



## Dear students,

We kindly wish to extend you an invitation to participate in our International Virtual Course on *Pandemics I - Determinants and management* supported by DAAD and AGEP.



Electron Microscope image of COVID-19 virus particles

As humans have spread across the world, so have infectious diseases. Even in this modern era, outbreaks are nearly constant, but not every outbreak reaches pandemic levels.

There are some major pandemics which have afflicted mankind throughout history such as plague, cholera, influenza, and coronavirus diseases Thus it is important to know the way they were controlled in the past and how these diseases are managed today.

Infectious diseases still represent threats for human health as pathogens can spread rapidly through global trade and travel. Global surveillance programs are needed to trigger response to waterborne pathogens and vector-borne diseases or to detect and identify pathogens spilling over from animals to humans.

The University of Freiburg is organising an online course on major pandemics such as HIV/AIDS, Malaria, Tuberculosis and Dengue fever, but also other examples will briefly be discussed such as Covid-19, SARS, Ebola and others.

The overall objective of the course is to train students in the prevention, early detection, management and monitoring of major contemporary pandemics.



The specific learning objectives of this course are related to the following topics: Students will be able to understand and describe:

i) Pandemics in history and in modern times;

ii) How to measure the transmission dynamics and expansion of epidemics/pandemics;

- iii) Pathogens causing epidemics/pandemics and their routes of transmission;
- iv) Epidemiological indicators to measure the extent and burden of a pandemic;
- v) Social and cultural determinants driving a pandemic;
- vi) Response options to different pandemics;
- vii) Coping strategies in Health Services with the fast surge of cases;
- viii) Transmission prevention according to the route of transmission.

The Seminar will be held from **13<sup>th</sup> May 2022** to **22<sup>nd</sup> June 2022** and is based on self-learning materials and weekly online meetings with facilitators. As a final assessment each student will prepare a PowerPoint presentation about a selected topic.

The Seminar is open for Master Alumni and students at Freiburg University (M.Sc. Global Urban Health, UCF Liberal Arts Students and AGEP participants). The successful student will receive 4 ECTS for the effort.

To register for the seminar:

Please send your application including a motivational letter and a CV **before the application deadline** of **08<sup>th</sup> May 2022** to Damaris Bockstahler, coordinator of the virtual course: <u>damaris.martina.bockstahler@ucf.uni-freiburg.de</u>

Peep of the course framework:

**Kick-off meeting**: 13<sup>th</sup> May 2022, 16<sup>00</sup> – 20<sup>00</sup> MEZ (GMT+1)

**Self-learning**: Students work on the "pandemic of the week" (4 pandemics in 4 weeks). They will look at the presentations by mentors and by students, and will solve MCQs at the end of each session.

**Online meetings with the facilitator**: One weekly 2-hrs online session with the facilitator for clarification of the concepts and revision of the responses to the MCQs Preliminary dates for the 2-hours online sessions (tbc) **20.05.**, **27.05.**, **03.06.**, **10.06.** 

**Assessments:** The students will be marked as pass/fail according to their ppt presentation at the end (week of 20<sup>th</sup> June).

**Award of ECTS points**: The duration is 6 weeks with an award of 4 ECTS for the successful student (120 hrs meeting- and self-study-time).

Outline of the kick-off meeting:

Month	Day	Time	Item	Presenter	
	1				
May	13 <sup>th</sup> May		- Welcome	Simon Buechner	
	2022		- Purpose and objectives of the course.	Axel Kroeger	
	16 <sup>00</sup> - 20 <sup>00</sup>		- Course format.		
		15 min	Break		
		45 min	- Introduction of participants (2mins each)	Simon Buechner	
		10 min	Break		
			- Introduction of the concepts and contents	Txema Calleja,	
			- Description of procedures	Simon Buechner	
			- Overview of student's assessments.	Axel Kroeger	
			Pandemics: Basics, History and Transmission	Hajo Grundmanr	
			Introduction to understanding pathogens	Bettina Fries	
			Socio-economic impact of Pandemics	Axel Kroeger	
		30 min	Q&A: Group discussion	Students	
		10 min	Wrap-up		

We are looking forward to your application and hopefully participation in our elearning course!

The Organising Committee

