Pandemiology: Epidemic Diseases that Shaped the World, and the Methods Used to Study Them

Om kurset

This course will be of interest to students in medicine, global health, environmental sciences, social sciences, demography, history – any student with a keen interest in human health and epidemic diseases and would like to become familiar with the variety of methodologies used to explore data and generate evidence.

Aim of the course:

Students will gain understanding of the key questions and interdisciplinary methods used in the emerging field of “pandemiology”.

The course will provide foundational knowledge of important pandemics/epidemics and key, analytical methods through case studies. This will build a comprehensive understanding of the forces that shape pandemic trajectories from origin to endgame, placed in historical and societal context.

Please note that the course takes place at:

Statens Serum Institut (SSI) – PandemiX Center of Excellence

Artillerivej 5

2300 Copenhagen S

Denmark

Meeting room at SSI: Jernesalen

Uddannelse	ph.d.
Undervisningssprog	English
National_online	Kurset vises på den nationale database
Vært	Ph.d.-skolen for Naturvidenskab og Miljø
Tilmelding	Via email to Michelle Kramer Hendriksen (michellekh@ruc.dk) no later than the 7th of October 2026, giving: 1) Name and affiliation
Kursus starter	09-11-2026
Kursus slutter	13-11-2026
Ekstern underviser	Infectious Disease Experts from Statens Serum Institut (SSI) and other renowned academic and government-based researchers in cooperation with the Infectious Disease Experts from PandemiX Center of Excellence
Forudsætninger	Basic statistics, epidemiology, demography, global health, life sciences such as: biology, genetics or environment
Kursusform	This course will be conducted over 5 consecutive days. Lectures will be held in-person for 2 sessions per day, morning and afternoon. No online participation is possible. The specific content of the course (schedule) will be made available by 30 June, 2026. Expected preparation for the course is 50 hours, including required readings prior to the start of lectures (up to 20 papers). These will be made available online by 9 October, 2026
Kursusdage	5 course days: 9 to 13 November 2026
Deltagelseskrav for opnåelse af ECTS	Will be based on active participation in the course and exercises, and a written group report to be submitted by December 14, 2026. There will be 3-5 students in each group, depending on total number of participants
ECTS	5

Indhold	Through case studies, students will understand the history, signatures, burden and control of major epidemics and pandemics. Students will become familiar with the scientific methods used to study them; these include outbreak investigation, registry-based research, dynamic models, statistical models, phylogenetics, and historical research, among others. Please note that the course is held at Statens Serum Institut (SSI) in Copenhagen. Lectures and case studies will be undertaken by experts from PandemiX Center of Excellence and Statens Serum Institute (SSI), and other renowned academic and government-based researchers, as relevant. Case studies will be chosen from: mpox, smallpox, pertussis, measles, influenza, vector-borne diseases, HIV, tuberculosis, and COVID-19
Pris	Free of charge – including free catering
Maksimum antal deltagere	30 (Minimum number of participants: 5)
Litteratur	Up to 20 papers that will be made available online by 9 October, 2026
Aktivitetsansvarlig	Lone Simonsen (lonesimo@ruc.dk) Sangeeta Mookherji (sangeetam@ruc.dk)
Underviser	Lone Simonsen (lonesimo@ruc.dk) Sangeeta Mookherji (sangeetam@ruc.dk)