

# Water Security in an Era of Global Crisis

### **Kyung Hee University**

2021 Online Summer Program Short Intensive Course

Course Schedule July 5<sup>th</sup> – 9<sup>th</sup>, 2021

Application Deadline June 15<sup>th</sup>, 2021

#### Contact

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# Water Security in an Era of Global Crisis

#### **About the Course**

While global water demand has been ever increasing, more areas all over the world are facing water stress, where both humans and ecosystems are suffering from the lack of water and/ or its low quality. Recent global crises further aggravate many issues related to water scarcity. The COVID-19 pandemic has been striking all aspects of our life and the viral pathogens detectable in water may imply their potential transmission through urban water cycles. Climate change causes frequent and severe flooding, typhoons, and droughts, significantly affecting global water sustainability. In line with the Sustainable Development Goal 6 (ensuring availability and sustainable management of water and sanitation for all) established by the United Nations, Kyung Hee University (KHU) aims to provide an international online educational platform towards ensuring global water security. This short-intensive course brings diverse aspects of water resource management, water quality engineerings and international cooperation/policy-making that can improve global water security against recent challenges such as pandemic diseases and climate change.

#### **Course Schedule**

July 5<sup>th</sup> - 9<sup>th</sup>, 2021 (One week)

#### **Application & Deadline**

June 15th, 2021 https://docs.google.com/forms/d/1P3plvBHk7fJ1sIdqwtioJCNJIm0sdcGedMFgDo73y6E/edit

#### **Course Fee**

100,000(KRW) for course registration(no tuition fee)

- Bank Name: HANA BANK
- Bank Address: 1 Seocheon-dong, Giheung-gu, Yongin-si Gyeonggi-do 446-701, Korea
- Swift Code: KOEXKRSE
- Name of Account Holder: Kyung Hee University Global Campus (경희대학교국제캠퍼스)
- Account Number: 428-141962-00404

#### **Prospect Participants/Attendees**

The course is open to undergraduate students (freshman to senior) with any major across countries and officials, professionals, and scientists/engineers who are interested in future directions in water management and technology.

#### **Course Activities**

The course consists of i) core lectures from KHU professors, ii) topical seminars presented by guest lecturers from other universities, national research centers, and non-governmental organizations, and iii) mentor-guided discussions on various specialized topics. The course brings together both internal (KHU) and guest scholars/experts from diverse countries (e.g., US and Asian countries). Course participants will be able to interact with the instructors in their interdisciplinary approach towards sustainable water management. Upon completion of all class hours and submission of a short essay, students will be given a certificate in which total hours and grades are shown.

TIME &	MON	TUE	WED	тни	FRI
DATE	July 5	July 6	July 7	July 8	July 9
10:00-11:00 (KST)	<b>[Orientation]</b> Course Introduction	<b>[Lecture 2]</b> Climate Change, Impacts and Adaptation	[Lecture 5] Drinking Water Distribution Network: from Theory to	[Lecture 7] Sustainable Wastewater Treatment Systems	<b>[Lecture 9]</b> Green Approaches for Climate Change and the COVID-19 Pandemic
11:00-12:00 (KST)	[Special Lecture 1] Introduction of Sustainable Development and SDGs: Theory and Policy Implications		Application		
13:00-14:00 (KST)	[Lecture 1] COVID-19 and Other Zoonotic Disease Transmitted through Water and Environments	<b>[Lecture 3]</b> Reservoir Management to Enable Sustainable Provision of Clean Water: Case Study Duriangkang	[Lecture 6] Towards Sustainable Management of Urban Water Cycle: Wastewater Engineering and Water Reclamation	[Special Lecture 2] Water Digitalization for the Future World	<b>[Special Lecture 3]</b> Korean Wave: K-Pop
14:00-15:00 (KST)		<b>[Lecture 4]</b> Drinking Water Treatment		<b>[Lecture 8]</b> Ground Water: Pollution and Remediation Strategies	[Closing]
15:00-16:00 (KST)			[Cultural Exchanges] (2hr)		

#### Time Table(Tentative)

#### Courses

	Title	Hours	Instructor
1	COVID-19 and Other Zoonotic Diseases Transmitted through Water and Environments		Dongwan Yoo UIUC, U.S
2	Climate change, Impacts and Adaptation		Gayoung Yoo Kyung Hee University
3	Reservoir Management to Enable Sustainable Provision of Clean Water: Case Study Duriangkang Dam, Batam City		Doddi Yudianto UNPAR, Indonesia
4	Drinking Water Treatment		Seok-Oh Ko Kyung Hee University
5	Drinking Water Distribution Network: from Theory to Application	2	Doosun Kang Kyung Hee University
6	Towards Sustainable Management of Urban Water Cycle: Wastewater Engineering and Water Reclamation	2	Seungdae Oh Kyung Hee University
7	Sustainable Wastewater Treatment Systems		Booki Min Kyung Hee University
8	Ground Water: Pollution and Remediation Strategies		Rheo B. Lamorena-Lim Univ. of the Philippines-Diliman
9	Green Approaches for Climate Change and the COVID-19 Pandemic	2	Hyungna Oh Kyung Hee University
	Total hours	15	

## **Special Lectures & Cultural Exchanges**

	Title	Hours	Instructor
1	Introduction of Sustainable Development and SDGs: Theory and Policy Implications		Young-Woo Park EcoMom Korea, NGO
2	Water Digitalization for the Future World		Kyung-Hyuk Lee K-Water Research Institute
3	Korean Wave: Live	1	Yoonhan Jeon Kyung Hee University
4	Cultural Exchanges	2	With Local Students
	Total hours	5	



#### Contact

#### Kyung Hee University

Office of International Affairs, Global Campus

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