

June 14, 2021

# EM148: IBITA Basic Bobath Course



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The Bobath concept is a problem solving approach aimed at the evaluation and treatment of people with movement disorders, postural control and function, caused by a central nervous system injury. This approach to adult rehabilitation with central neurological damage originates from the work of Berta and Karel Bobath and has evolved over the last 50 years.

The rationale for its current application is based on current neuroscientific knowledge related to motor control, motor learning, neural and muscular plasticity and current biomechanical knowledge.

The aim of the course is to deepen the theoretical foundations of the concept and translate them into clinical and technical skills aimed at tackling the main rehabilitative problems of adult patients with cerebral injury.

The teaching activity will be divided into theoretical lessons, practices and clinics with demonstration of patient treatment by the teacher in a collective session and by the participants in working couples.

Each activity of the learners will be supervised by the teacher for a constant refinement of the techniques: the goal is to make the student more and more independent in the clinical and competent reasoning in the design and structuring of the specific rehabilitation intervention for each patient. The course is organized according to the IBITA international regulations and the final certification allows access to advanced Bobath courses.

# Specific aims:

- Acquire specific terminology to describe the rehabilitative approach to the adult neurological patient according to the Bobath Concept
- Updating knowledge in the biomechanical and neurophysiological fields, especially in relation to postural control, locomotion and reach-to-grasp
- Refine the ability to observe and acquire models for the evaluation of neurological patient problems
- Implement treatment techniques
- Refine and exercise a correct manual in the treatment of the adult neurological patient Support the comparison and discussion among participants to train the clinical reasoning



- Promote team work
- Promote the evidence based approach based on updated literature

	€	0	*
24 Seats	€2,074.00	<b>115</b> Hours	<b>50</b> ECM
INTENDED FOR	PAYMENTS	CALENDAR	LANGUAGE
Doctors, Physiotherapists and Occupational Therapists	Deposit €732.00 within 7 days from the registration	l Modulo: 14-20 June 2021 Il Modulo: 1- 8 November 2021	Italian - English with consecutive italian translation
2 <sup>nd</sup> deposit €732.00 by date May 15, 2021			
	Balance €610.00 by date September 10, 2021		
	Total: <b>€2,074.00</b>		

# SCHEDULE

# **First day**

- 08.30-09.00 Registration of participants and presentation of the objectives of the course
- 09.00-10.00 Lesson: The Bobath Concept from its origins to today
- 10.00-11-15 Lesson: Clinical Reasoning and Model of Bobath Clinical Practice (MBCP)
- 11.15-11.30 Coffee break
- 11.30- 12.45 Evaluation and treatment of patient A by the teacher in a collective session
- 12.45-13.00 Summary of evaluation and discussion
- 13.00-14.00 Lunch



14.00- 15.00 Lesson: Characteristics of efficient movement

15.00-16.00 Practical session: Alignment in an upright position to facilitate the antigravity seal. Orientation of the center of mass on the base of support.

16.00-17.30 Practical session: Analysis and facilitation of efficient movement: Stand-to-sit

### Second day

- 08.30-10.00 Lecture: Neurophysiology of postural control
- 10.00-11.15 Lesson: Core stability as a multicinetic chain
- 11.15-11.30 Coffee break
- 11.30-12.45 Evaluation and treatment of patient B by the teacher in a collective session
- 12.45-13.00 Summary of evaluation and discussion
- 13.00-14.00 Lunch
- 14.00-15.30 Lesson: Outcome measurement
- 15.30-17.30 Practice session: Postural control in upright position and ankle strategies

#### Third day

- 08.30-11.15 Lesson: Ascending and descending systems
- 11.15-11.30 Coffee break
- 11.30-12.45 Evaluation and treatment of patient C by the teacher in a collective session
- 12.45-13.00 Summary of evaluation and discussion
- 13.00-14.00 Lunch
- 14.00-15.00 Presentation of a clinical case with video and images using MBCP
- 15.00-17.30 Linear acceleration and lateral tilt Brief theory and practice

#### Fourth day

- 08.30-11.00 Lecture: Additional functions in the SNC
- 11.00-11.15 Coffee break



11.15- 12.45 Practice session: Evaluation and positioning of the scapula in a sitting position. Sit-to-stand transition

- 12.45-13.00 Preparation of the patient treatment workgroups Clinical documentation
- 13.00-14.00 Lunch
- 14.00-15.30 Treatment of patients by the participants with supervision of the teacher
- 15.30-16.00 Review of evaluation and discussion in working pairs
- 16.00-17.30 Practice session: Seated-supine passage

#### **Fifth day**

- 08.30-10.00 Lecture: Upper Motor Neurone Syndrome
- 10.00-11.15 Practice session: Exercise the core-stability in the supine position
- 11.15-11.30 Coffee break
- 11.30-13.00 Supine / side-lying transition and work for the hip extension
- 13.00-14.00 Lunch
- 14.00- 15.30 Treatment of patients by the participants with supervision of the teacher
- 15.30-16.30 Practice session: posterior pass and anterior step in lateral decubitus
- 16.30-17.30 Guidelines for case-reports to be prepared between the first and second module of the course

