [J/E]	NODA AGETSUMA KOIZUMI KISHIDA OHDACHI	D101	Advanced Course in Marine Biosphere Science I (Marine Environmental Biogeochemistry) [J/E]	KUDO YOSHIMURA TAKAGI	D101	Advanced Course in Agro-Ecosystem Science II (Livestock Production) [J/E]	KAWAI HOSHINO GOTOH	FSC 106
		EMS	Advanced Course in Environmental Catalytic Chemistry II [J/E]	TAKAKUSAKI	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 II [J/E]	TBD	D103	Advanced Course in Environmental Nano-Materials Chemistry III [J/E]	YAGI	D103
		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
	3	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 Paleoenvironmental and Biomarker Geochemistry] [E]	YAMAMOTO SEKI IWASAKI	D103	
		BS	Advanced Course in Plant Ecology/Biodiversity Science II	G KUDO	A809												
		EMS															
		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 IZUKA MINOWA	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 Paleoenvironmental and Biomarker Geochemistry] [E]	YAMAMOTO SEKI IWASAKI	D103
	4	BS	Advanced Course in Plant Ecology/Biodiversity Science II	G KUDO	A809			★Fundamental Course in Biodiversity of Northern Ecosystems [E]	G KUDO & others					★Fundamental Course in Biodiversity of Northern Ecosystems [E]	G KUDO & others		
		EMS															
		ESD	Introduction to Practical Science for Environment I [J]	YAMANAKA	D103	Advanced Course in Practical Science for Environment [J]	YAMANAKA	D103									
		ESS															
		BS	Fundamental Course in Biological Diversity [J]	KOIZUMI & others	D101	Advanced Course in Ecological Genetics I [J/E]	KOSHIKAWA UTSUMI	C202	Fundamental Course in Biological Diversity [J]	KOIZUMI & others	D101	Advanced Course in Ecological Genetics I [J/E]	KOSHIKAWA UTSUMI	C202	Fundamental Course in Field Sciences [J/E]	YOTSUKURA & others	D102
5	EMS																

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		Mon.	Tue.	Wed.	Thu.	Fri.	Intensive courses and other courses (Dates to be determined)				
Second Half, Second Semester 2024	1	ESD							Advanced Course in Aquatic Biology I[J]: NAKAOKA & others (Dates :TBD)		
		ESS							Advanced Course in Aquatic Biology II[E]: NAKAOKA & others (Dates :TBD)		
	BS								Advanced Course in Aquatic Biology III[J]: MINAMI and others (December)		
	EMS	Advanced Course in Environmental Nano-Materials Chemistry I [J/E]	KAMIYA D103	<i>Fundamental Course in Materials Science III[E]</i>	ONODA D103	<i>Fundamental Course in Materials Science II [E]</i>	TAKANO D103		<i>Fundamental Course in Materials Science I [E]</i>	SHICHIBU D103	
	ESD	<i>Advanced Course in Environmental Adaptation [E]</i>	Liu & others D102			<i>Advanced Course in Environmental Adaptation [E]</i>	Liu & 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 HOSHINO GOTOH FSC 106	
	EMS	<i>Advanced Course in Environmental Catalytic Chemistry II [J/E]</i>	TAKAKUSAKI D103	Advanced Course in Biomaterials Chemistry II [J/E]	UMEZAWA D103	<i>Advanced Course in Molecular Photonics and Electronics Science I [E]</i>	BLJU D103	Advanced Course in Molecular Environmental Science II [J/E]	TBD D103	Advanced Course in Environmental Nano-Materials Chemistry III [J/E]	YAGI D103
	ESD	<i>Advanced Course in Environmental Pollution Comparison [E]</i>	TOYODA & others D101	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										
	EMS										
	ESD	<i>Advanced Course in Environmental Pollution Comparison [E]</i>	TOYODA & others D101	<i>Advanced Course of International Science Communication Methods [E]</i>	TOYODA Greve Avtar D101						
	ESS	Advanced Course in Glacier/Ice Sheet Science [J/E]	SUGIYAMA IZUKA MINOWA LT2F				<i>Advanced Course in Theoretical Glaciology [E]</i>	Greve LT313			
	BS										
EMS											
5	ESD	Introduction to Practical Science for Environment I [J]	YAMANAKA D103	Advanced Course in Practical Science for Environment [J]	YAMANAKA D103						
	BS	Fundamental Course in Ecology [J/E]	KOSHIKAWA & others D102	Advanced Course in Ecological Genetics II [J]	KOSHIKAWA YOSHIDA C202	Fundamental Course in Ecology [J/E]	KOSHIKAWA & others D102	Advanced Course in Ecological Genetics II [J]	KOSHIKAWA YOSHIDA C202	Fundamental Course in Field Sciences [J/E]	YOTSUKURA & others D102
EMS											

[Important]

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Second Half,
Second Semester 2024