Study plan for the

CAS programme in Brain Health

9 October 2023

The CAS in Brain Health is a university continuing/postgraduate education programme leading to the award of the "Certificate of Advanced Studies in Brain Health, University of Bern (CAS BH Unibe)". The legal basis is the regulations of the Faculty of Medicine for the CAS BH Unibe programme dated 19 November 2023.

1. Objectives of the programme

Objectives

The course is aimed at people who work in the health sector or intend to work in this field: clinical staff, scientific staff and people working in the public health sector or in politics.

At the end of the course, participants will

- understand the determinants of brain health, including physical, psychological and social factors, and be able to analyse and evaluate their impact on brain function;
- have developed a sound knowledge of various brain diseases and disorders enabling them to understand and apply strategies for diagnosis, prevention and treatment;
- have learnt intervention techniques and strategies to promote brain health and how to apply them to support patients' cognitive abilities and well-being;
- be able to develop individualized action plans for improving brain health based on the knowledge and skills learned, to effect lasting improvements in patients' quality of life.

2. Scope, objectives and content of the programme elements

Scope

The degree programme comprises 15 course days (100 attendance hours) and 15 ECTS credits (approximately 450 working hours in total).

Module 1: Introduction to Brain Health

ECTS points	**4 ECTS points** (including self-study + examination)	**Scope**	4 days of classroom instruction
Proof of achievement	• Written interim examination	**Attendance requirement**	80%

Learning objectives	The graduate • understands what constitutes brain health and why it is important • can explain the role of evolution in the development of the human brain • understands the basic anatomical development of the human brain • has acquired a basic knowledge of the functioning of the nervous system • can apply basic terms and concepts in the field of brain health to practical scenarios and case studies
Course content	Block 1.1: Brain Health Block 1.2: Brain Development and Evolution Block 1.3: Neurophysiology Block 1.4: Concepts
Teaching and learning methods	• Lectures • Online platform with multimedia material • Discussion rounds • Literature study • Flipped classroom
Teaching language	English

Module 2: Brain disorders and their risk factors

ECTS points	**4 ECTS points** (including self-study + examination)	**Scope**	4 days of class-room instruction
Proof of achievement	• Written interim examination	**Attendance requirement**	80%
Learning objectives	The graduate • knows the most common physical brain diseases and their risk factors • knows the most common mental brain diseases and their risk factors • knows the difference between physical and mental brain diseases • can classify the risk factors according to individual vulnerability and epidemiological occurrence		
Course contents	Block 2.1: Physical brain health Block 2.2: Mental brain health		
Teaching and learning methods	• Lectures • Online platform with multimedia material • Discussion rounds • Literature study • Flipped classroom		
Teaching lanaguage	English		

Module 3: Preserve, Prevent and Protect

ECTS points	**4 ECTS points** (including self-study + examination)	**Scope**	3 days of class-room instruction
Proof of achievment	• Written interim examination	**Attendance requirement**	80%

Learning objectives	The graduate • understands the importance of the early stages of life and how they can influence brain health in later life • recognises the role of psychological factors in maintaining and protecting brain health • understands the impact of the social environment on brain health • understands the importance of a healthy lifestyle for the prevention of brain diseases • recognises the role of environmental factors in brain health • knows the latest therapeutic and rehabilitation approaches
Course contents	Block 3.1: Life start Block 3.2: Psychological aspects Block 3.3: Social environment Block 3.4: Lifestyle Block 3.5: Environmental factors Block 3.6: Treatment
Teaching and learning methods	• Lectures • Online platform with multimedia material • Discussion rounds • Literature study • Flipped classroom
Teaching language	English

Module 4: Planning and Implementation

ECTS points	**3 ECTS points** ((including self-study + examination))	**Scope**	3 days of class-room instruction
Proof of achievement	• Written interim examination	**Attendance requirement**	80%
Learning objectives	The graduate • can develop effective strategies for planning and implementing brain health programmes • understands the fundamentals of public health strategies related to brain health and can develop and implement interventions to promote brain health at the population level • can understand and apply effective methods for implementing brain health programmes in public health settings		
Course contents	Block 4.1: Planning Block 4.2: Public health strategies Block 4.3: Health-care implementation		
Teaching and learning methods	• Lectures • Online platform with multimedia material • Discussion rounds • Literature study • Flipped classroom		
Teaching language	English		

2. Performance assessments in the degree programme

Performance assessments

The performance assessments take place either on site or via the e-learning platform and comprise the following elements:

- course attendance (at least 80%)
- written examinations
- presentations
- literature summaries
- a practical examination
- a written paper
- a progress report

The Programme Management Committee decides on the basis of the assessment of the performance records and the fulfilment of the other performance requirements whether the the CAS degree should be awarded.

Further details are set out in the implementation regulations for the performance assessments, which are issued by the Programme Management Committee.

3. Final provisions

Entry into force	This study plan comes into effect on 1 April 2024.
9 October 2023	Decided by the study commission: The Chairman Prof. Dr. med. Simon Jung
29 November 2023	Approved by the Faculty of Medicine: The Dean Prof. Dr. med. Claudio Bassetti