

York University SDG Course Inventory

SDG 14 – Life Below Water



SDG 14 Life Below Water sets out goals for protecting the world’s salt and fresh water aquatic ecosystems and marine life. The world’s oceans must be protected and the dangers of acidification, decline fish populations, coral reef degradation and mounting plastic pollution be addressed. The world’s universities are vital to studying and solving these issues.

York University’s offers numerous courses and programs relevant to SDG 14 through the [Faculty of Science](#), the [Faculty of Health](#), and the [Faculty of Environmental and Urban Change](#). These courses include those relating to hydrology, aquatic ecosystems, arctic studies, and the conversation of aquatic and marine regions. In 2023, York University was named the academic lead in the United Nation’s new global [Water Academy](#)—further demonstrating York’s commitment to SDG 14.

[Click Here](#) to learn more about York’s initiatives towards accomplishing SDG 14

[Click Here](#) to learn more about the United Nations’ SDG 14 targets and goals

SDG 14 Courses at YU	Primary SDG	Secondary SDG	Ancillary SDG	Total Courses
	9	0	0	9

[Click Here](#) to access York University’s full course inventory

York University 2022 SDG Course Mapping - SDG 14

COURSE TITLE	FACULTY	SUBJECT	CODE	CREDIT	DESCRIPTION	LANGUAGE	PRIMARY SDG	SECONDARY SDG	ANCILLIARY SDG
Physiology of Global Change	Faculty of Graduate Studies	BIOL	5153	1.5	Focuses on global environmental change (past and present) covering broad ranges of topics: from changing global temperatures to ocean acidification. Changing environments are discussed in terms of the resulting physiological stresses and adaptations that have occurred/are occurring in diverse taxa. Emphasis is placed on basic physiology principals, biochemistry, and molecular biology in the context of evolution and ecology.	en	SDG 14 Life Below Water	SDG 13 Climate Action	
Physiology of the Invertebrates	Faculty of Science	BIOL	3030	4	A treatment of the physiology of major invertebrate phyla with emphasis on interphyletic relationships. Laboratory exercises address the diversity and physiology of invertebrates. Prerequisite: SC/BIOL 2030 4.00.	en	SDG 14 Life Below Water		
Fish Biology	Faculty of Science	BIOL	4340	3	A study of fish biology (ichthyology), including anatomy, systematics, physiology, behaviour and ecology of freshwater and marine fishes. Special emphasis is placed on the unique features of fishes and their functional adaptation to aquatic environments. Prerequisite: SC/BIOL 2030 4.00. Note: Completion of 60 credits required.	en	SDG 14 Life Below Water		
Northern Ecosystems: A Natural History of Arctic Regions	Faculty of Environmental & Urban Change	ENVS	4447	3	Examines the interactions between species and their environment in northern terrestrial and marine habitats. We review the postglacial history, climate, and energy flow in boreal and arctic ecosystems and examine evolutionary adaptations to cold, highly-seasonal environments. We consider strategies for wildlife management and conservation and the threats posed by climate change, resource development, and pollution. Prerequisite: EU/ENVS 3402 3.00 or EU/ENVS 2420 3.00 or permission of the Instructor. PRIOR TO FALL 2020: ES/ENVS 3402 3.00 or ES/ENVS 2420 3.00	en	SDG 14 Life Below Water	SDG 13 Climate Action	SDG 15 Life on Land
Hydrography	Lassonde School of Engineering	ESSE	4650	3	Hydrography and its role in offshore management. Elements of oceanography, tides and water levels, seabed and sea water properties. Underwater acoustics. Bathymetric and imaging methods. Marine positioning and navigation. Prerequisite: LE/ESSE 4610 3.00. PRIOR TO FALL 2014: Prerequisite: LE/EATS 4610 3.00 or LE/ENG 4110 3.00. PRIOR TO SUMMER 2013: Prerequisite: SC/EATS 4610 3.00 or SC/ENG 4110 3.00.	en	SDG 14 Life Below Water		
Dynamics of Snow and Ice	Faculty of Environmental & Urban Change	GEOG	4310	3	Examines the formation, distribution, structure and degradation of snow, as well as lake, river and sea ice. Normally offered in alternate years. Prerequisite: AP//GEOG 2400 6.00 or SC/GEOG 2400 6.00.	en	SDG 14 Life Below Water		

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Swimming I	Faculty of Health	PKIN	200	0	An introduction to the fundamentals of stroke technique for front crawl, back crawl, elementary backstroke, breast-stroke and sidestroke. Non-swimmers are encouraged to enrol as this course will focus on deep water skills and safety requirements. Note: Students who have completed at least one of the following, the Canadian Red Cross Swim Kids 10 or AquaQuest 12; the Toronto Learn to Swim Ultra 9; the YMCA of Canada Star 6; or the Lifesaving Society of Canada Learn to Swim Level 6, should take HH/PKIN 0270 0.00, HH/PKIN 0285 0.00 or HH/PKIN 0294 0.00 instead.	en	SDG 14 Life Below Water		
Aqua Fitness (Deep Water)	Faculty of Health	PKIN	285	0	Provides students with fitness activities and teaching techniques in a deep water aquatic environment. Students can opt to take WaterArt teacher certification. All classes will include theory and practical activities which are low- to non-weight bearing. Prerequisite: HH/PKIN 2000 2.00 or equivalent.	en	SDG 14 Life Below Water		
Sports Conditioning in an Aquatic Environment	Faculty of Health	PKIN	286	0	Focuses on training techniques in a deep water aquatic environment such as resistance training, increased flexibility through buoyancy, cardiovascular enhancement and endurance. Core stabilization is greatly intensified by working vertically in the water. Lessened impact on the joints helps to prevent injuries or assists in healing them. Prerequisite: HH/PKIN 0200 0.00 or equivalent. Note: There is an additional option for certification as a WaterArt Sports Conditioning Specialist. Equivalency for this course is the Canadian Red Cross Swim Kids 10 or AquaQuest 12; the Toronto Learn to Swim Ultra 9; the YMCA of Canada Star 6; or the Lifesaving Society of Canada Learn to Swim Level 6.	en	SDG 14 Life Below Water		