#### Sixth day

- 08.30-11.00 Lecture: Neurophysiology and biomechanics of locomotion
- 11.00-11.15 Coffee break
- 11.15-12.00 Practical session: Alignment from supine and placing response
- 12.00-13.00 Revaluation of patient A by the teacher in a collective session
- 13.00-14.00 Lunch
- 14.00- 15.30 Treatment of patients by the participants with supervision of the teacher
- 15.30-17.30 Practice session: Preparation of the seated and supine foot



### Seventh day

- 08.30-9.30 Lesson Main characteristics of the path after central injury
- 10.30 Practice session: From the supine position to the sitting position Stand-down
- 10.30-10.45 Coffee break
- 10.45-12.00 Practice session: Stance phase
- 12.00-13.00 Presentation of a clinical case with video and images using MBCP
- 13.00-14.00 Lunch
- 14.00-15.30 Treatment of patients by the participants with supervision of the teacher
- 15.30-16.00 Review of the treatment and discussion in working pairs
- 16.00-17.30 Practical session: Rear step

#### **Eighth day**

- 08.30-10.30 Lesson: The role of the cerebellum in motor learning
- 10.30-10.45 Coffee break
- 10.45-12.00 Practice session: From standing up to standing prone
- 12.00-13.00 Revaluation of patient B by the teacher in a collective session
- 13.00-14.00 Lunch
- 14.00-15.30 Treatment of patients by the participants with supervision of the teacher
- 15.30-17.30 Practice session: Working in prone standing for the selective extension of the trunk, for the setting of the scapula, for reaching over the head, for alignment of the pelvis, for the selective extension of the lower limb, for the distal components of the step.

#### Ninth day

- 08.30-10.30 Lesson: Neural and muscular plasticity
- 10.30-10.45 Coffee break
- 10.45-12.00 Protraction and retraction of the scapula for abduction
- 12.00-13.00 Practical session: Functional reaching for the sit-to-booth Practical session:



13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of the treatment and discussion in working pairs

16.00-17.30 Practical session: Preparation of the heel strike

#### **Tenth day**

08.30-10.30 Practice session: First step and facilitation of the journey (general aspects)
10.30-10.45 Coffee break
10.45-12.00 Practice session: Easy to walk (guided by the pelvis and the central key point)
12.00-13.00 Practical session: Easy to walk (guided by the shoulder girdle and by the arm)
13.00-14.00 Lunch
14.00-15.30 Treatment of patients by the participants with supervision of the teacher
15.30-16.00 Review of the manual
16.00-16.30 Ecm
16.30 Conclusion of the first module

## <u>A work to be prepared between the first and the second module will be required: a case report /</u> case study to be sent to the teacher / assistant within a defined term as scheduled in the fifth day of the course.

#### **Eleventh day**

08.30-10.00 Delivery of the evaluations of the work carried out between the two modules and discussion 10.00-11.15 Practice session - Contactual Hand Orientating Response: short theory and practice 11.15-11.30 Coffee break 11.30- 12.45 Evaluation and treatment of patient F by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of evaluation and discussion in working pairs

16.00-17.30 Practical session - Trunk constraint for the setting of the scapula: short theory and practice

#### Twelfth day

08.30-11.15 Neurophysiology of reaching and grasping

11.15-11.30 Coffee break

11.30-12.45 Evaluation and treatment of the patient G by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of evaluation and discussion in working pairs



16.00-17.30 Practical session - Review of the postural bases for sitting and standing uptake: consideration on the work of the core-stability multicinetic chain.

Preparation of the scapulo-humeral cingulum for sitting while sitting.

# Thirteenth day

08.30-10.00 Lesson: Biomechanics of reaching and grasping and comparison with the pathology

10.00-11.15 Practical session - Alignment and facilitation of the arm and elbow

11.15-11.30 Coffee break

11.30-12.45 Evaluation and treatment of the patient H by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practical session - Alignment of the radius and ulna, treatment of the tensions of the forearm structures, alignment and facilitation of the wrist extension as a prerequisite to the activation of the hand

# Fourteenth day

08.30-10.00 Lesson: Hand recovery after central injury

10.00-11.15 Practical session - Assessment of sensitivity

11.15-11.30 Coffee break

11.30-13.00 Practical session: Preparation of the postural component of the hand, realignment of the tenare region and thumb facilitation, biomechanical preparation of the carpal structures 13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practice session - Strengthening of intrinsic musculature, digitization, sensory stimulation of the hand. Coordinate the shoulder, arm and hand components for functional reach-to-grasp

# **Fifteenth day**

08.30-10.00 Practical session - The function of the upper limb in different antigravity contexts: reaching in standing

10.00-11.15 Practice session - The role of the upper limb in locomotion

11.15-11.30 Coffee break

11.30-13.00 Patients' treatment by the participants with teacher supervision and final discussion

13.00-13.30 Lunch

13.30-14.30 Last additions to practical sessions and review of manual skills

14.30-15.00 ECM Test

15.30-16.00 Latest questions, delivery of certificates and conclusion of the course