# Fundamental Concepts in Epidemiology

**Facilitator**

Prof. Albert Hofman  
Harvard T.H. Chan School of Public Health

Prof. Oscar Franco  
ISPM, University of Bern

**Description**

This course will provide an orientation to health and medical research from a quantitative and epidemiological viewpoint. It will give an introduction to the design of public health and clinical research, and it will discuss measures of disease frequency and association, and the validity of research in medicine. The course will discuss recent developments in epidemiologic methods for public health and clinical research. It will review the various study designs and major issues in the validity of epidemiologic studies. It will give an overview of elements of epidemiologic data-analysis.

**Objectives**

The purpose of this introductory class is to discuss the principles and methods of epidemiology for quantitative health research; to demonstrate their applicability in research in public health and clinical medicine; and to demonstrate the interrelations of public health and clinical research.

**Dates**

8 – 12 November 2021

**Eligibility**

Epidemiologists, clinicians interested in research, public health scientists with an interest in public health or clinical medicine or both.

**Course Structure**

The course includes both didactic interactive lectures as well as exercises and practicals. The exercises will provide the opportunity to discuss, in greater depth, the principles covered in the lectures.

**Assessment**

Daily quizzes and final test on last day
#### Credits

<table>
<thead>
<tr>
<th>Credits</th>
<th>2 ECTS</th>
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<tbody>
<tr>
<td>Preparation Work: 8 h, Contact: 30 h, home-work during the course: 12 h</td>
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<tr>
<td>(1 ECTS corresponds to appr. 25-30 hours workload)</td>
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#### Location

University of Bern, Hallerstrasse 6, 3012 Bern, room 205 + 203

#### Course Fees

<table>
<thead>
<tr>
<th>Course Fees</th>
<th>Fee</th>
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<tbody>
<tr>
<td>SSPH+ PhD Students</td>
<td>30.00 CHF (processing fee)</td>
</tr>
<tr>
<td>PPHS PhD Students</td>
<td>30.00 CHF (processing fee)</td>
</tr>
<tr>
<td>External MD/PhD Students</td>
<td>600.00 CHF</td>
</tr>
<tr>
<td>External Academics</td>
<td>1700.00 CHF</td>
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<tr>
<td>Other Participants</td>
<td>2500.00 CHF</td>
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(The cost scheme depends on the Number of ECTS. Per ECTS participants are asked to pay 300.00 CHF, 850.00 CHF or 1250.00 CHF, respectively)

#### Registration

**Please register online on our website**

#### Registration date

8 October 2021